

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

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*Improved Access. Improved Services. Better Health Outcomes.*



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**FISCAL YEAR 2023  
QUARTER 3  
(APRIL–JUNE 2023) REPORT**



**USAID**  
FROM THE AMERICAN PEOPLE

FISCAL YEAR 2023  
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## PROJECT OVERVIEW

<b>Program Name:</b>		USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program
<b>Reporting Period:</b>		Fiscal Year 2023 Quarter 3 (April-June 2023)
<b>Activity Start Date and End Date:</b>		September 20, 2018–September 19, 2024
<b>Name of Prime Implementing Partner:</b>		Management Sciences for Health
<b>Contract Number:</b>		7200AA18C00074
<b>MTaPS Partners:</b>	<b>Core Partners:</b>	Boston University, FHI360, Overseas Strategic Consulting, Results for Development, International Law Institute-Africa Centre for Legal Excellence, AUDA-NEPAD
	<b>Global Expert Partners:</b>	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
	<b>Capacity Resource Partners:</b>	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
	<b>Collaborators:</b>	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 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	<i>Autoridade Nacional Reguladora de Medicamentos, Instituto Público</i> [National Medicines Regulatory Authority, Public Institute] (Mozambique)
ANEH	National Hospital Evaluation Agency (Mali)
ARC	antimicrobial resistance containment
ART	antiretroviral therapy
ARV	antiretroviral
ARVs	antiretroviral medicines
ASEAN	Association of Southeast Asian Nations
ASM	active safety monitoring
ASO	AMS optimal access and use
ASRAMES	<i>Association Régionale d'Approvisionnement en Médicaments Essentiels</i>
AUDA-NEPAD	African Union Development Agency's New Partnership for Africa's Development
AWaRe	Access, Watch and Reserve
BCZ/S	<i>bureau central de la zone/de santé</i> [central health zone office] (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); <i>Centro de Colaboração em Saúde</i> (Mozambique)
CDC	US Centers for Disease Control and Prevention, Communicable Disease Control (Bangladesh)
CDR	regional distribution center (DRC)
CGD	Center for Global Development
CHD	Center for Health Development (Philippines)
CHTF	child health task force
CIPCAC	County Infection Prevention and Control Advisory Committee
CMD	chief medical director
CME	continuous medical education
CMSD	Central Medical Store Depot (Bangladesh)
CNAMM	National Marketing Authorization Commission (Mali)
CODESA	health area development committee
COE	center of excellence
COR	contracting officer representative
COI	conflict of interest
COVID-19	coronavirus disease 2019
COVD	COVID-19 vaccine delivery
CPD	continuing professional development
CQI	continuous quality improvement
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	<i>Direcção Nacional de Assistência médica</i> [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	<i>Division Provinciale de la Santé</i> [Provincial Health Division] (DRC)
DQA	data quality assurance
DQSHH	Directorate for Quality, Security, and Hospital Hygiene (Senegal)
DRC	Democratic Republic of the Congo
DR-TB	drug-resistant tuberculosis
DTC	drug and therapeutics committee
DTG	dolutegravir
EAC	East African Community
eAMS	electronic asset management system
eLMIS	electronic logistics management information system
EML	essential medicines list
e-SPAR	Electronic State Parties Self-Assessment Annual Reporting Tool
EVD	Ebola virus disease
EVML	essential veterinary medicines list
EWG	expert working group
FA	framework agreement
FAIG	framework agreement implementation guidelines
FAO	Food and Agriculture Organization
FDA	US Food and Drug Administration, Philippines Food and Drug Administration, Rwanda Food and Drugs Authority
FG	focus group
FGD	focus group discussion
FP	family planning
FS	field support
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
GOU	Government of Uganda
GPB	government procurement bylaw
GPD	government procurement department
GPP	good pharmacy practices
GRP	good regulatory practice
GSDP	good storage and distribution practices
GPVP	good pharmacovigilance practice
GWG	gender working group
HA	health area/account
HAD	health affairs directorate
HAI	health care—associated/acquired infection
HCAC	Health Care Accreditation Council
HCAD	Health Communication and Awareness Directorate
HCAI	health care—associated/acquired infection
HCF	health care facility
HCP	health care provider/practitioner/professional
HCW	health care worker
HCWM	health care waste management
HEOC	health emergency operation center
HEU	health economic unit
HF	health facility
HH	hand hygiene
HHSAF	Hand Hygiene Self-Assessment Framework
HQ	headquarters
HSR 2022	Seventh Global Symposium on Health Systems Research
HTA	health technology assessment
HWDP	health workforce development plan
HZ	health zone
ICC	infection prevention and control committee
iCCM	integrated community case management
ICU	intensive care unit

IDDS	infectious disease detection and surveillance
IEC	information, education, and communication
IFRC	International Federation of Red Cross
IGAD	Intergovernmental Authority on Development
IHR	International Health Regulations
IMS	information management system
IMS	Ebola incident management structure (Senegal)
InaHTAC	Indonesia HTA Committee
INH	isoniazid
INRB	<i>Institut National de Recherche Biomédicale</i>
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
MAAIF	Ministry of Agriculture, Animal Industry, and Fisheries (Uganda)
MALAP	Maturity Level Action Plan
MALF	Ministry of Agriculture, Livestock, and Fisheries (Burkina Faso)

MCC	multisectoral coordinating/coordination committee
MCCH	maternal, child, and community health
MCDA	multicriteria decision analysis
MDA	ministries, departments, and agencies
MER	medicines evaluation and registration
MERL	monitoring, evaluation, research, and learning
MIC	middle-income country
MIHR	USAID MOMENTUM Integrated Health Resilience project
MIS	management information system
MISAU	<i>Ministério da Saúde</i> [Ministry of Health] (Mozambique)
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; National Curriculum Development Center (Uganda)
NDA	National Drug Authority (Uganda)
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
OIE	World Organization for Animal Health
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
PH	provincial hospital
PIES	provider integration and engagement system
PMDT	programmatic management of drug-resistant TB
PMED	Pharmaceuticals and Medical Equipment Directorate (Ethiopia)
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	<i>Programme de Promotion de Soins de Santé Primaires (DRC)</i>
PQM+	Promoting the Quality of Medicines Plus
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
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 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 Antimicrobial Awareness Week
WASH	water, sanitation, and hygiene
WB	World Bank
WHO	World Health Organization
WIMS	Warehouse Inventory Management System

# I. INTRODUCTION

## A. PURPOSE

Funded by USAID and implemented by a team led by MSH, the purpose of the six-year MTaPS program (2018–2024) is to provide PSS assistance 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 theory of change 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.

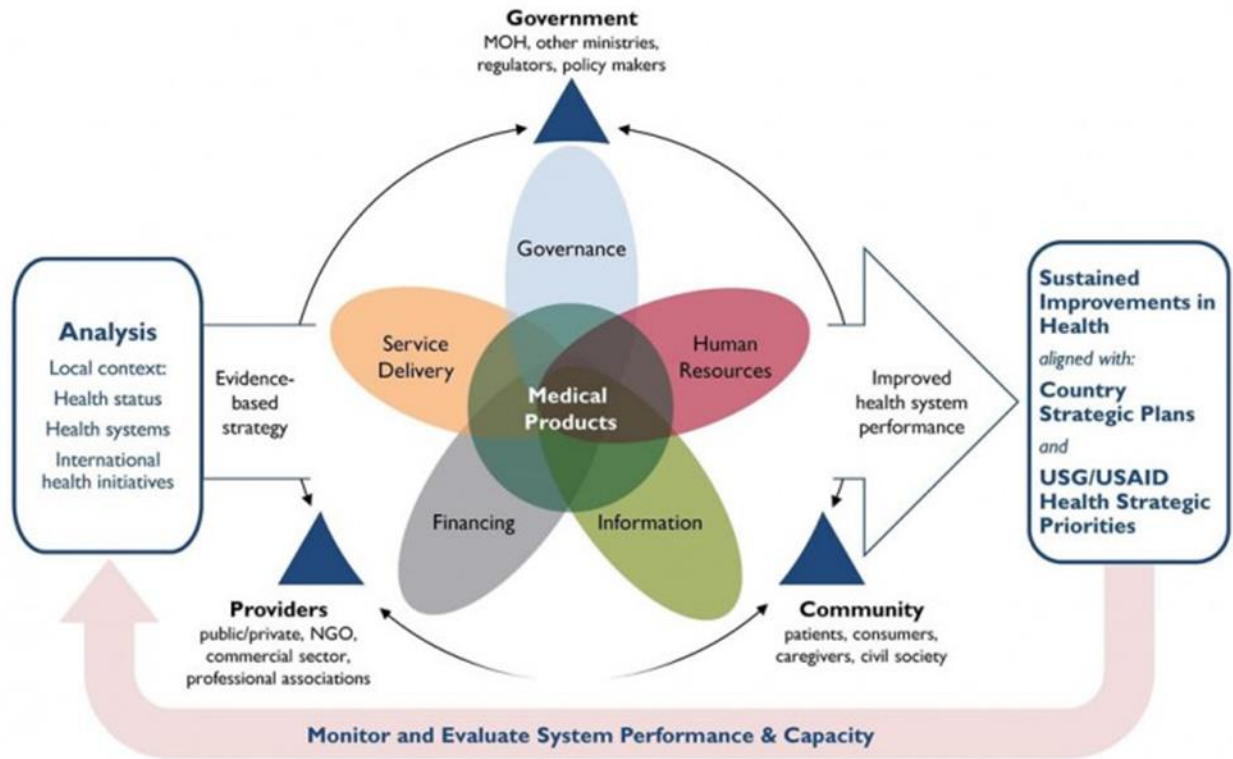


Figure 1. USAID pharmaceutical systems–strengthening approach

## D. ABOUT THE REPORT

This report presents activity progress and achievements by portfolio for fiscal year 2023 Quarter 3 (April–June 2023). 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, required to achieve UHC.<sup>1</sup> Poor governance in pharmaceutical systems can reduce access to pharmaceutical products, inflate medicine prices, and waste scarce health system resources.<sup>2</sup> Governance plays a critical role in minimizing opportunities for corruption and mitigating other system inefficiencies. It also 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 quarter 3, FY23.

#### CUMULATIVE PERFORMANCE TO DATE

Strong pharmaceutical-sector governance is fundamental to well-performing pharmaceutical systems. A key feature for improving these systems is the understanding that it takes time and significant engagement to review and improve governance components. Examples of MTaPS' cumulative work, aligned to local pharmaceutical systems priorities, are provided below.

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

**Jordan:** Completed drafting the FA SOPs, which will be submitted to the National Committee for Procurement Policies (NCP) for review and approval. Engaged the private sector pharmaceutical suppliers in the FA planning process. Completed the final draft of the procurement negotiation SOPs with an annex specifically focused on negotiations within the FA settings. Initiated the development of the PSD operational plans.

**Bangladesh:** In PYI, MTaPS facilitated the development of a strategic plan for coordinated procurement of medical products, including mapping procurement entities, their practices, and key actions. MTaPS developed the TOE for HFs with 10- to 500-bed capacity (tertiary level) and updated its reference

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<sup>1</sup> Wirtz VJ, Hogerzeil HV, et al. Essential medicines for universal health coverage. *The Lancet*. 2017. 389(10067):403–476.

<sup>2</sup> World Health Organization. 2013. *Good Governance in the Pharmaceutical Sector*. Geneva.

prices. The program also updated the specifications of the MSR list and assisted the MSR List Updating Committee in developing a strategy to regularly review standard reference prices to the updated list.

### **SUB-OBJECTIVE I.2: EVIDENCE-BASED MEDICINES POLICIES, LAWS, REGULATIONS, GUIDELINES, NORMS, AND STANDARDS IMPROVED AND ENFORCED**

**Ethiopia:** MTaPS supported MOH in revising the AMS practical guide. The review was conducted April 28-30, 2023, at Adama. A total of 15 (2 female) experts drawn from academia, hospitals, RHBs, MOH, EPHI, EFDA, and MTaPS, participated in the review. The practical guide is currently under technical review. The printing and distribution of this guide is expected to enable health care providers to support the selection, prescribing, and use of antimicrobials with evidence-based practices. This will, in turn, improve prescribing adherence to STGs and contribute to optimal use of antimicrobials.

**Cote d'Ivoire:** In collaboration with WHO, USAID, the US CDC, and FAO, MTaPS supported the AMR TWG, IPC TWG, Multisectoral Technical Committee 4 (MTC4), and AMS MTC (MTC5) to develop and validate more than 15 reference documents, including the AMR governance manual, national AMR policy, 2019–2020 multisectoral NAP-AMR, national IPC plan, animal-sector IPC guidelines, and the national AMS policy, guidelines, and plan. Also, MTaPS supported the AMS MTC in developing the AMR monitoring and evaluation plan and the AMR operational advocacy plan and updating the inter-ministerial decree officially establishing DTCs in Côte d'Ivoire.

**Nepal:** MTaPS has supported the updating of new policies, acts, regulations, norms, and standards for the Government of Nepal. The progress was because of MTaPS' continued collaborative and advocacy work with DDA; MOHP senior management; partners; representatives of the Ministry of Law, Justice, and Parliamentary Affairs; and others. The Code on Sale and Distribution (CSD), including GPP and GSDP practices and implementation strategies are in place as are the GHPP and the HPSG. Guidelines and SOPs for the registration of medicines and HTPs were updated, and the National Medicines Policy was developed. The QMS quality policy was developed and approved. These policy, legislative, and regulatory building blocks will enable DDA to effectively undertake regulatory work in line with WHO standards and best regulatory practices for ensuring the safety, quality, and efficacy of medicines and medical products in the country.

### **SUB-OBJECTIVE I.3: STAKEHOLDER ENGAGEMENT AND EMPOWERMENT, INCLUDING CIVIL SOCIETY AND CONSUMERS, INCREASED**

**Mali:** During FY19–FY23 Q1, MTaPS worked with the GCMN-RAM to develop TORs for the group as well as for its IPC and AMS TWGs. With MTaPS support, the GCMN-RAM has been able to organize 7 coordination meetings out of the 12 initially planned to monitor progress on implementing the NAP-AMR. Additionally, MTaPS supported the IPC and AMS TWGs in organizing their respective meetings. So far, the IPC TWG has organized eight meetings. Additionally, MTaPS supported the National Institute of Public Health, DGSH, and DPM in developing the 2023–2027 NAP-AMR, 2021–2025 AMS action plan, and 2023–2027 IPC strategic plan.

**Rwanda:** Through support to the Rwanda FDA, 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) were developed.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

The following country examples highlight the range of pharmaceutical governance activities conducted by MTaPS during the reporting period.

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

**Bangladesh:** MTaPS worked with DGFP in rolling out the DGFP online inventory management system in all 23 warehouses and a few sub-district level FP stores. Implementation of the system helps top-to-bottom visualization and use of real-time logistics data for decision-making, which in turn is expected to increase access to health products by clients and reduce product wastage. To ensure the sustainability of MTaPS' support and gains in the SCM area, technical assistance has been provided to the Logistics & Supply Unit to develop the OPs of procurement, supply, and store management (PSSM) for DGFP for the Fifth Health, Population and Nutrition Sector Program (HPNSP 2024-2029).

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

**Philippines:** MTaPS developed TOR to guide the development of the national supply chain strategy. The TOR, which comprises an iterative process, has been discussed and agreed with the DOH SCMS. It includes rapid analysis of the previous strategy, government-led consultative workshop, strategy write-shop, and dissemination and validation of the new strategy. The TOR is also used to engage local and international consultants who are expected to facilitate the assessment and consultative workshop. The strategy is expected to identify key supply chain interventions to ensure the continuous availability of life-saving health products.

**Jordan:** MTaPS, in close collaboration with the GPD, received and addressed additional comments and completed the final draft of the procurement negotiation SOPs. MTaPS also developed an annex for the SOP specifically focused on negotiations within FA settings to address the unique conditions associated with FAs. This will enhance the effectiveness and success of future procurement negotiation processes. MTaPS also developed a negotiation plan and a report template to be used by the negotiation team at public health-sector procurement entities to ensure proper documentation, transparency, accountability, knowledge retention, and continuous improvement. The negotiation SOPs and FA SOPs will be submitted to the NCPP for approval during Q4.

MTaPS successfully developed six procurement and supply management (PSM) priority policies. These policies were identified through a collaborative effort with the PSD team and considering recommendations from the supply chain assessment conducted in FY22. Following the development phase, MTaPS obtained the official approval for these policies from the secretary-general for Technical and Administrative Affairs at MOH. This is a significant achievement as it highlights the recognition and endorsement of the policies' vital role in enhancing the availability and distribution of essential medical products. It further demonstrates the commitment of MOH to optimize the health care supply chain and ensure the provision of high-quality health care services to the population.

**Nepal:** MTaPS, in collaboration with the DDA, drafted five regulations and codes necessary for implementing the updated Drug and Health Product Bill, which is awaiting approval by the Nepal Law Commission. The regulations include Drug and Health Products Registration Regulation, Inspection and Investigation Regulation, Drug and Health Product Consultative Council and Advisory Committee Regulation, Drug and Health Product Standard Regulation, and Cosmetics Registration. MTaPS collaborated with DDA to draft an updated pricing regulation based on the findings of the situational analysis report on price regulation in Nepal conducted in previous quarters. These additional regulations will enhance the regulatory framework of DDA ensuring access to and availability of safe and quality health care products for the benefit of the population.

The revised NMP and the draft implementation and monitoring plan developed with MTaPS support are awaiting approval. A technical report on the revised NMP was drafted and is planned for finalization in Q4. The NMP guides the effective regulation, procurement, distribution, and use of medicines, ensuring safe, accessible, and quality health care for the population.

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

**Philippines: Capacitate a pool of LTAPs** - MTaPS conducted an information sharing session on LTAPs attended by 19 participants (8 male, 11 female) from 11 institutions. Out of the 11 institutions, 6 organizations are interested in providing support services for eLMIS, which is one of the modeled tracks of LTAPs. LTAPs is a private sector engagement strategy to scale-up and sustain pharmaceutical system strengthening initiatives. MTaPS reached over 200 individuals from the national convention of the Philippine Pharmacists Association to identify more institutions and individuals to be part of LTAPs.

**Outsourcing logistics services to private sector 4PL or best practice third-party logistics (3PL) providers:** MTaPS successfully engaged an international consultant to collaborate with the team in formulating an outsourcing operational policy, developing engagement TOR and key performance indicators (KPIs) for 4PLs. MTaPS gathered initial information on how commonly LGUs are engaging 3PLs and gathered a list of potential 4PLs in the country. When the operational policy, TOR, and KPIs are finalized, they will provide a mechanism for the government to engage and utilize best-practice 3PLs and 4PLs supporting the public health supply chain.

**Mali:** MTaPS supported the GCMN-RAM in organizing the AMR coordination group meeting. The objectives of this meeting were to (1) assess the implementation of NAP-AMR activities carried out in 2022; (2) analyze MTaPS PY 5 activities' achievement levels; and (3) develop a sustainability plan for MTaPS project-supported activities. Thirty participants (11 female) from the 4 key sectors including human health, animal health, environment, and agriculture attended the meeting. Participants recommended establishing an ad-hoc group to work on the political adoption of the NAP-AMR, the formalization of the AMR thematic group in the One Health Platform, and the appointment of sectoral focal points.

**Kenya:** MTaPS, in collaboration with Kisumu County, supported the launch of the One Health Kisumu CASIC work plan on April 18, 2023; 50 participants (23 female) drawn from the departments responsible for human health, environment, and agriculture and representatives from county leadership,

partners, and other stakeholders, including the media, community pharmacies, universities, etc., were in attendance.

## **BEST PRACTICES/LESSONS LEARNED**

- Improving pharmaceutical system governance is a multiyear process, with incremental gains over time. MTaPS' ongoing work with partners to strengthen the procurement processes in Bangladesh, Jordan, and the Philippines are clear examples of this. These examples also demonstrate the importance of contextualizing system strengthening approaches and having ongoing engagement with local stakeholders for success to be realized.
- Effective stakeholder engagement and evidence-based policies are key to effectively implementing medicine policies, laws, regulations, guidelines, and norms and ensuring that standards are improved and enforced. In line with this best practice, in Q3, MTaPS facilitated stakeholders' consultations in development of a regulatory framework for medical products in Nepal.

## **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**

Capacity strengthening of individuals and institutions is a critical aspect of sustainability within the MTaPS program. Sustainable pharmaceutical systems require more than just training. MTaPS focuses on capacity strengthening, ensuring that the range of activities the program is involved in producing a legacy in areas such as but not limited to the following: eLearning materials are integrated into the learning system of ministries for ongoing use, and digital solutions are seamlessly embedded into the workflows of pharmaceutical systems. MTaPS' aim is to enable mature pharmaceutical systems, including regulatory systems, in countries, leaving the responsibility of these systems in the hands of local counterparts.

### **CUMULATIVE PERFORMANCE TO DATE**

This section documents progress in selected MTaPS program institutional and human resource capacity-building activities from the start of the project to demonstrate improvements through the application of MTaPS' PSS approach.

Institutional capacity building to achieve stable and effective regulatory systems (sub-objective 2.4), is essential for sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medical products and pharmaceutical services that contribute to better health care delivery systems. To strengthen regulatory systems in countries of interest, MTaPS performed new assessments and reviewed previous assessments to determine the level of maturity of the regulatory system in five countries and to develop institutional development plans to address the gaps identified.

MTaPS worked with NRAs in Bangladesh, Burkina Faso, Cameroon, DRC, Kenya, Mali, Mozambique, Nepal, Philippines, Rwanda, and Tanzania to strengthen regulatory systems by implementing QMS for efficient delivery of regulatory services and to streamline and improve registration systems through capacity building by imparting principles of good review practices and the use of electronic information management systems. MTaPS collaborated with several continental and regional organizations (e.g., ASEAN, EAC, IGAD, SADC, SEARN) to support convergence and harmonization of medical product regulation in product registration, PV, regulatory inspections, and regulatory information management systems. MTaPS offered technical assistance to validate and use the regional centers of regulatory excellence's M&E tool to measure the performance of 11 designated centers. This tool produced

baseline information on the status of the institutions and organizations that provide capacity development in medicine regulation.

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

MTaPS interventions to institutionalize pharmaceutical system improvements are systematic in nature, and context specific. The following eLearning examples from Mali and Rwanda show how MTAps moves from developing training materials to integrating them into government systems for ongoing use.

**Mali:** MTAps supported the development and implementation of eLearning platforms that are now installed and operational at both the DGSHp and the Faculte de Medecine et d'Odontostomatologie (Faculty of Medicine and Odontostomatology.)

**Rwanda:** In addressing human resources capacity gaps, MTAps supported training of health care providers in different areas of pharmaceutical management, including 815 Rwanda FDA staff trained in various areas, including medicine evaluation and registration, good manufacturing practices (GMP), good review practices, good reliance practices, PV, and QMS. As part of long-term sustainability of capacity building, MTAps provided technical support to develop online eLearning courses in MER and PV, which are hosted on the Rwanda FDA servers.

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

MTaPS is active in a variety of pharmaceutical systems areas. In this quarterly report, Kenya stands as an example of how MTAps-related support over the life of the project has improved the government's ability to manage AMS.

**Kenya:** MTAps Kenya AMS interventions are focused on strengthening AMS governance structures at the national level and in focus counties and HCFs and include dissemination of the national AMS guidelines; development and dissemination of regulatory guidance on optimal use of antimicrobials to HCWs and the general public; development and implementation of AMS curricula at pre-service and in-service levels; training HCWs on AMS; and monitoring implementation of AMS activities by using a CQI approach in the focus counties and HCFs.

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

Private-sector organizations are a key element in national pharmaceutical systems. This example from Nepal shows engagement with the private sector to increase GPP and GSDP, two elements critical for the availability of quality medicines to patients.

**Nepal:** For the private sector, training materials for GPP and GSDP capacity building and assessment were finalized with input from the DDA and stakeholders, and the eLearning modules are ready to be uploaded to the DDA website for dissemination after branding approval from USAID. These materials could be adopted for the public sector as well. Ten assessors, recommended by Nepal's pharmacy



associations, were trained to conduct GSDP assessments of wholesalers, which will be implemented immediately after codes on sales and distribution of drugs are approved.

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

MTaPS has been supporting strengthening of regulatory systems in countries as well as regional harmonization as part of the effort to improve access to safe, quality assured, and efficacious medical products. Using the WHO GBT and the corresponding IDP, technical assistance was provided to address gaps and raise the regulatory capacity ML to acceptable levels.

**Nepal:** MTAps made significant progress in several areas to improve DDA's regulatory capability, i.e., assisting in organizational restructuring of DDA, strengthening regulatory systems to increase MLs that included implementation of OpenRIMS for medicine registration and PV (PViMS), strengthening capacity and developing competence of personnel, and establishing QMS standards and practices. With MTAps support, DDA has addressed all 55 recommendations for MLs 1 and 2 indicators in the CAPA plan.

**Regional harmonization:** MTAps followed up with three key networks (ASEAN, SEARN, and WHO's Western Pacific Regional Office) for potential collaboration to strengthen regulatory systems in Asia. Following a mapping exercise to identify existing regulatory gaps, MTAps implemented technical capacity strengthening trainings on current GMP for pharmaceutical manufacturers for active pharmaceutical ingredients and formulations; evaluation of vaccine dossiers for assessors and convergence of technical standards for medical product registration in Bangladesh and Nepal; TOT on evaluation of biologics, including vaccines for and application of good reliance practices for ASEAN member states as well competency mapping in Bangladesh, Nepal, and the Philippines.

### **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

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

This quarter, we highlight innovation in the form of COEs in Uganda to further improve AMR at facility level and post-training workplace follow-up methods in Ethiopia to ensure improved competence of health workers' results in systems change at the facility level.

**Uganda:** During Q3, MTAps supported MOH and NAMRSC to designate MTAps-supported hospitals as COEs for AMS for outcome and impact assessment for AMS. A COE for AMS is an HF that implements best practices in AMS and has emerged as a leader and reference standard to guide AMS practice. Designating hospitals as AMS COEs would potentially result in cost reduction and cost optimization because of likely reduction in expenditures on antimicrobials due to appropriate use, shorter hospital stays for patients, reduced incidence of resistant infections and HAIs, as well as provide evidence-based practice that is context-specific and scalable to other and lower-level HFs.

**Ethiopia:** MTAps provided technical assistance to MOH and the Addis Ababa RHB to provide training on the AMC survey for health professionals drawn from 20 hospitals in Addis Ababa, from May 15 to 16, 2023. The training package included simulated data entry exercises using the WHO AMC survey



Excel sheet. The training was given to 40 participants (19 females), 2 from each facility. At the end of the training, participants were given an assignment to conduct an AMC survey at their respective hospitals. A review meeting was conducted from May 31 to June 1, 2023, to evaluate the progress at each hospital. The Addis Ababa RHB and MOH staff, in collaboration with the MTaPS technical staff, took responsibility for follow-up on the remaining AMC data collection, aggregation, and reporting.

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

Pharmaceutical systems require integrated IT systems to manage the necessary data that is used to inform management systems to ensure the availability and use of quality medicines. In this quarter, we highlight MTaPS support of eLMIS implementation in the Philippines as an example.

**Philippines:** MTaPS updated the eLMIS sustainability and transition plan based on a series of consultations with key stakeholders. The plan outlines the key activities needed in supporting and building the capacity of DOH to scale up and sustain the eLMIS implementation in the country. In Q3, MTaPS also supported the eLMIS roll out training of 356 participants (244 female, 112 male) from 15 UHC sites. Training end-users on eLMIS is a prerequisite activity prior to going live. In Q3, MTaPS also trained 54 participants (30 female, 24 male) from 13 regions in providing eLMIS service/help desk support.

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

**Nepal:** MTaPS hired two AMR consultants (a journalist and a clinical specialist) and developed a training package based on a pretest assessment that was administered to 114 journalists (50 females, 63 males, 1 other) to evaluate their baseline knowledge of AMR that was used to design the training. A total of 405 media personnel from 7 provinces were trained on AMR. Through the end of June, the trained media representatives published 200 news reports in Nepali as well as several TV and radio programs on AMR-related issues.



AMR training for media personnel, Nepal, June 2023. Photo credit: MTaPS.

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

**Tanzania:** MTaPS collaborated with the Tanzania Medicines and Medical Devices Authority (TMDA) to train 22 assessors (5 female, 17 male) in evaluating the quality, safety, and assessment of bioequivalence of studies for generic medicines, including ARVs before granting marketing authorization. The trained

assessors were able to evaluate 50 dossiers (12 ARVs) at a product dossier evaluation retreat, thereby reducing backlogs and expediting ARV marketing authorizations. This activity also contributed to building a pool of experts within TMDA and aligned with addressing the WHO GBT sub-indicator MA03.01 for competent staff in marketing authorization and registration activities.

MTaPS provided technical support to TMDA for training clinical trial officers, including 26 participants (16 female, 10 male). The training focused on evaluating clinical trial applications and inspecting trial sites for Good Clinical Practices (GCP) compliance. Participants learned to review preclinical, clinical, and manufacturing data and develop scientific assessment reports, enhancing the competency of TMDA assessors in analyzing and summarizing clinical trial data.

A subsequent training for 25 participants (13 female, 12 male) focused on inspecting clinical trial sites for GCP compliance, offering practical experience through site inspections at two locations in Dar es Salaam. These interventions aimed to strengthen clinical trial oversight in Tanzania, fulfilling WHO GBT sub-indicator CT03.01 by ensuring that enough competent staff are assigned to clinical trial oversight activities.

## **BEST PRACTICES/LESSONS LEARNED**

- For pharmaceutical strengthening activities to have an impact beyond the life of MTAps, these activities must result in outputs being integrated into the systems and procedures of regular pharmaceutical system activity in a country context. The COE approach in Uganda for AMR and eLMIS support in the Philippines, as applied this quarter, are two diverse examples of how this can be done, with specific reference to local context and stakeholder engagement.
- Capacity-building initiatives should be undertaken with careful consideration of the receiving partners' goals and ensuring workforce knowledge transfer for sustainability after the project ends. Toward this end, in Q3, MTAps supported creating a pool of experts at TMDA for sustainable knowledge transfer.

## 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' overall strategic approach is to support the governing bodies in using evidence-based recommendations and tested approaches to strengthen the pharmaceutical system. MTAps is providing technical assistance to the ministries to build institutionalized and sustainable capacity, which is critical to achieving UHC, sustainable development goals, and self-reliance.

### CUMULATIVE PERFORMANCE TO DATE

#### ***Bangladesh***

In Bangladesh, MTAps performed enhancements to the existing eLMIS, WIMS, and UIMS. MTAps Bangladesh also introduced the eAMS in all 62 district hospitals across the country and established e-TB Manager (instead of the e-Tracker tool) as the digital platform to capture individual TB patient information and management data. The system has been rolled out nationally to all 868 sites. The NTP in Bangladesh has announced paperless reporting of TB data using the e-TB Manager for selected divisions and has a plan to expand it nationwide in a phased manner. E-TB Manager is also interoperable with the Janao App in Bangladesh to capture information on TB patients treated at private centers, thereby increasing the network and data visibility. In PY5, implementation of PViMS, an online adverse event reporting and monitoring tool, was supported by MTAps through training and UAT and went live on the DGDA website for piloting.

#### ***Nepal***

In Nepal, a new regulatory management information system, Open Regulatory Information Management System (OpenRIMS)—formerly known as Pharmadex—is in the process of being customized to increase efficiency and data use at the DDA. MTAps successfully demonstrated to DDA senior management the complete OpenRIMS for registering and tracking the country's nearly 30,000 pharmacies and 4,000 pharmaceutical wholesalers and importers. As of Q2 PY5, OpenRIMS has progressed to the final stages of implementation with the engagement of a local vendor that is working on data migration.

#### ***Mozambique***

MTaPS Mozambique and the DNF/ANARME, IP achieved key agreements to implement the online version of OpenRIMS and are working to enhance it to follow the Common Technical Document format for evaluation of MA dossiers in the product registration process.

## **Rwanda**

In strengthening the information management system for both active and spontaneous PV, MTaPS supported the Rwanda FDA to adapt the electronic PViMS for spontaneous reporting of AEs, including AEFIs for Ebola and COVID-19 vaccines, and for active safety monitoring of DTG-based antiretroviral therapy regimens. From June 2021 to March 2023, 1,539 AEFIs (597 of which were serious AEs) were reported to the Rwanda FDA, which subsequently reported them to WHO. The use of PViMS ensures that medicine safety monitoring reports are quickly received and analyzed by the FDA, which can then provide regulatory feedback to clients, patients, and health facilities in a timely manner.

MTaPS has been providing technical assistance for implementation of a regulatory management information system to increase the efficiency of the Rwanda FDA's regulatory functions. IRIMS was customized to the Rwanda FDA's requirements and deployed on a temporary server at the Rwanda FDA. During PY5, MTaPS continued to work with the Rwanda FDA and the software development consultant to support IRIMS deployment and implementation, including training internal and external users. In addition, MTaPS worked with Rwanda FDA and Rwanda Information Society Authority to facilitate final hosting of IRIMS in the country's National Data Center on three configured and deployed IRIMS servers, leveraging COVID-19 funds from USAID.

## **Philippines**

MTaPS supported the DOH in introducing and rolling out an end-to-end eLMIS to enhance supply chain visibility and efficiency, including for COVID-19 vaccines. To date, a total of 37 warehouses (central, regional, and in two LGUs) have functioning eLMIS. MTaPS is continuously collaborating with other organizations, donors, and government departments—such as Philippine Business for Social Progress (PBSP), a Global Fund recipient, and WHO—to leverage resources for eLMIS implementation. In total, MTaPS has leveraged Php50,104,548 (~\$910,991) from PBSP and WHO in support of the eLMIS implementation. MTaPS also enhanced PViMS, including its interoperability with VigiFlow, and supported the DOH and the FDA in rolling it out to targeted TB facilities. Since the start of the PViMS roll-out in PY3 (FY21), MTaPS has been able to reach 197 out of 199 TB facilities. To date, 569 adverse events have been reported through PViMS. Additionally, MTaPS supported the DOH in analyzing stock information for key tracer TB, FP, and HIV commodities, starting in PY3 (FY21).

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

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

#### **Bangladesh**

**Activity 1.2.2: Institutionalize the eAMS use at district hospitals.** With MTaPS' technical assistance, information on approximately 396 assets at the 61 district hospitals was entered and 9 tickets for repair were raised in the eAMS during this quarter. Currently, the eAMS contains information on 9,373 assets, including their location, functional status, and repair and maintenance history. The implementation of the eAMS at sub-district level hospitals (152 out of 431) has been initiated through training organized by the MIS unit of the DGHS and facilitated by MTaPS, with the government's own funding.

**Activity 3.2.1: Develop handover documents for major IT systems supported by MTaPS in consultation with the respective GOB units.** MTaPS is working closely with government entities to help develop the pathway to sustainability for major MTaPS-developed IT systems. Five out of seven plans have been drafted and shared with MTaPS global subject-matter experts for input. Discussions on the system handover were conducted with relevant stakeholders. MTaPS has advocated for the proposal of necessary budget. This financial support will ensure the continued operation and maintenance of the systems after MTaPS phases out. By transferring expertise, sharing best practices, and providing resources, MTaPS ensures that these government entities are well-prepared for the transition and enables them to sustain the benefits of the IT systems.

### **Philippines**

**Activity 1.3.1: Implementation of an Electronic Logistics Management Information System (eLMIS):** MTaPS supported the DOH and CHDs to roll out eLMIS in the warehouses of two LGUs, bringing the total of warehouses implementing eLMIS to 37. To highlight the milestone of implementing eLMIS in one of the UHC sites, eLMIS was officially launched in Capiz. MTaPS updated the eLMIS sustainability and transition plan based on a series of consultations with key stakeholders. The plan outlines the key activities needed for supporting and building the capacity of the DOH to scale up and sustain eLMIS implementation in the country. In Q3, MTaPS also supported the eLMIS rollout training of 356 participants (244 female, 112 male) from 15 UHC sites. In Q3, a total of 30 change requests were incorporated into the eLMIS.

### **Rwanda**

**Activity 2.1.1: Build capacity on the use and management of IRIMS in automation of medical product regulation:** MTaPS and the Rwanda FDA achieved a milestone in IRIMS implementation by reaching the “go-live” stage and formally starting the use of IRIMS to support the execution of Rwanda FDA core functions. A go-live event that brought together various stakeholders, including clients, USAID, implementing partners, and representatives of the Government of Rwanda’s ministries and agencies, was held in May 2023, which provided an opportunity for the sensitization of stakeholders on the use of IRIMS through a live demonstration. Over 150 participants attended the event. MTaPS provided follow-up support to external and internal users. To ensure system transition and sustainability, super-users from various departments were trained in basic system support and troubleshooting. Within four weeks after implementation, over 1,500 permits had been issued using IRIMS and approximately 44% (RWF 152,604,311, about \$128,568) of the RWF 352,493,804 (about \$296,974) revenue collected was secured through the government-owned iRembo payment gateway. These numbers evidence a substantial improvement in efficiency and transparency with respect to processing applications and a significant increase in revenue collection at the Rwanda FDA. Furthermore, MTaPS supported the development of a data protection and privacy policy to support the use of the Rwanda FDA’s information management systems, including IRIMS. The document is under final review by the Rwanda FDA.

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

### **Bangladesh**

**Activity 1.2.1: Collaborate with Directorate General of Family Planning (DGFP) to implement the transition to the online inventory management system:** MTaPS worked with the DGFP to roll

out the online inventory management system in all (23) warehouses and a few sub-district level FP stores. Implementation of the system helps with top-to-bottom visualization and the use of real-time logistics data for decision-making, which in turn is expected to increase clients' access to health products and reduce product wastage. To ensure the sustainability of MTaPS' support and gains in SCM, technical assistance has been provided to the Logistics and Supply Unit to develop the operation plans of procurement, supply, and store management for DGFP for the 5th Health, Population and Nutrition Sector Program (HPNSP 2024-2029).

**Activity 1.3.1: In collaboration with NTP roll out eLMIS for TB commodities in all subdistricts.** All the trained upazilas (317 out of 484) from 41 districts (out of 64) in 5 out of 8 divisions (Mymensingh, Rangpur, Rajshahi, Khulna, and Chattogram) have successfully completed quarterly stock reports, submitted quarterly commodity requisitions, and made all transactions using the eLMIS. MTaPS resumed the eLMIS for TB commodities training by organizing six batches of training for upazilas of the Dhaka division. It is expected that all the newly trained upazilas will complete the quarterly stock reports as well as submit the quarterly commodity requisitions for the next quarter and use the eLMIS for all transaction, which will contribute to an uninterrupted supply of TB commodities in the facilities.

### **Nepal**

**Activity 3.1.1: Implement pharmaceutical management information system, Pharmadex, for registration, inspection, importation and exportation, and pharmacovigilance:** The draft import registration module report is under review before its planned finalization next quarter. The dashboard for key performance indicators was finalized using Google data studio. The local vendor contracted to transition the Drug Administration and Management System to the DDA-MIS was oriented and the data migration script is being drafted. The potential interoperability between the Risk Based Inspection, the Medicines Risk-Based Surveillance Tool, and DDA-MIS were explored, and the local vendor is working on achieving that interoperability using an application programming interface service. Implementation of DDA-MIS will enable comprehensive tracking and performance reporting of medicine registrations, pharmacy, and wholesaler activities, and inspections for effective regulatory oversight and ensuring enhanced accountability in the healthcare care system.

### **Philippines**

**Activity 1.4.1: Conduct pilot testing on using a digital platform for Providers Integration and Engagement System (PIES):** MTaPS is identifying the legal, operational, and financial requirements for LGUs to engage private pharmacies. MTaPS gathered information from the Eastern Samar LGU and the National Pharmaceutical Foundation, a private entity that provides procurement, delivery, and inventory management services to the Eastern Samar LGU. USAID ReachHealth and MTaPS also facilitated the finalization of the system requirement specifications of the digital platform to inform the enhancement of the tool and its readiness for testing.

**Activity 2.4.1 PViMS: Standardized and systematic recording, reporting, and analysis are needed to monitor the safety of clients receiving drug-resistant tuberculosis treatment.** This quarter, a total of 10 adverse events were reported in 10 individuals (4 female, 6 male) through PViMS. MTaPS supported and co-facilitated the training of newly hired doctors and nurses by the PBSP on May 11, 2023. A total of 33 participants (24 female, 9 male) from 19 PMDT facilities and 2 CHDs were trained.



### **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**

- Early consultation, advocacy, collaborative design, and conduct of activities with government counterparts produces tangible results and facilitates government ownership. (*Experience from the Philippines.*)
- A fundamental component of implementing a software solution is to create an enabling environment that can facilitate project strategic design and implementation objectives. Understanding the atmosphere in which the work is being done—e.g., the legal and policy environment, including the country’s commission on audit rules and regulations—is critical. (*Experience from the Philippines.*)
- Government counterparts need to assign dedicated personnel clear roles and responsibilities and support them with the appropriate tools and guidelines so they can fulfil their capacity to implement the software. (*Experience from the Philippines.*)
- Identifying risks and defining mitigation strategies at an early stage in the implementation of a software solution is vital to minimize the chance of project delays, failure to meet objectives, and other potential threats that could have been anticipated and addressed. (*Experience from Rwanda.*)

## **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 stock-outs and reduces the inefficient use of resources. MTaPS' objectives include building country pharmaceutical financing systems by strengthening their ability to institutionalize transparent and evidence-based decision making, building capacity to use robust information to define and cost pharmaceutical benefits coverage, promoting pharmaceutical expenditure (PE) tracking to improve purchasing value, and strengthening pharmaceutical-sector governance.

### **CUMULATIVE PERFORMANCE TO DATE**

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

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

To reduce patient-side financial barriers to accessing medicines, MTaPS 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. Promoting the use of generics and competitive markets could lower prices and increase access for vulnerable populations.

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. Following the recommendation of WHO, countries should apply policies that control the margins or maximum markups throughout the supply chain. Building a regional database of prices can guide governments in benchmarking their prices to pursue internal or external reference pricing policies.



In **Nepal**, MTaPS supported the development of an evidence-based policy on a price control mechanism for pharmaceutical products. Three DDA staff participated in the WHO online Summer School Pharmaceutical Pricing and Reimbursement Policies course in 2021 in preparation for the regulatory revision aiming to reduce out-of-pocket expenditures. 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 prepared a preliminary report on pharmaceutical pricing regulations in Nepal.

In **Mozambique**, MTaPS supported the DNF/ANARME 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 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 supported the Ministry of the Economy to improve the cost structure for health services and products. 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 BENEFIT 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 October 2020, more than 200 participants attended the roadmap launch webinar, which included a five-member panel discussion with HTA program leaders from Colombia, Kenya, South Africa, Taiwan, and Ukraine.

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. The draft report was shared with key informant interviews for feedback. MTaPS also supported the Indonesian MOH in organizing, synthesizing, and documenting the 9th HTAsiaLink Virtual Conference from October 11 to 13, 2021. The MTaPS-led pre-conference workshop drew 220 participants. 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* (IJTAHC) in July 2022. MTaPS presented two abstracts and received an award at the 10th HTAsiaLink Virtual Conference in November 2022.

In **Indonesia**, MTaPS is supporting MOH in redefining the criteria for selecting HTA topics, from eight overlapping and unclear criteria to six clearly defined criteria (volume, impact of technology on health, cost technology, compliance with policy priorities, potential cost savings, and social acceptance). MTaPS also facilitated an MCDA workshop to define a statistical weight for these criteria. InaHTAC accepted the new criteria for its measurable indicators and non-redundancy. To rollout the new changes, MTaPS developed digital forms for HTA topic nomination for stakeholders and supported the call for a topic-launching event. MTaPS' key principles in HTA topic selection were incorporated into the revised Indonesian HTA guidelines co-developed with the World Bank, InaHTAC, and Pusjak PDK. Following the revamp of HTA topic selection criteria in Indonesia, MTaPS supported the first rollout of the call for topics, and 41 HTA topics were received—twice as many as in the previous year. MTaPS organized stakeholder meetings to agree on operationalizing the revamp and adding it to the HTA topic selection operational manual. 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 developed a manuscript detailing 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, with support from the in-country consultant CREATE, developed a document outlining options for setting up an HTA agency in the Ethiopian context. MTaPS wrote a manuscript entitled “Institutionalizing Health Technology Assessment in Ethiopia: Seizing the Window of Opportunity.”

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

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

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

In **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 onboarded local consultants to support the costing of the 25 prioritized interventions within the Bangladesh SSK benefits package.

In **Indonesia**, MTaPS conducted a systemwide 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 final report on the implementation of the 2022 PE tracking. MTaPS facilitated a meeting between the Pusjak PDK and the Directorate of Pharmaceutical Production and Distribution (Prodisfar) 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.

To support **MTaPS COVID-19 immunization costing**, MTaPS reviewed 530 articles across 3 databases and conducted 2 online surveys (November 2021 and May 2022) of health experts working in 21 countries to gather real-time COVID-19 vaccine delivery data. A third global survey is being deployed, focusing on subpopulations and integration. These activities feed into the MTaPS-adapted Harvard/COVAX costing model to estimate the cost of delivering COVID-19 vaccines under various scenarios. MTaPS compared its findings with other studies and led two large presentations with major stakeholders at the USAID-UNICEF-led Funders Forum and with the USAID COVID-19 Task Force Leadership. MTaPS also presented the work at the Health Systems Research Conference in Bogota, Colombia, in November 2022. In **Malawi**, MTaPS collected vaccine delivery expenditure data in 4 districts through surveys and interviews in the national offices and 20 facilities and cleaned and analyzed the COVID-19 costing data.

#### **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 applying for additional external funding.

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

In the **Philippines**, MTaPS supported identifying and allocating resources for PSCM through the national strategic plan implementation. MTaPS is advocating for leveraging private-sector capacity to outsource certain components of the PSCM, which is already part of the strategy for increasing PSCM efficiency in the national strategic plan. MTaPS also supported the DOH in developing guidelines for framework agreements to ensure that quality health commodities are procured efficiently. MTaPS analyzed the procurement legal and policy environment to identify gaps and provisions to develop feasible models to introduce and pilot a mechanism for pooling demands from multiple procurement entities.

The Philippines Department of Budget and Management has approved the multiyear contracting authority (MYCA) of the DOH for the procurement of TB commodities. Through MTaPS' advocacy, the DOH chose a framework agreement mechanism to procure those MYCA-approved TB commodities. MTaPS also mapped the FA procurement process and related activities to support its implementation. Enabling the MYCA and selecting a FA mechanism for procuring these commodities provides the DOH the flexibility in the quantity of commodities they order for every call-off/procurement, reducing the possibility of overstock or stockout of essential TB commodities.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

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

In **Nepal**, MTaPS, in collaboration with the DDA, drafted an updated pricing regulation based upon the findings of the situational analysis report on price regulation in Nepal conducted in previous quarters.

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

Under Cross Bureau funding, MTaPS had its manuscript entitled “Institutionalizing Health Technology Assessment in Ethiopia: Seizing the Window of Opportunity” accepted for publication in the *International Journal of Technology Assessment in Health Care*.

In **Asia**, MTaPS is finalizing the report on the HTA Hub in Asia, summarizing the findings from the e-survey and the interviews, and began drafting a manuscript from this report. MTaPS met with the secretariat of HTAsiaLink, HITAP, to discuss the findings of the report and activities for collaboration, focusing on potential support on the following activities: (1) regional HTA capacity building, and (2) improving the political climate around HTA. MTaPS will also provide technical support to ASEAN harmonization efforts as needed. MTaPS also finalized the HTA Institutionalization Canvas, adapted from Osterwalder’s business model canvas.

In **Indonesia**, MTaPS supported the 2024 call for HTA topics announcement meeting, attended by representatives from professional organizations, industries, academia, hospitals, relevant government units, and other HTA enthusiasts. This cycle now uses the processes designed earlier by MTaPS. MTaPS also began finalizing the HTA Topic Selection Operational Manual, developed through a two-year co-development process that engaged InaHTAC’s stakeholders. MTaPS held capacity building sessions for Pusjak PDK and InaHTAC on MCDA. Stakeholders agreed to conduct an MCDA case study in TB control using the evidence-informed Deliberative Process (EDP) framework to compare TST (tuberculin skin test) and IGRA (Interferon-Gamma Release Assays) for diagnosis of latent TB infection. MTaPS drafted a landscaping report on the HTA appraisal process and plans to develop the appraisal manual outline by July 2023. MTaPS work on RWE in Indonesia was featured as a case study at the 2023 annual conference of the International Society for Pharmacoeconomics and Outcomes Research (ISPOR).

In the **Philippines**, MTaPS finalized the HTA Methodology Guidelines for Clinical Equipment and Devices outline with the HTA Division and HTA Council. The draft content of the guide is expected to be completed by mid-July 2023. Once finalized and approved, the guide will be used to inform decision-making in selecting efficient, equitable, and innovative medical devices.

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

In **Asia**, MTaPS adapted the previously developed PE tracking training material to strengthen Bangladesh’s capacity in MNCH Pharmaceutical expenditure tracking. MTaPS supported a briefing session in May 2023 with 16 participants from the Bangladesh Health Economics Unit and other

stakeholders. MTaPS work in pharmaceutical expenditure tracking in Indonesia will be presented at the 2023 International Health Economics Association (IHEA) conference.

In **Indonesia**, MTaPS facilitated the Pharmaceutical Expenditure Tracking training workshop attended by Pusjak PDK, DG Pharmaceutical and Medical Devices, BPOM, University of Indonesia, and USAID-Health Financing Activity (HFA). The workshop resulted in the development of the 2023 PE tracking implementation plan.

In supporting the USAID COVID-19 global activity, MTaPS designed and implemented a third global survey with a focus on integrating COVID-19 vaccination into immunization programs and primary health care, as well as country efforts to target sub-populations for vaccination. In **Malawi**, MTaPS completed data analysis of the COVID-19 costing data. The findings from both the Global Survey and Malawi field costing will be presented at the 2023 IHEA preconference on Immunization Economics. A submission to the journal *Vaccine* on the results of the first two surveys is currently going through a round of revisions and will be resubmitted in August.

In **Bangladesh**, 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 is also drafting a technical report and processes on the PE tracking exercise to help the HEU showcase the results for policy brief and perform future exercises for other commodities.

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

In the **Philippines**, MTaPS in collaboration with DOH facilitated a 3-year quantification of FP and first line adult and pediatric TB commodities. The estimated quantities and budgets will be used for the DOH's application for multi-year contractual authority for FP and TB commodity procurement.

#### **BEST PRACTICES/LESSONS LEARNED**

- Close collaboration with government counterparts is essential when developing methodological products to ensure they reflect the country's priorities and can be feasibly implemented and sustainably executed. (*Experience from Indonesia and the Philippines.*)
- Introducing advanced methods for the first time may require continuous support to ensure sustainability and strengthen the capacity of the country so that it will be able to execute the work in the future. (*Experience from Indonesia and Bangladesh.*)
- Development of the scoping review on the community demand for the HTA Hub helps MTaPS refine areas of support. Unless based on a specific request of host agencies, future support should start with a broad and systematic assessment involving a broad group of stakeholders. (*Experience from Asia Bureau.*)

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

### **OVERVIEW**

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

### **CUMULATIVE PERFORMANCE TO DATE**

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

**Bangladesh:** MTaPS supported government counterparts to develop a long-term procurement strategic plan, a TOE for tertiary hospitals, a system to monitor the performance of procuring entities of DHGS, and an eLMIS-updated reference prices and specifications of the Medical Surgical Requisites (MSR) list, as well as to develop a strategy for assigning and reviewing the standard reference prices. MTaPS also provided TA to the FP warehouses to ensure timely resupply of FP commodities, resulting in very low stock-out rates and saving resources; introduced the eAMS in all 61 DHs for real-time assets tracking to improve rational procurement, timely maintenance, and repairs; assisted the NTP in assessing peripheral-level storage systems, developing an action plan and implementation of the plan to improve storage, supported a capacity assessment of the DGHS's procuring entities and developed key recommendations to strengthen procurement capacities of the DGHS, including creation of a procurement coordination cell.

**Philippines:** MTaPS supported DOH in developing a 3-year supply chain strategy, facilitated the inclusion of articles into UHC regulation to ensure policy support for supply chain reforms, developed a supply chain road map for UHC law implementation, assessed and developed supply chain workforce needs currently used to hire new staff, and developed and delivered several supply chain courses, which are being uploaded to the DOH e-Learning Academy. MTaPS supported the long-term estimations and revisions of TB and FP commodities requirements; the development and review of the quantification module in the Local Health System Playbook for Integrated Service Delivery for LGUs, including facilitating the registration of selected public health products to enhance availability; inclusion of three new ARVs in the PNF and completion of a 3-year (2022–2025) quantification of HIV/AIDS commodities; standardized the flow of HIV commodities and supported mapping of MMD practices; trained the PSCM focal persons in all 52 PEPFAR sites on these HIV/AIDS SCM standards; and developed a supply chain supervision and monitoring tool which is being used to improve PSCM practices.

**Jordan:** With strong leadership from local counterparts, MTaPS supported the MOH to advance efficient vaccine procurement through policy and legal reforms and to conduct a supply chain assessment



aiming to improve procurement and supply chain practices. MTaPS collaborated with the USAID-funded Public Financial Management and Administration Activity (PFMA) on conducting a training module focusing on the Government Procurement Bylaw.

### **SUB-OBJECTIVE 5.2: PATIENT-CENTERED PHARMACEUTICAL CARE IMPROVED**

**Nepal:** MTaPS worked with the DDA to develop and finalize guidelines, inspection tools, and an implementation strategy on GPP and GSDP and to develop and apply an e-Learning course and disseminate IEC materials to raise awareness on GPP and GDSP. The MOHP formed a nine-member TWG to revise the existing hospital pharmacy directives, for which MTaPS supported to develop a GHPP capacity-strengthening package for hospital pharmacists.

### **SUB-OBJECTIVE 5.3: PATIENT SAFETY AND THERAPEUTIC EFFECTIVENESS ASSURED**

**Bangladesh:** MTaPS has strengthened the PV system of the DGDA through scaling up of PV to more than 30 government and private HFs by providing training and creating PV units; developing and implementing risk management and investigation procedures to identify, analyze, and mitigate medicines safety risks; and supporting periodic evaluation of ADE safety data and submitting it to the WHO Uppsala Monitoring Center.

**Jordan:** MTaPS has supported the MOH to establish and implement a targeted spontaneous reporting system on the safety of COVID-19 vaccines and in analyses of multiple data sets from the COVID-19 vaccines AEFI surveillance system. It also generated and submitted comprehensive reports and key messages to be approved and disseminated by the MOH's National Pharmacovigilance center as health communication messages to encourage vaccine uptake.

**Mozambique:** MTaPS supported ANARME, IP in the institutionalization of PV and the utilization of PViMS for both active (ASM of TLD and TPT) and passive surveillance. The ASM resulted in enrollment of 3,317 and 458 participants respectively to studies to monitor AEs.

**Nepal:** MTaPS supported the DDA with a situational analysis of the PV system; establishment of a PV and drug information working group; capacity development through training on signal detection, analysis, and risk management; and development of PV regulations, guidelines, risk management plans, and SOPs for regulation and reporting. These interventions helped the DDA to become a member of the International Society of Pharmacovigilance.

**Philippines:** MTaPS supported the implementation of PViMS for active surveillance for TB medicines and worked with the DOH's pharmaceutical division and the FDA to ensure interoperability between PViMS and WHO Vigiflow for ADR reporting. MTaPS has also supported the causality assessment of the AE reports submitted through PViMS. Since the start of the PViMS rollout in PY3 (FY21), MTaPS has been able to reach 197 out of 199 TB facilities. To date, 569 AEs have been reported through PViMS.

**Rwanda:** MTaPS has continuously supported the Rwanda FDA in capacity building and institutionalization of PV through development of the PV national plan, training of PV personnel, creation of awareness on PV through IEC materials for public awareness on medicine safety, safety monitoring through active surveillance for the newly introduced DTG-based antiretroviral treatment regimens, and

evaluation of safety reports for regulatory decision making. MTaPS also supported the development of a costed multiyear national PV plan to guide the implementation of medical safety monitoring activities.

**Tanzania:** MTaPS supported the revision of the TOR for the National PV Safety Advisory Committee, developed safety monitoring guidelines for the pediatric population, and trained Vigilance Technical Committee (VTC) members on safety assessment of medical products, which has helped that committee assess AEs associated with ARVs and other medicines. MTaPS also built the capacity of Tanzania Medicines and Medical Devices Authority staff on the assessment of PSURs and risk management plans for ARVs and other medicinal products through practice-based training.

#### **SUB-OBJECTIVE 5.4: ANTIMICROBIAL RESISTANCE CONTAINMENT SUPPORTED**

**Jordan:** MTaPS strengthened the national AMR steering committee and its subcommittees to operationalize the NAP-AMR through MSC and a stakeholder analysis of the AMR/AMS initiatives. Additionally, the MOH approved the National Policy to Combat Multidrug-Resistant Organisms (MDRO), developed by the ACIPC with MTaPS' support. To enhance the technical capacities of IPC focal points, MTaPS supported the ACIPC to launch a certified IPC training course. MTaPS also worked with the MOH's School Health Directorate to nominate health educators for the MTaPS-led CASS initiative and conducted a TOT to prepare them for AMR awareness sessions. MTaPS helped develop 27 protocols and procedures for management of priority ICU infections, with accompanying audit tools, and helped create antibiotic prophylaxis protocols for 4 priority surgical procedures and an antibiotic management protocol for urinary tract infections.

**Philippines:** MTaPS supported the finalization of TOT materials on IPC and HCWM standard guidelines and practices and used the materials to train 41 trainers, who have begun cascading IPC training across the country. MTaPS supported the DOH to develop the IPC checklist tool applicable for HFs such as HIV/AIDS outpatient care facilities. Using this IPC checklist tool, MTaPS conducted assessments of IPC practices in 30 HIV facilities and community-based organizations.

**Rwanda:** Upon finalization of the first NAP-AMR, MTaPS collaborated with the MOH, Rwanda FDA, and other stakeholders to develop a complementary national multisectoral communication strategy for AMR. MTaPS also provided technical support to the MOH to conduct an AWaRe categorization of antibiotics and integrate it into the NEML to help prescribers use antibiotics more effectively. To improve pharmaceutical management in HFs, MTaPS supported the development of a manual for the establishment and operationalization of MTCs and subsequent training guide and job aids.

**Nepal:** To map previous and ongoing AMR-related actions by the government of Nepal, the MOHP, OH partners, and MTaPS Nepal began an AMR landscape analysis, which helped inform the development of an AMR training curriculum for journalists and IEC materials on AMR containment and AMS.

### **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

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

**Bangladesh:** MTaPS provided TA for the improvement of the procurement approval process by using performance-monitoring tools issued by the Health Service Division of the MOHFW. The TOR for the



DGHS procurement coordination cell has been finalized. MTaPS supported refresher training on SCM, online inventory management systems, and data analysis. MTaPS worked with the DGFP to roll out its online inventory management system in all 23 warehouses and a few subdistrict-level FP stores. Implementation of the system helps top-to-bottom visualization and use of real-time data for decision making. In this quarter, information on approximately 396 assets at the 61 district hospitals was entered into eAMS, 9 tickets were raised for repair, and 1 ticket was successfully resolved. Cumulatively, the eAMS contains information on 9,373 assets, 177 repair requests, and 117 resolved tickets. The implementation of the eAMS at subdistrict-level hospitals (152 out of 431) has been initiated through training organized by the MIS unit of the DGHS and facilitated by MTaPS, with domestic funding. MTaPS is providing TA for the smooth functioning of the online inventory management system for CMSD. The system can be replicated in other health facilities to improve SCM systems and to contribute to the health of the population of Bangladesh. To ensure the sustainability of MTaPS' support and gains in PSCM, TA has been provided to the logistics and supply unit of DGFP and the CMSD to develop the OP of Procurement, Supply, and Store Management (PSSM) for the DGFP as part of the 5th Health, Population, and Nutrition Sector Program (HPNSP 2024–2029).

All the trained upazilas (317 out of 484) have successfully completed the quarterly stock reports, submitted quarterly commodity indents, and made all transactions using the TB eLMIS. MTaPS resumed the eLMIS training by organizing 6 batches of training.

**Philippines:** MTaPS, in collaboration with the DOH, facilitated a 3-year quantification of FP and first-line adult and pediatric TB commodities. The estimated quantities and budgets will be used for the DOH's application for multiyear contractual authority for FP and TB commodity procurement. The quantification results and related stock status analyses also helped the DOH to expedite procurement of some of the commodities, such as combined oral contraceptives and first-line TB medicines for adult and children, to minimize potential stockouts. The DOH has taken immediate steps to expedite procurement and distribution, while also collaborating with partners in implementing stockout mitigation measures, such as commodity reallocation and redistribution and facilitating immediate FDA quality inspections. MTaPS, in partnership with the DOH, conducted consultative workshops to define the inventory systems and policies based on types of products and distribution networks. MTaPS engaged staff from SCMS, DPCB, 17 CHDs, 31 LGUs, and a hospital to conduct a survey on product flow modalities, PSCM process lead times, and practices. They presented the results of the survey and made decisions to standardize the key parameters to set up inventory holding policies at each level of the supply chain. MTaPS formally handed over the warehouse operation manual (WOM) to the Commission on Population and Development (CPD). The CPD released a memo endorsing this WOM to be applied in all warehouses.

During this quarter, MTaPS collaborated with the DOH and USAID EPIC to assess the country's requirement for viral load cartridges, and to complete their allocation. In addition, clearance of USAID donated HIV-1 Viral Load tests was completed. MTaPS is also monitoring the government-funded procurement status of TLD and informing key stakeholders. MTaPS supported the DOH to identify and invite participants to the DOH's suppliers' expo which aimed to help end users with how to write better technical specifications based on current market trends. MTaPS provided supportive supervision to HIV sites to bolster the skills and knowledge gained during the training on stock data recording, reporting, analysis, and good storage practices. After the supportive supervision visits, MTaPS held

results dissemination meetings for CHD HIV/AIDS Program Managers in which additional recommendations, including supportive supervision visits to non-certified clinics and community-based organizations, were made. MTaPS is also facilitating the compliance of HIV sites in storing or distributing donated HIV/AIDS commodities in accordance with the DOH, CHD, and LGU logistics management and documentation standards.

**Jordan:** MTaPS developed six priority procurement and supply management policies that are expected to contribute to sustainable availability of safe, effective, and quality-assured essential medical products. These policies were granted official approval by the Secretary General for Technical and Administrative Affairs at the MOH. The FA TWG, with MTaPS support, completed an advanced draft of the FA SOPs.

The GPD engaged the private pharmaceutical suppliers in the FA planning process with support from MTaPS. In this session, the GPD communicated its intention to implement FAs in future bidding processes. Most participants demonstrated commitment and support to the FA implementation. FAs will contribute to more efficiency and effectiveness in procurement when applied appropriately. MTaPS, in close collaboration with the GPD, completed the final draft of the procurement negotiation SOP. MTaPS also developed an annex for the SOP, specifically focused on negotiations within FA settings to address the unique conditions associated with FAs. Additionally, MTaPS developed a negotiation plan and a report template to be used by the negotiation team at public health–sector procurement entities to ensure proper documentation, transparency, accountability, knowledge retention, and continuous improvement.



*The GPD General Director, USAID Project Specialist, and CEO of the Jordanian Association of Pharmaceutical Manufacturers take part in the information session for pharmaceutical suppliers on FA implementation for procurement of pharmaceuticals, June 22, 2023. Photo credit: MTaPS*

## **SUB-OBJECTIVE 5.2: PATIENT-CENTERED PHARMACEUTICAL CARE IMPROVED**

**Nepal:** As part of the MTaPS-supported SPARS pilot, by the end of June, around 800 supervisory visits to health facilities, had been conducted by the MMS. MTaPS conducted 3 coordination and collaboration meetings in the pilot districts. In addition, MTaPS helped finalize and print the SPARS job aid, which will be distributed to the SPARS health facilities.

## **SUB-OBJECTIVE 5.3: PATIENT SAFETY AND THERAPEUTIC EFFECTIVENESS ASSURED**

**Bangladesh:** MTaPS supported workshops of the ADR monitoring cell, technical subcommittee (TSC), and ADRAC for evaluation of 128 AE reports, of which 31 serious adverse event (SAE) reports (10 in

female patients, 21 male) were identified with safety concerns that were published in the WHO newsletter. The DGDA is planning the scale up of PViMS to reach around 50 hospitals, 50 marketing authorization holders (MAHs), and a few public health programs. A total of 33 AE reports have been submitted through PViMS (as of June 21, 2023).

**Mozambique:** A total of 458 patients were enrolled in the TPT study, with 1,601 follow-up visits completed and 14 AEs reported. A third supportive supervision exercise was also initiated in Gaza province sites. Main challenges were identified, and recommendations and instant solutions were provided where possible.

**Nepal:** MTaPS led an analysis on the contribution of previous PV capacity-building activities on reporting, and it showed an increase in the number of ADE reports submitted to the DDA per month, from 1.5 reports in Quarter 2 to 7.5 reports in Quarter 3 and improvements in data completeness of ADE reports of over 40 percentage points (from 36% before the activities to 80% after). MTaPS presented PV activity updates at a USAID family planning subgroup meeting on June 8, 2023. Further, PV IEC materials were approved for publication by the DDA during the quarter.

**Philippines:** This quarter, a total of 10 adverse events (6 male, 4 female) associated with TB treatment were reported through PViMS. Out of the 10 reports, 7 were possible, 1 was probable, 1 was unlikely, and 1 was not assessable. MTaPS supported Philippine Business for Social Progress and co-facilitated the training of 33 newly hired doctors and nurses (9 male, 24 female).

**Rwanda:** MTaPS supported the FDA to review and print 10,000 ADR patient alert cards, 700 posters, and 500 flyers as part of creating public awareness on AEs, with in-depth review of the draft institutional safety communication strategy that will guide internal and external communications. As of the end of Q3, half of the patient cards and all 700 posters had been printed. In Q4, MTaPS will hand over the materials to the Rwanda FDA for distribution to health facilities. MTaPS is working on the enhancement of PViMS following recommendations of the recent WHO GBT assessment.

#### **SUB-OBJECTIVE 5.4: AMR CONTAINMENT SUPPORTED**

**Jordan:** MTaPS supported finalization of 27 draft AMS protocols, which the RMS quality department will pilot at Al Hussein Hospital using MTaPS-supported audit tools and key performance indicators, finalization of the implementation audit tools and KPIs for the hospital antibiotic prophylaxis protocols, and the drafting of AMR-related awareness messages to help HCAD raise community awareness. Following the success of the CASS program, the School Health Directorate and HCAD integrated CASS into the NAP-AMR 2023–2025, and they plan to extend the program to additional schools.

**Nepal:** Based on the results of an AMR pretest administered to 114 journalists (63 males, 50 females, 1 other), MTaPS developed an AMR training which was administered to 405 media personnel (278 male, 127 female) Through the end of June, the trained media personnel published over 200 news reports in Nepali as well as several TV and radio programs on AMR-related issues.

**Philippines:** MTaPS helped the DOH's Health Facility Development Bureau train a total of 221 health care workers (94 female, 127 male) on IPC and HCWM using the MTaPS-developed materials, and it trained IPC and HCWM master trainers.

## BEST PRACTICES/LESSONS LEARNED

- Appropriate planning, implementation, and monitoring of initiatives coupled with advocacy can result in ownership and scale-up of interventions. For example, in Bangladesh, the MIS unit of the DGHS has initiated the deployment of the eAMS at subdistrict hospitals, based on the experience from DHs. Consequently, 152 subdistrict hospitals in 4 divisions have begun using the eAMS.
- Local stakeholders are more willing to participate in interventions if they are supported with international and local evidence, locally contextualized approaches, and tools. For example, in Jordan, the GPD enthusiastically led an information session for private-sector suppliers which was founded upon the SOPs derived from the latest and most valid international references, fostering a stronger interest and commitment from the stakeholders.
- Consistent and direct follow-up with the focal persons at the active surveillance sites to identify data-related problems and make timely corrections can improve data quality and timely reporting. (*Experience from Mozambique and Rwanda.*)

## 3. PROGRESS BY HEALTH AREA/FUNDING STREAM

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

#### OVERVIEW

MTaPS provides GHS support to 13 partner countries (Bangladesh, Burkina Faso, Cameroon, Côte d'Ivoire, DRC, Ethiopia, Kenya, Mali, Mozambique, Nigeria, Senegal, Tanzania, and Uganda), focusing on AMR containment. MTA's GHS 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 NAPs-AMR.

#### CUMULATIVE PERFORMANCE TO DATE

##### EFFECTIVE MSC-AMR: EXAMPLES FROM TWO COUNTRIES

To strengthen subnational-level MSC on AMR, in **Kenya**, MTA's has been working with the NASIC since PY3 to establish and institutionalize CASICs in the four MTA's focus counties. By the end of PY3, the CASICs were established in all four focus counties, and a CASIC orientation package had been reviewed and updated with MTA's support. During PY4, MTA's supported Murang'a and Kilifi to launch their CASIC work plans developed in PY3 and helped the Kisumu CASIC develop its own work plan. In PY5, MTA's held an end-term workshop with the Nyeri CASIC to review their 2022–2023 action plan implementation, set priorities for their next action plan, and set up TWGs aligned with the six strategic objectives.

From the first year of MTA's work in **Mali**, the program supported the GCMN-RAM to develop TOR both for itself and for its IPC and AMS TWGs, as well as to organize regular meetings. So far, MTA's has supported seven GCMN-RAM coordination meetings, seven IPC-TWG meetings, and three AMS-TWG meetings. Since 2020, MTA's has been working with the IPC-TWG to conduct the annual Infection Prevention and Control Assessment Tool 2 (IPCAT2), which has shown steady improvement in IPC performance. In addition, in 2021, MTA's supported the AMS-TWG in assessing AMS core components at the national level by using the WHO checklist of national core elements for AMS programs in LMICs. During PY4, MTA's supported the GCMN-RAM in conducting a mid-term evaluation on NAP-AMR implementation and its associated M&E framework to propose recommendations for the next iteration of the NAP-AMR.

##### IPC IMPROVED AND FUNCTIONAL: EXAMPLES FROM TWO COUNTRIES

To help **Côte d'Ivoire** reach higher capacity levels for IPC as measured by JEE benchmarks, MTA's worked with the AMR secretariat and the Directorate of Veterinary Services to conduct a hygiene and IPC assessment, which included data collection visits to 10 veterinary clinics, 8 slaughterhouses, and 20 poultry farms. Following the assessment validation, MTA's supported the AMR-TWG in developing, reviewing, and validating IPC guidelines for the animal health sector alongside national and international

partners, including OIE. MTaPS then used the results from the hygiene and IPC assessment and the IPC guidelines to support the development of an IPC plan for animal health.

In **Nigeria**, MTaPS helped establish IPC programs, including facility IPC teams, in seven private and public HFs in Enugu and Kebbi States. To initiate these programs, MTaPS supported baseline IPCAF/HHSFAF assessments at each facility, which were then used to inform the development of improvement plans with a CQI approach for monitoring improvements. Subsequently, MTaPS helped strengthen the capacity of 59 members (38 female) from the 7 facility teams on key technical, managerial, and leadership components to effectively coordinate and manage IPC programs across the state, including using WHO assessment tools to self-assess and develop improvement plans. As a result, the facility teams cascaded the training to about 550 staff.

### **USE OF ANTIMICROBIAL MEDICINES OPTIMIZED: EXAMPLES FROM TWO COUNTRIES**

Beginning in PY2, MTaPS **Bangladesh** collaborated with the CDC/DGHS to develop STGs for managing common infectious diseases. Following the development and finalization of the STGs in PY4, MTaPS worked with CDC/DGHS to develop an STG mobile app to disseminate the STGs across the country. During PY5, MTaPS supported the development of an STG app protocol and conducted UAT to gather comments and feedback on the app's usability and user-friendliness in the field. To address AMU in the animal sector, during PY2, MTaPS **Uganda** worked with the National Drug Authority and MAAIF to update the EVML and develop guidelines on using antimicrobials in the animal sector. Following regional consultative meetings with veterinary practitioners and subsequent validation meetings, MTaPS helped the national stakeholders develop and implement a plan to disseminate the finalized EVML and guidelines across Uganda's regions and to selected high-impact districts. In parallel with the development of these guidance documents, MTaPS supported MAAIF in developing key messages on AMR in the agricultural sector, including posters, fliers, and billboards, targeting a wide range of audiences, including livestock farmers, herdsmen, veterinary practitioners, and the public.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

### **EFFECTIVE MSC-AMR**

**Strengthening MSC governance structures and functions:** Following the development and finalization of the AMR 2021-2025 M&E plan and routine data collection tools last quarter, MTaPS **Côte d'Ivoire** supported the AMR-TWG in training 12 M&E focal points (9 male, 3 female) to use data collection tools and indicators. MTaPS **Ethiopia** supported the Environmental Protection Agency (EPA) to conduct two TOT sessions for 49 (all male) clinical pharmacists and pharmacologists. EPA will use these trainers to cascade and scale-up AMR training across the country. To help prepare for **Senegal's** next JEE evaluation in July 2023, MTaPS supported data collection for the AMR, IPC, and laboratory sections and helped train the AMR-TWG on the JEE 3.0 tool. In **Uganda**, MTaPS collaborated with Makerere University and the ASO-TWC of the NAMRSC to publish the third edition of the biannual AMS newsletter, which serves as a crucial platform for sharing information on AMR activities.

**Holding multisectoral meetings or activities:** During this quarter, MTaPS helped coordinate routine MSC meetings in **Bangladesh, Burkina Faso, Ethiopia, Kenya, Mali, Mozambique, and Tanzania**. In its role as a major stakeholder supporting AMR in **Bangladesh**, MTaPS provided



technical and logistic support to the 11th One Health Bangladesh Conference in Dhaka (June 12-14, 2023). As an invited keynote presenter at the conference, MTaPS showcased its work in the 13 GHSA collaborating countries. MTaPS also cochaired a session on AMR mitigation and facilitated the translation of a video on AMR into Bangla, which was presented at the conference. In **Burkina Faso**, MTaPS worked with the One Health Technical Secretariat to organize a quarterly meeting of the Rational Use of Antimicrobials Subcommittee, where 12 participants (3 female) discussed a variety of topics, including implementation of the AWaRe categorization of antibiotics and operationalization of DTCs. In June, MTaPS **DRC** supported the Congolese Pharmaceutical Regulatory Authority (ACOREP) and Directorate of Animal Disease Control in conducting a workshop to complete the TrACSS tripartite survey questionnaire. The assessment found that the country either maintained or improved on all elements since the last assessment in 2022. MTaPS **Ethiopia** collaborated with EPA, MOH, and WHO to organize an event to celebrate the 11th National AMR Day on June 22, 2023, in Addis Ababa, attended by 114 participants (31 female), both in person and virtually. To launch the One Health Kisumu CASIC work plan, MTaPS **Kenya** helped hold a high-level launch event attended by key stakeholders from various sectors. Discussions during the launch event also led media outlets to commit to holding One Health radio talk shows to raise awareness on AMR containment efforts in Kisumu. In preparation for the soon-to-be conducted second external JEE in **Tanzania**, MTaPS supported the MSC committee and MOH to facilitate a workshop to conduct the first country self-evaluation of the WHO IHR JEE; the self-evaluation found improvements in AMS and IPC, especially in the human sector.

**Drafting or updating multisectoral policies, plans, or guidelines:** After completing the 2017-2022 NAP-AMR performance review earlier in the year, MTaPS **Nigeria** helped develop and present a roadmap to develop the next version of the NAP-AMR. In **Mozambique**, MTaPS participated in a meeting to review the draft animal-health-sector AMR communication strategy. Additionally, at an AMR MCC meeting organized with MTaPS support, participants developed an action plan and budget, which will be used to advocate for resources. In collaboration with the OIE and the FAO Emergency Centre for Transboundary Animal Diseases, MTaPS **Senegal** provided technical assistance to develop the NAP-AMR for 2023-2027, including integrating the National AMS Plan, which was previously developed with MTaPS support. From data collected last quarter, MTaPS **Uganda** worked with the NAMRSC of the OHP to draft a report demonstrating the status of and barriers to NAP-AMR implementation and mapping potential sources of funding for AMR activities in Uganda.

## **IPC IMPROVED AND FUNCTIONAL**

**Strengthening IPC governance structures and functions:** In April, MTaPS **Côte d'Ivoire** supported the MTC 4 to make supervision visits to IPC committees at the three hospital COEs, where a tool that DMHP developed was used to assess the IPC committees' functioning and capacities. Two of the hospitals increased their score to the advanced level, while the third hospital's score went down; the decrease in score may be attributed to the appointment of new IPC committee members who were not yet familiar with their roles. Continuing from last quarter, MTaPS **Cameroon** supported the Directorate of Health Promotion to make IPC supervisory visits at the nine MTaPS-supported facilities that did not receive visits last quarter (total of 13 facilities), which included conducting IPCAF and HHSAF assessments. The IPCAF assessments showed improvements in IPC scores in eight of nine facilities, with two facilities rising to the advanced level from the intermediate level. At the national level in **DRC**, MTaPS supported the Directorate of Hygiene to repeat the IPCAT2, which showed

improvement in all components. The assessment results were then used to develop an improvement plan, which will be reassessed in six months. In **Mali**, MTaPS supported the General Directorate of Health and Public Hygiene to complete IPC supervision visits to 16 supported HFs, finding that 88% of facilities had improved performance in core IPC components and in handwashing compliance. Moreover, all 16 supported facilities were carrying out their CQI plans, with an average implementation rate of 53%—an increase from 39% in 2022. MTaPS **Mozambique** helped the National Directorate of Medical Assistance–Department of Nursing (DNAM-DE) conduct repeat IPC assessments at the three MTaPS-supported facilities, all of which demonstrated improvement in IPC interventions and were rated at the advanced level. Similarly, in **Tanzania**, MTaPS collaborated with MOH to conduct onsite IPC supervision visits at 10 MTaPS-supported HFs, which included mentoring HCWs on areas of improvement and SSI surveillance and reporting and conducting repeat IPCAF assessments.

**Developing and implementing IPC policy and guidance documents:** In **Ethiopia**, MTaPS supported the MOH to organize a validation workshop for the IPC-FLAT tool. During the workshop, the 19 participants (4 female) developed a scoring scale, improved indicator clarity, and refined the verification criteria. MTaPS **Mozambique** supported DNAM-DE to host two workshops where stakeholders developed and validated an HAI surveillance manual and validated IPC protocols developed in PY4 with MTaPS' support. MTaPS also participated in a WHO-led workshop to develop a draft national IPC plan, based on a situational analysis report that MTaPS had supported to develop previously using data from IPCAT2 and IPCAF assessments. In collaboration with the national AMR-TWG secretariat, MTaPS **Nigeria** supported the review of the first edition of the viral hemorrhagic fever management IPC guidelines. During workshops this quarter, MTaPS **Senegal** helped the Directorate for Quality, Security, and Hospital Hygiene develop a national IPC work plan and update the National IPC Guidelines.



IPC-FLAT validation workshop in Ethiopia, June 8, 2023. Photo credit: MTaPS

**Developing individual and local capacities:** As part of the quality improvement program scale-up, MTaPS **Ethiopia** supported four hospitals in conducting an integrated training on IPC and AMS to 193 (45 female) health workers. In **Kenya**, MTaPS worked with the National Nurses Association of Kenya to conduct two CPD-accredited webinars on SSIs and environmental cleaning and reprocessing of reusable medical devices in hospitals for 270 HCWs (179 female). Additionally, in **Kenya**, MTaPS helped



seven representatives (four from Nyeri county and three from Murang'a county) present abstracts at the 10th IPNET-Kenya conference, covering topics related to COVID-19, hand hygiene, SSIs, and OSH. In **Nigeria**, MTaPS supported the national AMR-TWG in conducting IPC step-down trainings for 668 HCWs (476 female) from MTaPS-supported facilities in Enugu and Kebbi States that included environmental cleaning, hand hygiene, use of PPE, and national IPC guidelines. In addition, MTaPS **Nigeria** collaborated with the national AMR-TWG secretariat to visit the three supported facilities in Enugu State to provide on-the-job training for facility IPC teams and secure commitment from their respective facility management teams for budgetary support for procuring IPC products.

## **USE OF ANTIMICROBIAL MEDICINES OPTIMIZED**

**Developing and implementing AMS policies, plans, and guidance documents, including AWaRe classification:** MTaPS **Bangladesh** received further feedback on the STG app from physicians in four selected facilities. So far, the test has included 87 physicians from 4 HFs; 80% of respondents provided positive feedback on the app's technical correctness and usefulness. In **Côte d'Ivoire**, MTaPS worked with the MTC 5 to conduct an AWaRe categorization workshop, where 43 participants (13 female) classified the list of antibiotics according to AWaRe categorization and drafted an inter-ministerial decree to enforce the implementation of the AWaRe categorization in HFs. Similarly, during a series of workshops in **Cameroon**, MTaPS supported the development, finalization, and validation of the AWaRe categorization of antibiotics in the NEML. In collaboration with the National Pharmacovigilance Committee and ACOREP, MTaPS in **DRC** supported a one-week workshop to draft national antibiotic use guidelines for use in HFs, which will be validated next quarter. In **Ethiopia**, MTaPS provided technical assistance to MOH to revise the AMS practical guide, which, once finalized, will enable health care providers to use evidence-based practices in their selection, prescribing, and use of antimicrobials. Through a series of weekly and supplementary meetings, in **Kenya**, MTaPS supported the Directorate of Health Products and Technologies to review, update, and validate the Kenyan EML. At a two-day workshop in April, MTaPS in **Nigeria** collaborated with the Federal MOH and AWaRe-TWG to complete the AWaRe categorization of antimicrobials, which will be integrated into the updated NEML. In **Tanzania**, MTaPS supported analysis of the national AMC data from 2020-2022 that it had helped collect last quarter, before submitting it to the AMS-TWG and MCC for their approval before uploading to the GLASS platform.

**Assessing AMS capacity at the national and local levels and developing action plans:** In collaboration with the Directorate of Hospital Pharmacy (DPH), MTaPS in **Burkina Faso** visited three HFs to help monitor the functionality of their DTCs and conduct a post-training survey on the rational use of antibiotics. The visits revealed some of the DTCs' important challenges, including staff turnover, lack of funding, and weak member commitment. In **Mali**, MTaPS worked with national stakeholders to monitor AMS practices in 16 HFs by using the WHO tool for AMS implementation program at facility level, antibiotic use monitoring tools, the CQI implementation plan, and a DTC supervision tool. Overall, all 16 supported facilities were implementing their CQI action plans, and all facilities had infectious disease treatment guidelines. In April, MTaPS in **Mozambique** supported DNAM-DTH to conduct supervision visits to the three MTaPS-supported facilities to provide technical assistance and repeat AMS assessments, which found that all three facilities had improved their AMS performance since baseline. In **Uganda**, MTaPS, in collaboration with MOH and ASO-TWC, qualitatively assessed AMS interventions in six MTaPS-supported HFs, documenting major barriers and enablers to success. In

addition, building from the work done last quarter, MTaPS worked with MOH and NAMRSC to develop and apply a tool to evaluate HFs in becoming AMS COEs; the tool assesses AMS structures, outcomes, and AMS intervention impact in hospitals. The tool has 27 mandatory indicators and 10 optional indicators, and to be designated as an AMS COE, HFs must have met all mandatory indicators in the previous 6-12 months, including demonstration of outcomes and impact of AMS interventions.

**Strengthening individual and local capacity:** MTaPS in **Ethiopia** supported MOH and the Addis Ababa RHB to train 40 participants (19 female) from 20 hospitals on how to conduct mandatory AMC surveys at their facilities. In addition, at MOH’s request, in **Ethiopia**, MTaPS helped conduct a TOT on AMS, IPC, and diagnostic stewardship for 30 health professionals (6 female) drawn from 8 hospitals in the EPHI’s AMR surveillance network. In **Senegal**, MTaPS worked with the National Committee for Antibiotic Treatment to train a group of 19 trainers (10 female, 9 male) on the antibiotic treatment guidelines, who will help roll out AMS training to HFs nationwide.

## BEST PRACTICES/LESSONS LEARNED

- Identifying and developing funding opportunities is a key avenue for sustaining IPC and AMS programs. For example, the revised Health Facility Improvement Fund in Kenya takes funds generated at the facility level and ploughs them back into improving certain aspects of health services delivery at the facility level, which has contributed to budgeting for sustaining AMS/IPC activities at the MTaPS-supported facilities.
- Frequent supervisory visits with government partners can help mitigate and resolve facility-level challenges. For example, in Bangladesh, problems identified at Jhalokathi District Hospital during a supervisory visit were resolved rapidly by including government personnel who had official authority.
- As found in Nigeria, using in-country data for the AWaRe categorization process helps tailor the outcome to the local conditions and ensures outcome ownership by end users at the facilities.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	
Global	<ul style="list-style-type: none"> <li>▪ Finalize the GHeL AMR 2 course</li> </ul>
MSC	<ul style="list-style-type: none"> <li>▪ Continue facilitating meetings of MSC-AMR bodies and/or their TWGs (BD, BF, KE, ML, MZ)</li> <li>▪ Support the validation and finalization of the new iteration of NAP-AMR (KE, SN)</li> <li>▪ Help conduct a NAP-AMR lessons learned and experience-sharing workshop (CI)</li> </ul>
IPC	<ul style="list-style-type: none"> <li>▪ Help conduct repeat IPCAT2 (BD, MZ)</li> <li>▪ Support the newly established pilot systems for HAIs and multidrug-resistant organisms’ surveillance (CM)</li> <li>▪ Support facility-level IPC assessments (IPCAF, HHSAF, WASH-FIT) (DRC, CI)</li> <li>▪ Finalize and support dissemination of the revised National IPC Guidelines (KE)</li> <li>▪ Complete the revision of the IPC communication strategy (TZ)</li> </ul>
AMS	<ul style="list-style-type: none"> <li>▪ Collaborate with national stakeholders to conduct supervisory visits to facilities (BD, BF, CI, KE, ML, NG)</li> <li>▪ Help disseminate the ministerial order regulating and enforcing the rational use of antimicrobials (BF)</li> <li>▪ Develop/update and disseminate treatment guidelines with the AWaRe categorization of antibiotics (DRC)</li> <li>▪ Facilitate re-establishment of the national AMR advisory committee (ET)</li> <li>▪ Support finalization of the Kenya EML 2023, including updating AWaRe categorization (KE)</li> <li>▪ Collaborate with national counterparts to conduct a central-level AMS baseline assessment using the WHO AMS toolkit (MZ)</li> </ul>

## **B. COVID-19**

### **COVID-19 RESPONSE AND VACCINE INTRODUCTION—QUARTERLY PROGRESS FOR QUARTER 3, FY23**

In May 2023, WHO declared that COVID-19 no longer represents a global health emergency. However, despite a noticeable decline in reported cases, COVID-19 remains a public threat in MTaPS-supported countries. In light of the threat, continuous effort is required to maintain the quality and safety of health services through better IPC and ensure an uninterrupted supply of IPC- and COVID-related products and equitable and safe vaccine administration with specific focus on vulnerable population groups. MTaPS supports careful vaccination planning, reaching out to vulnerable and remote populations, actively promoting vaccine safety monitoring and evidence-based information, and engaging private-sector providers and communities. Many governments are looking into health system improvements based on the innovations and lessons from the pandemic response and exploring the options for private sector engagement and mainstreaming COVID-19 vaccination into national immunization programs.

MTaPS completed all planned COVID-19 activities in several countries in the previous reporting period, including Burkina Faso, Senegal, and Mali. In quarter 3, FY23, MTaPS supported the governments in nine countries to strengthen their ability to plan, deploy, administer, and monitor the safety of COVID-19 vaccines.

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 support two USAID objectives and eight result areas:

#### **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

Select quarter 3 highlights from the MTaPS countries include the following:

In **Bangladesh**, in Q3, MTaPS continued providing technical leadership to the DGDA and National AEFI Advisory Committee to improve the mechanisms for COVID-19 vaccine safety, including the evaluation of AEFI reports, two of which were serious. In addition, MTaPS supported COVID-19 vaccination supervisions and safety monitoring of the Extended Program on Immunization (EPI) in eight districts: Munshiganj, Narayan Ganj, Sunamganj, Gaibandha, Lalmonirhat, Rangamati, Bandarban, and Sherpur districts utilize a customized supervision and monitoring checklist based on a routine checklist for all EPI vaccines. The primary objective of the monitoring and supervision activity was to enhance local capacity for vaccine safety monitoring and supervision, while promoting collaboration among stakeholders. With these activities, the MTaPS COVID-19 related program of support to Bangladesh concluded on June 30, 2023.

In **Cameroon**, MTaPS supported the EPI in launching COVID-19 vaccination in hard-to-reach areas in the 42 identified health districts from the 3 supported MTaPS regions (Center, Littoral, and West). This included training 120 health care providers (87 female and 33 male) from private HFs in the supported regions on COVID vaccination-related topics. Following the training, MTaPS supported EPI in conducting vaccination in 42 health districts by funding the activities of 347 supervisors (105 female, 242 male), 45 data managers (26 female, 19 male), and 774 vaccinators (348 female, 426 male). Q3 data shows that 13,650 males and 12,643 females received the first dose of the vaccine; 1,203 males and 900 females received the second recommended dose, and 5,449 males and 5,455 females received a recommended booster dose. Overall, 7,813 doses of Sinopharm, 31,469 doses of J&J/Janssen COVID-19 vaccine, and 18 doses of Pfizer-BioNTech were administered.

In **Cote d'Ivoire**, to reach the 70% COVID-19 vaccination national vaccination target, MTaPS supported the integration of COVID-19 and routine vaccination in private clinics and pharmacies in Abidjan and strengthening the capacity of metabolic disease management units in public HFs to safely increase the vaccination coverage of people with comorbidities. MTaPS supported the development of training materials and trained 128 health care workers (104 female, 24 male) on immunization processes and vaccine administration. COVID-19 vaccination in private pharmacies and health care facilities will start on July 10, 2023. To protect people with diabetes and hypertension against COVID-19, MTaPS, in collaboration with the National Program for the Fight against Metabolic Diseases, integrated systematic vaccination against COVID-19 into the National Program for the Control of Metabolic Diseases (PNLMM) Diabetes and Hypertension Management Units. MTaPS developed training materials and trained 39 health workers on the new type 2 diabetes and hypertension guidelines and the COVID-19 guidelines.

In **Kenya**, MTaPS continued to support the government in establishing processes governing vaccine manufacturing. MTaPS participated in a WHO-facilitated virtual GBT status review of PPB that showed significant progress by PPB in implementing institutional development plans (IDPs) since the last assessment (November 2022), especially on IDPs supported by MTaPS. A total of 53 IDPs were highlighted as pending out of the 119 that were highlighted as required to achieve maturity level 3 (ML3) status. MTaPS, in partnership with PPB, assessed and mapped existing skills and competencies for selected pharmaceutical regulatory functions identified during the WHO GBT assessment. This covered the following departments/sections: leadership/directors, marketing authorization, clinical trials, PV and post-marketing surveillance, licensing, and laboratory. MTaPS finalized the competency mapping report and disseminated it to the PPB team. Findings from the competency mapping will inform capacity-

building efforts for PPB staff, including the 25 new staff (13 female, 12 male) recruited with USAID support. Another important Q3 highlight is MTaPS' continuous strengthening of the national PV system at the national, county, and facility levels. Overall, MTaPS trained 132 people (66 females, 66 males), including through a TOT on investigating reported serious and other adverse events of medical concern, and PPB and county focal persons for PV staff on AEFI investigation and using the PV electronic reporting system (PvERS); PvERS was updated by MTaPS in Q2 and Q3 with an improved landing page and dashboards, digitized AEFI investigation form, and links to the PPB and Kenya Health Information System (KHIS).

In **Madagascar**, MTaPS developed and validated the laboratory supply management guide; training materials based on this guide will be developed in Q4. MTaPS supported the mid-term monitoring and evaluation of the implementation of the national strategic plan for laboratory development and assessed peripheral diagnostic laboratories in Nosy-Be, Diégo, Toamasina, and Mahajanga; following the planned assessment of the central Medical Laboratory of Madagascar (LA2M) in Q4, MTaPS will design a networking plan for the central and peripheral LA2M laboratories. MTaPS continued capacity-strengthening activities, including the development of the training curriculum on COVID-19 RDT and the GeneXpert platform and a workshop on using harmonized electronic registers and data entry into the DHIS2 system.

In **Nigeria**, MTaPS continued to work collaboratively with the state primary health care boards, the professional associations for pharmacists and doctors, and other implementing partners involved in COVID-19 vaccination, such as WHO, UNICEF, and Breakthrough Action Nigeria, to increase outreach and generate demand for COVID-19 vaccination. MTaPS conducted advocacy visits to all supported states of Oyo, Akwa-Ibom, Cross-River, Rivers, Kaduna, and Federal Capital Territory (FCT) and designed, printed, and disseminated COVID-19 outreach materials, including 2,400 copies of vaccine leaflets/posters and 2,400 copies of commodity fliers and COVID-19 e-fliers to boost COVID-19 vaccination community engagement and demand generation via private health care facilities. MTaPS' capacity-strengthening activities focused on supporting the dissemination of vaccination manuals and helping the Pharmacists Council of Nigeria (PCN) complete the development of a vaccination training manual that will be a basis for the PCN's Mandatory Continuing Professional Development (MCPD) program for Nigeria pharmacists interested in providing vaccination services.

In **Nigeria**, the overall number of supported private sector vaccination sites in Q3 reached 327 (114 fixed and 213 community-based sites). MTaPS trained an additional 60 HCWs (23 male, 37 female), bringing the total number of HCWs to 817 trained in all aspects of COVID-19 immunization, including vaccine handling and administration, maintaining cold chain functionality, vaccine safety and management of AEFIs, inventory management, recording and reporting vaccination data, and infection since the start of the program. During this reporting period, COVID-19 vaccination delivery continued through 213 private community pharmacies and 114 private sector hospitals mobilized with MTaPS support: to date, a total of 81,646 people (41,602 females and 40,044 males) in 6 states of the country have completed primary immunization series, and 40,528 people (22,947 female, 17,581 male) have received a booster dose of the vaccine.

In the **Philippines**, in Q3 MTaPS provided oxygen-related technical assistance to the central government. MTaPS worked with the DOH SCMS to incorporate the USAID- and Global Fund-donated

mechanical ventilators in the WHO Inventory and Gap Analysis (IGA) online system developed to ease the burden of collecting and analyzing equipment inventory data, including mechanical ventilators. DOH SCMS released a memo instructing all CHDs and PHOs to encode the donated mechanical ventilators into the IGA system. To guide the users, MTaPS and DOH SCMS co-developed and disseminated a Mechanical Ventilators Encoding Guide. The IGA system will be used to check compliance and monitor the status of the mechanical ventilators and cold chain equipment. MTaPS with representatives from the DOH and CHDs also visited 2 hospitals, Western Visayas Medical Center and Southern Philippines Medical Center, to check the status of the donated mechanical ventilators. Through this visit MTaPS was able to identify issues on the discrepancy in the number of units received by the hospitals against the allocation list and the lack of supplier for the procurement of the consumables needed to continuously use the ventilators.

In **Rwanda**, MTaPS responded to the Rwanda FDA’s request to conduct a training on signal detection, prioritization, validation, and analysis to address a key WHO recommendation following the recent evaluation of progress towards the attainment of maturity level 3 goals, specifically sub-indicators VL04.02 and VL04.04 which now requires the Authority to revise procedures on signal detection and management. MTaPS supported IRIMS deployment which 'went live' during the reporting period. The IRIMS supports registration of Covid-19 vaccines and related market authorizations among other things. The FDA has already received and reviewed 23 applications for registration of medical products, and 1689 import license applications since the launch of IRIMS. To further support Rwanda FDA, under the Vaccine Manufacturing workplan, MTaPS has recruited an expert in Good Clinical Practice (GCP) Inspections (to start in July 2023).

In **Tanzania**, MTaPS continued supporting the Tanzania Medicines and Medical Devices Authority (TMDA) with the dissemination of WHO-developed awareness and Covid-19 vaccine safety materials, as well as materials promoting timely AEFI reporting in 19 regions of Tanzania’s Mainland covering 280 HFs, including 180 dispensaries, 62 health centers, and 38 hospitals. MTaPS continued supporting the TMDA in the implementation of the COVID-19 vaccine PV system using a package of technical materials developed previously with the project support.

For more information about MTaPS’ COVID-19 activities, [click here](#).

**Table 1. MTaPS COVID-19 Quarter 3, FY23, indicators (detailed breakdown can be found in annex 3)**

Indicator and Disaggregation		Q3 FY23	Total from March 2020
<b>Objective 1. Accelerate widespread and equitable access to and delivery of safe and effective COVID-19 vaccinations</b>			
CV.1.3-3 Number of people trained on COVID-19 vaccine-related topics with MTaPS’ support			
Number of people trained		761	11,313
Sex	Male	284	6,112
	Female	457	5,181
	Unknown sex	20	20
CV.1.3-4 Number of health workers who are renumeralated by the US Government (USG) to support workload required for COVID-19 vaccine delivery in the reporting period			
Number of people renumeralated		2,170	6,547
Cadre	Clinical	0	873
	Community/law	0	235
	Data management	621	1,802



Indicator and Disaggregation		Q3 FY23	Total from March 2020
Supervision and logistics		1,549	3,637
CV.1.4-5 Number of vaccination sites supported by USG during the reporting period			
Number of vaccination sites supported		1,173	26,329
Types of sites	Fixed sites	180	11,272
	Community-based outreach vaccination sites	213	12,823
	Mobile team (or clinic) or transit team strategy	780	810
	Mass vaccination sites/campaigns	0	1,424
	Unknown	0	0
CV.1.4-6 Number of people who received a first dose of an approved COVID-19 vaccine (COV-1) with USG direct support			
Number of people who received first dose		26,293	499,600
Sex	Male	13,650	16,730
	Female	12,643	15,951
	Unknown sex	0	466,919
CV.1.4-7 Number of people who received a last recommended dose of primary series of an approved COVID-19 vaccine (COV-c) with USG direct support			
Number of people who received last dose		63,770	92,485
Sex	Male	31,358	38,278
	Female	32,412	40,295
	Unknown sex	0	13,912
CV.1.4-8 Number of people who received a booster dose of an approved COVID-19 vaccine (COV-2,3,4) with USG direct support			
Number of people who received booster dose		41,993	148,251
Sex	Male	19,266	23,030
	Female	22,727	28,402
	Unknown sex	0	96,819
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		919	9,270
<b>Objective 2. Reduce morbidity and mortality from COVID-19, mitigate transmission, and strengthen health systems, including to prevent, detect, and respond to pandemic threats</b>			
CV.2.3-15 Number of health workers trained in COVID-19 testing or specimen transport with USG support			
Sex	Male	0	33
	Female	0	30
	Unknown sex	0	0
CV.2.4-17 Number of health facilities where MTaPS provided support for IPC and/or WASH for COVID-19			
Number of health facilities		0	6,254
CV.2.4-18 Number of workers who received COVID-19-related training in IPC and/or WASH with MTaPS' support			
Number of people trained		0	49,278
Sex	Male	0	22,205
	Female	0	26,834
	Unknown sex	0	239
CV.2.6-22 Number of policies, protocols, standards, and guidelines across any of the result areas developed or adapted with MTaPS' support			
Number of policies, protocols, standards, and guidelines		13	116

# COVID-19 IMMUNIZATION COSTING

## OVERVIEW

LMICs have been facing an incredibly challenging vaccine rollout and COVID-19 vaccine delivery and what it costs to deliver these vaccines is highly uncertain. According to the WHO, as of June 2023, just 37% of Africa's population had completed their primary vaccination series compared to the coverage of 70% at the global level.<sup>3</sup>

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 the WHO and its partners, which can be helpful in generating estimates of COVID-19 vaccine delivery costs. The modelled, 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

To date, MTaPS assessed the available modelling 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.

In January-February 2022, MTaPS conducted a desk review across three databases, screened 530 articles, and identified 20 studies relevant on social mobilization (14) and campaign/outreach strategies (6). The purpose of this exercise is to gather insights to improve the MTaPS-adapted Harvard/COVAX costing model.

Global estimates require assumptions, which would benefit from in-country intelligence. MTaPS conducted an online survey of health experts working in each of our 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. This survey, completed in November 2021 and May 2022, identified evolving trends in vaccine delivery at the country level.

Further, MTaPS has been gathering more detailed vaccine delivery expenditure data in two countries: Malawi and Madagascar. MTaPS designed protocol for the country studies based on the How to Cost

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<sup>3</sup> <https://ourworldindata.org/covid-vaccinations>



Immunization Programs Guide,<sup>4</sup> WHO’s COVID-19 vaccine introduction and deployment costing tool, and ThinkWell’s COVID-19 Vaccine Delivery Costing protocol.<sup>5</sup> In Malawi, Institutional Review Board (IRB) approval was sought and granted. Data collectors have been gathering expenditure data through surveys and interviews in the national office, supplemented by 20 facility-level secondary data collection. Data collection was completed by the end of February 2023.

Lastly, MTaPS has supported ad hoc requests from USAID in addition to the original work plan. To date, MTaPS has conducted an assessment of the CARE Studies on the cost of COVID-19, conducted comparative assessment with ACT-A 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 5 ACHIEVEMENTS AND RESULTS

In Q3/Y5 the data analysis of the costing data was completed in Malawi. 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. By the end of June, the MTaPS home office completed data cleaning and analysis. Results will be presented on July 8 at the Immunization Economics Special Interest Group (SIG) Pre-Congress Session of the International Health Economics Association (IHEA) Congress in Cape Town.

The team received approval from USAID in Q3 to design and roll out a third global survey with a focus on integrating COVID-19 vaccination into immunization programs and primary health care, as well as country efforts to target sub-populations for vaccination. The survey was completed by the end of June 2023 and will be presented on July 9 at the IHEA SIG on Immunization Economics. A submission to the journal *Vaccine* on the results of the first two surveys is currently going through a round of revisions to be resubmitted in August 2023.

## BEST PRACTICES/LESSONS LEARNED

None this quarter.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Presentation of results of the Malawi costing work and the global surveys	July 2023
Submission to USAID of deliverables from the Malawi costing work and global surveys	July 2023

<sup>4</sup> Resch S, Menzies N, Portnoy A, Clarke-Deelder E, O’Keeffe L, Suharlim C, Brenzel L. How to cost immunization programs: a practical guide on primary data collection and analysis. 2020. Cambridge, MA: immunizationeconomics.org/ Harvard T.H. Chan School of Public Health.

<sup>5</sup> ThinkWell. (2021). General Study Protocol COVID-19 Vaccine Delivery Costing. Retrieved 2 February 2022, from <https://thinkwell.global/wp-content/uploads/2021/12/General-research-protocol-17-Nov-2021.pdf>

## 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 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. MTaPS also developed a [summary brief](#) on the key messages and action points in the discussion paper to make those messages more readily accessible to USAID missions and partner organizations and to facilitate their application by NGOs and governments.

#### 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***

As a follow-on to the PY2 [mapping of challenges in registering MNCH medical products](#) in nine countries, MTaPS supported Mozambique's regulatory authority, ANARME, IP, in streamlining registration of MNCH medicines by using findings and recommendations from the mapping. In PY4, MTaPS supported the [capacity building of 13 assessors from ANARME, IP in the assessment of bioequivalence studies](#) for generic oral medicines and helped increase the visibility and transparency of registration procedures through a [workshop of 70 manufacturers, importers, and distributors](#) hosted by ANARME, IP.

Also in PY4, MTaPS held a regional knowledge exchange with regulators from SADC member states and selected manufacturers of MNCH medicines on the optimization and prioritization of MNCH medical product registration. MTaPS has been developing an advocacy document for NMRAs to use to prioritize registration of MNCH medicines in their countries. MTaPS also began gathering information from SADC member countries to guide the selection of MNCH medicines to be considered at an in-person regional joint assessment.

To strengthen the regulation of MNCH medical devices and ensure their quality, safety, and effectiveness, MTaPS and the African Medical Devices Forum (AMDF) drafted a resource document on specific considerations for regulating MNCH medical devices and shared it with WHO and other partners for review.

### **OBJECTIVE 3: AVAILABILITY AND USE OF PHARMACEUTICAL INFORMATION ON 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. As a result, guidance documents on managing medicines and quality in procurement were developed; webinars were conducted for GFF country teams on the importance of prioritizing a robust pharmaceutical system to support MNCH interventions; a section on managing medicines was included in the GFF annual report; and GFF recruited a pharmaceutical advisor as staff.

In Liberia, the MTaPS senior principal technical advisor provided support to 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 a dissemination workshop held in PY4, MTaPS supported the MOH in understanding the challenges of subnational procurement of essential medicines, including for MNCH. MTaPS also supported the MOH in identifying key interventions to improve the quality of, and access to, medicines procured at subnational levels and including them in annual budgets and plans at national and subnational levels. This work oriented the development of a [global guidance document](#) on best practices in subnational procurement of MNCH commodities in the public sector.

### **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](#) in English and French has been disseminated through a number of webinars to more than 160 people and eight country teams and is referenced in the recent

Global Fund (GF) guidance to countries to consider inclusion of non-malaria commodities in their GF proposals.

### ***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 PY4, in collaboration with UNICEF, USAID, GHSC-PSM, and PQM+, held a series of [consultative meetings](#) 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](#), which provides actionable solutions for countries and has been widely disseminated.

After identifying a gap in support for strengthening countries' regulatory systems to ensure appropriate administration of quality oxygen, MTaPS has been developing a technical resource document for the quality assurance of medical oxygen from source throughout the distribution chain up to delivery to the patient to complement other operational guidance from WHO. Feedback from reviewers and from discussions in a virtual consultation meeting with stakeholders were incorporated into the document.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

### **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***

**Dissemination of lessons for design of social accountability interventions for medical products access and use:** On April 12, 2023, MOMENTUM Knowledge Accelerator and MTaPS co-hosted a knowledge exchange on best practices in social accountability. A total of 124 stakeholders registered, and 60 people from over 6 different projects participated in the session. Grounded in the widely applicable [lessons learned from the MTaPS discussion paper](#), experts from other USAID-funded projects underscored similarities across varied contexts in the challenges and approaches to address social accountability. Key concepts included mapping the accountability ecosystem, addressing inequitable power dynamics, engaging grassroots stakeholders, strengthening stakeholder capacity, and ensuring accessibility of knowledge. Resources on social accountability approaches from the projects were compiled and circulated. Participants indicated interest in other opportunities/platforms to continue discussions on approaches to implement 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***

**Support regional collaboration to regulate MNCH medical devices:** The AMRH steering committee approved the final draft of the AMDF guideline on considerations for regulating MNCH medical devices and endorsed it as a reference for member states; it currently is undergoing final design.

Planning is underway for a virtual sensitization/orientation session as well as strategies for implementation in countries.

MTaPS is supporting AMDF to plan an in-person capacity-building workshop to review technical files of MNCH medical devices, which AMDF requested TMDA to host. The capacity-building workshop will enable knowledge transfer from NRAs with advanced systems for regulation of medical devices and foster collaborations among regulators on the continent.

**Build capacity for regulating medical devices in a region, with a focus on MNCH medical devices:** Following discussions with the TMDA and AMDF, MTAps is supporting the TMDA to improve the regulation of medical devices, with a focus on devices for MNCH, to position the Authority as a regional center of excellence once criteria have been established by the AMDF.

The proposed support consists of an exchange visit between TMDA and a strong regulatory authority for medical devices, such as in Singapore or Saudi Arabia, and for TMDA to host a twinning visit with a few regulators from the African continent both to build its capacity to mentor and to build the capacity of the visiting regulators. MTAps helped TMDA draft a letter to the Singapore Health Sciences Authority to request the exchange visit and is planning a virtual session with the Singapore authority.



Jane Briggs presenting on streamlining registration of MNCH medicines in Cape Town. Photo Credit: Aishling Thurow, MSH

**Implementing a regional approach to support national regulatory authorities to streamline registration of MNCH medicines in countries:** After reviewing the information sent by countries, MTAps worked with the SADC joint assessment coordinator to confirm the products proposed for review in the upcoming SADC workshop. After meeting with representatives from the NRAs, MTAps was able to determine which products were still pending registration and still untouched in the review process in the respective countries to create a list from which the products to be reviewed in the joint assessment will be selected. The joint assessment will facilitate joint approval of MNCH medicines in the SADC region, thus improving access to the target population. The document to help NRAs advocate for prioritization of registration of MNCH medicines is being shared for review by the SADC project coordinator and the coordinator of joint assessments and

then will be shared in the workshop for NMRA input. Prioritization of MNCH medicines registration will ensure timely access to facilitate effective delivery of MNCH services.

**Support the streamlining of registration of MNCH medicines at a continental level:** This quarter, MTAps began initial discussions with the Evaluation of Medicines Products Technical Committee (EMP TC) and the focal point in AMRH. MTAps provided comments on the draft of the Eligibility Criteria Guidance on Priority Medicinal Products for Continental Assessment through AMRH/African Medicines Agency EMP TC, which was released for comment. MTAps is advocating for inclusion of



MNCH tracer medicines in the priority list of medical products to be considered for continental assessment and facilitate expeditious market entry.

**Improving systems for managing and administering oxygen and other medical devices in the respiratory ecosystem:** MTaPS finalized the [technical resource document](#) and shared it with USAID. MTaPS has had discussions with partners such as the Clinton Health Access Initiative, PATH, and UNICEF that are interested in supporting the document’s use in countries. MTaPS developed a plan for the virtual dissemination of the document and for the in-country stakeholder workshop to consider how to improve quality assurance for medical oxygen and is developing materials for those activities.

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

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

**Developing and disseminating global guidance on local procurement:** Planning is underway for the dissemination of the guidance on subnational procurement through an external webinar. A summary of the guidance document has been developed to include in the GHSC-PSM manual on procurement of MNCH medicines and is under internal review.

#### **Providing global technical leadership on pharmaceutical systems issues impacting MNCH:**

In May, MTaPS senior principal technical advisor for MNCH attended the International Maternal and Newborn Health Conference in Cape Town and gave a presentation on the registration of MNCH medicines, highlighting the results from the mapping previously conducted by MTaPS and the ongoing work to strengthen registration of MNCH medicines.

### **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***



Jane Briggs presenting in the panel on antibiotic use in an era of excess and launching the call-to-action paper to improve access to amoxicillin. Photo credit: Dyness Kasungami.

#### **Supporting documentation of bottlenecks of access to, and appropriate use of, pediatric amoxicillin (DT or oral suspension) and gentamicin injection and implementation of actionable solutions:**

MTaPS presented the [call-to-action paper](#) in a panel on access to antibiotics at the Global Pneumonia Forum. The QR code to link to the document was displayed during the panel, and 120 copies of the paper in English, French, Spanish, and Portuguese were distributed after the session. The MTaPS team is collaborating with GHSC-PSM and PQM+ to prepare for two

webinars on the call-to-action paper in July: the first with USAID missions and the second with implementing partners.

**Technical support to countries to implement Global Fund guidance for procurement of non-malaria commodities for community case management:** Through participation in the biweekly meetings of the iCCM task team of the CHTF, MTaPS continues to coordinate with the team and with other partners on including non-malaria commodities in GF proposals. MTaPS also participated in the mock Technical Review Panel (TRP) for malaria in Dakar, engaging with countries submitting funding requests in window 2.

MTaPS is finalizing an Excel spreadsheet and instructions aligned to facilitate the completion of the GF non-malaria commodities gap analysis tables and generate estimated quantities and costs of non-malaria commodities to be included in the funding request.

In addition to contributing to an [advocacy brief around the inclusion of iCCM in GF proposals](#), MTaPS also developed a [menu of TA as a reference document](#) for countries and supported its finalization with other partners.

**Country support:** MTaPS joined a meeting with USAID and partners in Liberia to prepare for support that will be needed for window 3 submissions and has connected with the consultant team supporting the writing of the funding requests.

MTaPS supported Madagascar to include non-malaria iCCM commodities for three regions in the Resilient and Sustainable Systems for Health funding request, supporting the quantification and completion of the gap analysis table, and bringing important stakeholders together.

## BEST PRACTICES/LESSONS LEARNED

- Good collaboration and coordination with regional counterparts are critical to implementing regional activities in a timely manner. This quarter, AMDF and SADC secretariat coordinators were instrumental in coordinating with member states, despite competing priorities.
- Collaborating with stakeholders and following established procedures of partner institutions is essential to ensure buy-in and successful implementation. For example, the AMDF decided to adopt the MTaPS-developed document as an AMDF guideline on considerations to regulate MNCH medical devices.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Conduct a virtual orientation of regulators across the African continent on the considerations of regulation of MNCH medical devices	August 2023
Conduct the in-person capacity building on review of MNCH medical devices technical files	September 2023
Plan for the exchange visit for the TMDA and for TMDA to host the twinning visits from the continent	September 2023
Conduct joint assessment of MNCH medicines in SADC region	September 2023
Conduct the virtual orientation of stakeholders on the document on quality assurance of oxygen	September 2023
Plan for the country stakeholder workshop on quality assurance of oxygen	September 2023
Disseminate the global guidance on best practices for subnational procurement through webinar	September 2023
Disseminate the call-to-action to improve access to, and use of, amoxicillin and gentamicin through a webinar to USAID missions and another to implementing partners, GFF, and UNICEF	July 2023
Participate in the mock malaria TRP in Ethiopia	July 2023



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

### **OVERVIEW**

USAID advances and supports voluntary FP/RH programs in nearly 40 countries. As a core partner in FP 2030, it is working with the global community to support voluntary, modern contraceptive use by everyone who wants it, achieved in part through responsive and sustainable systems providing a range of contraceptives and a supportive policy environment.<sup>6</sup> 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 manufacturer to service sites. MTaPS, with CSL funds, contributes to the division's goal of promoting the long-term availability of a range of essential FP/RH commodities. The program aims to do this by analyzing and recommending approaches for increasing financing and strengthening supply and logistics services to improve the availability and accessibility of FP/RH commodities.

MTaPS' strategic approach is based on the understanding that implementing a system 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 stakeholders in the community, through targeted advocacy and evidence-based technical assistance, government financing of FP/RH commodities will increase. This will contribute to improved availability of and access to these commodities at service delivery points and in communities as a result of stronger supply and logistics services.

### **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 that may shape decisions around increasing government financing within its decentralized health system. The PEA enabled MOH, USAID, and other stakeholders to be better informed about the factors that influence priority setting and financing and procurement allocations for FP commodities at different levels of the system, as well as possible entry points and interventions. The PEA is a useful contribution to the development and implementation of a 10-year supply chain road map plan aimed at supporting the GOU to achieve self-reliance in supply chain and essential medicines and supplies being supported by the USAID/Strengthening Supply Chain Systems Activity. The PEA also provides an entry point for looking at factors that influence financing decisions on essential medicines and health products more broadly, as government-funded FP products are managed through the essential medicines and health products supply system. From the analysis of the desk review and PEA interview data, MTaPS developed a policy brief: [Increasing Government Financing and Resource Allocation for FP Commodities and Supply Chain Operations in Uganda: A Political Economy Analysis](#).

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<sup>6</sup> OPRH. (2021). Family Planning and reproductive health overview. USAID Office of Population and Reproductive Health. November 2021 Available at: [https://www.usaid.gov/sites/default/files/2022-05/2021.11.04\\_PRH\\_FP\\_RH\\_Program\\_Overview.pdf](https://www.usaid.gov/sites/default/files/2022-05/2021.11.04_PRH_FP_RH_Program_Overview.pdf)

which was finalized following a stakeholder validation meeting. MTaPS also developed a PEA methods module that will allow others to apply [the streamlined PEA methodology](#) that MTaPS found effective. The PEA in Uganda was included in a recent webinar “[How Can Thinking and Working Politically Strengthen Your Health Commodity Supply Chain?](#)” organized by the USAID Local Health System Sustainability Project and the policy brief and methods module were referred to in the primer “[The importance of political economy analysis for strengthening health commodity supply chains](#)” by USAID LHSS.

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

MTaPS conducted a study in Nigeria and the Philippines on the use of private-sector 4PL providers to understand factors, considerations, and influences and to develop models and advocacy strategies for governments and donors to leverage private-sector supply chain service providers in the public health supply chain. There were four parts to the study in both countries: a desk review of 4PL providers in public health supply chains, a rapid PEA to understand influences and motivating factors, an operational capabilities analysis, and a cost-benefit analysis. After completing data analysis, MTaPS drafted technical reports for Nigeria and the Philippines and produced two advocacy briefs entitled Building a More Efficient Public-Health Supply Chain through 4PL—one for each country. MTaPS facilitated virtual study result dissemination workshops for Nigeria (with more than 45 participants) and the Philippines (with more than 75 participants) in March 2022. Comments and feedback from the workshops were incorporated and used for next steps and implementation. MTaPS also facilitated a webinar for USAID staff in July 2022 on leveraging best practice 3PL or 4PL providers.

### **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. It also assessed how these private-sector engagements are operationalized. 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. The analytical framework also enabled MTaPS to gather evidence on how high-income countries mitigate risks associated with the engagement of private-sector pharmacies. MTaPS developed country case reports from three high-income countries (Spain, Sweden, and the United Kingdom) and three LMICs (Namibia, Ghana, and South Africa) and a thought leadership paper highlighting the key considerations, advantages, and disadvantages of engaging retail pharmacies as a source of essential medicines and FP products in LMICs and lessons learned in the context of COVID-19. The paper was disseminated in an internal USAID webinar and a [global learning series webinar](#) and [published](#) in the *Journal of Pharmaceutical Policy and Practice*.

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

MTaPS started an impact evaluation of a client, stock, and workflow management application on unmet FP need at the last mile in Luapula Province, Zambia. MTaPS is equipping community-based distributors (CBDs) with tablets configured with the application and using an experimental design to:

- 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 CHWs' 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

At the beginning of PY5, the protocol received ethical clearance from ERES Converge, a private IRB in Zambia, and BU School of Medicine IRB. Zambia's Ministry of Health and National Health Research Authority provided additional approvals for the study. The team completed baseline data collection and identified 221 active CBDs at 40 study sites. The team conducted physical stock counts at each study site and with each CBD to assess stock availability and stock management practices at baseline. The team also conducted phone surveys with 1,139 clients using FP products to determine the level of unmet FP need and satisfaction with FP counselling. After analysis of the data, a baseline report of the findings was produced, which showed that one-third of sampled clients have reported a recent lapse in their FP method, frequent FP stock-outs at HFs, and generally poor FP stock recordkeeping among CBDs. The development of the workflow management application and the procurement and configuration of the requisite devices and accessories has been completed. Implementation of the intervention has started with a two-week training of four cohorts of CBDs on using the application.

## **ACTIVITY 2: DISABILITY INCLUSION IN THE HEALTH SUPPLY CHAIN WORKFORCE**

MTaPS started conducting a study to understand the status of disability inclusion in the health supply chain labor market in LMICs to provide recommendations to USAID and its partners 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. The TWG has met three times, providing feedback and recommendations on preliminary findings and next steps with the study. MTaPS has completed a landscape analysis and is analyzing the results of a global survey on disability inclusion efforts that was disseminated to health supply chain stakeholders. A case study in Ethiopia is underway.

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

Building on its previous work studying the use of 3PL and 4PLs, in PY4, MTaPS began engaging the Government of Nigeria in developing and disseminating a policy on outsourcing logistics services to private-sector 4PLs and/or 3PLs providers. In response to the Nigeria government's indication that there is already adequate policy in place but that the country needs guidance on how to operationalize it, MTaPS finalized data collection and analyses to guide the development of a guidance document. The document lays out how 3PL/4PL provider outsourcing can be operationalized in Nigeria, considering the

legal landscape, international best practices, and other country-specific considerations. MTaPS facilitated a learning and advocacy workshop with 22 participants from the MOH National Product Supply Chain Management Program (NPSCMP), states, and implementing partners. Workshop discussions centered on what best-practice to engage 3PL and 4PL service providers and its advantages in supporting and strengthening public health supply chain management in Nigeria. The workshop discussions also provided useful context and feedback that the team integrated into the guidance document.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

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

MTaPS concluded two weeks of training of Open SRP in Luapula Province, Zambia, in early April. The training consisted of two-day sessions for four cohorts of persons affiliated with the Zambia MOH, resulting in 147 persons trained to use the MTaPS FP application. Of the 104 CBDs including in the training, 63 were female. The team has developed and submitted a report on the training. The team also responded to feedback on the baseline report and submitted the final version of the report.

The final build of the application was released on May 2, and the application went live on May 3. The final build of the application was delayed by a week because the team encountered some issues migrating the application from the test environment to the production/live server. Additionally, the MTaPS team found some errors/bugs in the final comprehensive review which the BlueCode team needed time to fix. All these issues have been successfully resolved. CBDs are now using the application, and the team is resolving any issues that arise along the way. One common issue was that CBDs were changing the names of facilities, so the team updated the application to prevent such changes in the future. Some CBDs also struggled to generate their reports, so the team provided additional instructions to them and the facility in-charges.

During the first field visit which took place from June 12 to 17, 2023, the team identified a few additional issues:

- Updating to the latest version of the application: Primarily due to low bandwidth and a few CBDs having not installed or not using WhatsApp, some CBDs were missing the notifications.
- Syncing of application: Some CBDs were turning off their data for fear that their monthly allotment would be depleted too soon and consequently were not syncing the application.
- Updating the stock register: Some CBDs were not updating their stock register and were thus unable to use the application to dispense stock.
- Errors with batch number entry: The batch number entered at stock receipt did not match the batch number entered for dispensing, which prevented the CBD from using the application to dispense. The team is discussing solutions to address the human error issue and will continue to reinforce training and the need to adjust stock to reflect correct batch numbers.

As of June 30, 2023, all CBDs were accounted for in the system, and there were 2,614 registered clients and 2,552 client visits recorded. There is an issue with duplicates, which the team will resolve when the data are cleaned for analysis at endline.

## ACTIVITY 2: DISABILITY INCLUSION IN THE HEALTH SUPPLY CHAIN WORKFORCE

After finalizing the global survey instrument based on USAID feedback and completing internal piloting, the MTaPS team disseminated the survey in English and French to health supply chain stakeholders globally. The analysis of the findings is underway. MTaPS also held a TWG meeting in late May, during which the team presented the findings of the global landscape analysis and the next steps with the activity. TWG members offered feedback and suggestions on the findings and next steps and offered to put the team in contact with stakeholders in Ethiopia. MTaPS finalized the recruitment of a consultant to support the case study on disability inclusion in the health supply chain workforce in Ethiopia. The consultant developed the research protocol, and, once reviewed by MTaPS, submitted the finalized protocol to the ethics board in Ethiopia for review.

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

MTaPS updated the guidance document developed to operationalize the engagement of 3PL and 4PL service providers in Nigeria, reflecting feedback received from NPSCMP. The service specification and the performance management documents are currently under development. MTaPS, the USAID CSL team, and USAID Nigeria agreed on Kaduna State for the pilot. MTaPS developed a plan for implementing the pilot and shared it with NPSCMP and Kaduna State. After NPSCMP's approval of the plan, the team engaged supply chain management stakeholders in Kaduna State through virtual and in-person means and collected data. The team also developed a concept note for the second workshop, which was approved by NPSCMP. Workshop preparations are underway.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<b>Activity 1:</b> Evaluating the efficacy of using a digital consumption tracking and workflow management tool to decrease unmet demand and foster contraceptive continuous use at last mile point of care <ul style="list-style-type: none"><li>Continue with technical support and implementation monitoring</li></ul>	July–September 2023
<b>Activity 2:</b> Disability inclusion in the health supply chain workforce <ul style="list-style-type: none"><li>Complete case study in Ethiopia</li><li>Draft manuscript based on findings from landscape analysis, survey, and case study</li></ul>	September 2023
<b>Activity 3:</b> Engaging 3PLs/4PLs to support the public health supply chain <ul style="list-style-type: none"><li>Finalize collection of data from Kaduna State</li><li>Conduct the second learning, advocacy, and validation workshop</li><li>Finalize the three deliverables, namely:<ul style="list-style-type: none"><li>Service specification</li><li>Performance monitoring framework</li><li>Training report</li></ul></li></ul>	September 2023

## **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 health system strengthening, 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 to coordinate efforts at identifying and promoting 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**

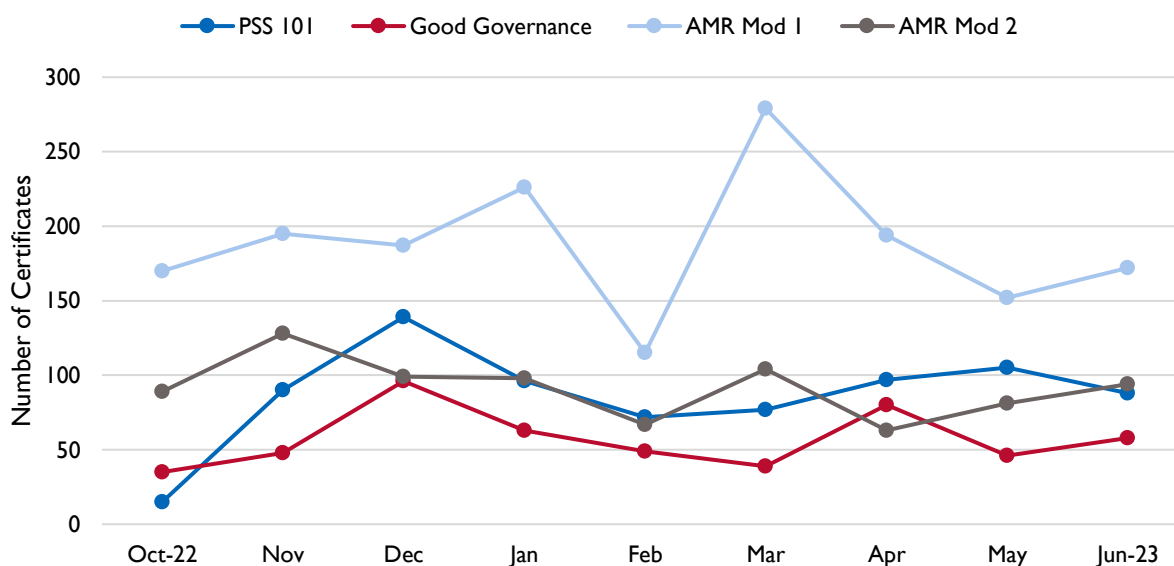
#### **OBJECTIVE 2: INSTITUTIONAL AND HUMAN RESOURCE CAPACITY FOR PHARMACEUTICAL MANAGEMENT AND SERVICES INCREASED, INCLUDING REGULATION OF MEDICAL PRODUCTS**

MTaPS has been engaging with the African Union Development Agency's New Partnership for Africa's Development (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 African Medicines Regulatory Harmonization (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 Promoting the Quality of Medicines Plus (PQM+) Program, MTaPS developed a set of minimum common standards for regulatory information management systems (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 a guidance document to promote and guide adoption of the standards in LMICs was finalized. 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 is also 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 (EMP), 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 Global Health eLearning Center (GHeL) platform. Through GHeL, the program issued 3,806 certificates between October 2022 and June 2023 to participants across the globe for completing PSS 101 (779 certificates), [Good Governance in the Management of Medicines](#) (514 certificates), [Antimicrobial Resistance \(Part I\)](#) (1,690 certificates), and [Antimicrobial Resistance \(Part 2\)](#) (823 certificates) (figure 2).



**Figure 2. Number of certificates issued per MTAps-supported course on the GHeL platform between October 2022 and June 2023.**

Previously, MTAps convened an 11-member PSS technical advisory group of donor governments, foundations, academic institutions, and public-private partnerships to publish a paper in the *Journal of Pharmaceutical Policy and Practice* on the importance of integrating PSS into global health programs. The program also conducted two peer-to-peer learning exchanges: one on medical products pricing strategies and a second on preventing and managing conflicts of interest in national pharmaceutical committees. Together, the two learning exchanges engaged approximately 60 government officials from over 30 countries. MTAps has submitted over 90 global conference abstracts and has published 18 peer-reviewed manuscripts since the start of the project.

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

MTaPS developed and successfully launched a policy and guideline document entitled “Practical Guide for Systematic Priority Setting and Health Technology Assessment (HTA) Introduction in LMICs” which provides a stepwise approach for HTA implementation. MTAps has also collaborated with the USAID Local Health System Sustainability project to develop an approach for tracking pharmaceutical



expenditure (PE) using the SHA2011 framework. The team drafted a PE tracking guide and, following pilots in two countries, developed two policy briefs that will serve as resources for countries to capture population-per-capita PE 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 into formulation, adoption, and implementation of HTA and 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 integration of IPC/WASH critical conditions into the quality of care and quality improvement tools and processes. In year 5, MTAps developed a chapter entitled *Institutional and Individual Capacity Building in Pharmacovigilance* for inclusion in a book on PV and is awaiting news on publication status.

### **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

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

During this quarter, MTAps completed the recruitment of a consultant to support the drafting of the continental reliance framework for consideration by AMA and use under the AMRH initiative. The team worked with the AMRH Secretariat and the EMP technical committee to finalize the implementation plan for developing the continental reliance framework and presented it at the Medicines Policy and Regulatory Reforms technical committee meeting in Nairobi in May. The team then worked with the consultant to gather resources and review literature to initiate the drafting of the framework. The information gathered from literature, the public domain, and existing AMRH reports on the reliance mechanisms and legislative environment in the countries/regions will inform the gaps to be covered through interviews with the various AMRH technical committees and national/regional representatives.

The MTAps team also worked with the EMP technical committee to draft and review a continental registration procedure to be followed while performing assessments for medical products. The document was finalized and is ready to be tabled before the AMRH approval system.

The team finalized the recruitment of a consultant to support the development of a draft strategy for the digitalization of regulatory IMS. The consultant will work with the technical teams from MTAps, PQM+, and AMRH to initiate the drafting of the strategy, in collaboration with the AMRH IMS technical committee.

Additionally, the MTAps team participated in the fourth AMRH IMS technical committee meeting that took place in late May in Dakar. The agenda included a series of presentations related to information

management systems and regulatory processes and began with short presentations from IMS technical committee members that provided insights into the status and systems of their respective national regulatory authorities. Other presentations focused on the IMS technical committee's terms of reference, work plans, and the AMRH website. These presentations collectively offer valuable information on eCTD and IMS convergence and provided a comprehensive overview of IMS-related initiatives in preparation for drafting the digitalization strategy.

### **ACTIVITY 3.3.1: MEASURING PSS, INCLUDING ACCESS TO MEDICINE**

Members of the PSS Insight team visited Uganda and Tanzania in late April to finalize the pilots. In Uganda, the team met with the commissioner for Pharmaceuticals and Natural Medicines and two of his unit members. The commissioner expressed great interest in the tool and the preliminary pilot findings. Based on his request, the team extended the planned half-day dissemination workshop to a full-day session, which was well-attended by MOH stakeholders. In Tanzania, MTaPS met with the chief pharmacist, director of the Pharmaceutical Services Division to discuss the pilot and collect additional data to update the findings from the desk review. Additionally, the team held a virtual hybrid workshop in Nepal and a virtual workshop in Bangladesh in May to disseminate the findings from the pilot in the respective countries. In each of the four countries, the workshops and meetings allowed country stakeholders to discuss the pilot findings and provide feedback on the draft country reports, including the relevance and feasibility of the PSS Insight indicators.

The team used the feedback gathered at the workshops to finalize the country reports, which are forthcoming. MTaPS anticipates completing the technical report in July. The technical report will serve as the foundation for other planned dissemination products, including conference abstracts, webinars, blogs, and commentaries.

Development of the web-based version of PSS Insight is near completion, anticipated by the end of July. The team conducted user acceptance testing in May and June, which allowed country-level participants to work through several functions of the tool and suggest improvements. Conversations with USAID regarding the approval process for pssinsight.org concluded in June, and the team is working on next steps for the tool's launch.

### **ACTIVITY 3.3.2: PSS 101 COURSE**

MTaPS conducted preparations for the fourth blended session of PSS 101 through USAID University, including disseminating the course invitation, completing a round of internal marketing, and finalizing presentation materials. The course was held from June 26 to 30 with 30 participants of which, 17 (7 female) completed the full course.

The team also made progress on the AMR module, completing the storyboard and the first draft of the alpha version, which is undergoing review. The alpha version was included in the PSS 101 course offering, and feedback from participants will be incorporated into the updates to the module.

The GHeL PSS 101 and Good Governance courses saw 290 and 184 certificates earned this quarter, respectively.

### ACTIVITY 3.3.3: EQUIP LOCAL INSTITUTIONS WITH PSS LEARNING RESOURCES

MTaPS completed and submitted the workshop reports for the East Africa and Southeast Asia skills exchanges. Following the skills exchanges, over 40 organizations expressed interest in mentorship. To meet the demand, the team adjusted the plan to include two levels of mentorship: a deep dive and tutorials. The deep dive group included seven organizations, which the team assigned to individual MTaPS subject matter experts. Of the seven organizations, two each received mentoring on the GBT, PSS Insight, and financing, and one organization received mentoring on procurement and supply chain management (PSCM). In parallel to the deep dive, MTaPS ran tutorial sessions for 25 organizations on PSCM and 15 organizations on PV. A report-out session is being planned for July to close out the mentorship program.

### ACTIVITY 3.3.4: MTAPS CLOSEOUT EVENT/PSS LEARNING SERIES WEBINARS

This quarter, MTaPS participated in the SAPICS Conference and conducted a PSS skills building workshop for supply chain managers and other health systems stakeholders on the concept of PSS and the need to situate health supply chains in the context of pharmaceuticals systems. Fifteen people (9 male, 6 female) registered for the event; they were joined on the day of the workshop by 15 unregistered participants, for a total of 30 participants. Special focus was given to regulatory systems strengthening, governance, supply chain management, and AMR containment. The workshop was well received, and participants rated the session a five (the maximum score) for the quality of the content and speakers and how well the session met their expectations. MTaPS also participated in a panel on market shaping for health care product access, which MSH organized in partnership with UNITAID and other global stakeholders.



Francis Aboagye-Nyame represents MTaPS on the Market Shaping for Health Care Product Access panel at the SAPICS conference, June 2023. Photo credit: MTaPS.

Due to guest panelists' conflicting schedules, MTaPS has had to repeatedly push back plans for the MNCH and AMR containment webinars originally planned for April and May 2023. The tentative plan now is to host those two webinars along with ones on RSS, OpenRIMS, and PSS Insight between August and October 2023. The team will finalize plans in Q4 and begin undertaking preparations for the webinars.

MTaPS submitted three cases to the USAID Health Systems Strengthening Case competition:

- Supervision, Performance Assessment, and Recognition Strategy (SPARS) - a multipronged intervention for strengthening medicines management
- Strengthening Pharmacovigilance to Improve Product Safety Surveillance and Reporting in Kenya
- Strengthening Multisectoral Coordination to Contain AMR in Kenya

MTaPS expects to be notified of the competition results in August. MTaPS also submitted one abstract entitled *Strengthening Pharmacovigilance to Improve Health Products Safety Surveillance and Reporting in Kenya* to the International Society of Pharmacovigilance Annual Meeting and started preparing ten abstracts for submission to the Global Health Supply Chain Summit 2023.

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

During this quarter, MTaPS onboarded the consultant to support the tool's implementation in Bangladesh. USAID received approval from the government and an endorsed introductory letter, which allowed MTaPS to disseminate the survey to a sample of organizations. This was after the consultant created the sampling frame by compiling lists of all international organizations, nongovernmental organizations, and public and private entities involved in the national health system at all levels. As of the end of June, there were 105 survey respondents.<sup>7</sup> MTaPS awaits further feedback from the Mission and USAID technical lead to determine whether we can move to the next steps of closing the survey, drafting the report, and disseminating the findings through a stakeholder workshop. Regarding implementation in a second country, MTaPS worked with USAID to obtain concurrence in Tanzania because discussions with Cameroon fell through. MOH approved the activity, and MTaPS shared a list of the top-five candidates from the consultant recruitment with the ministry and the Mission for feedback. MTaPS anticipates being able to make a final selection after receiving feedback and moving forward with implementation.

## **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**

This quarter, MTaPS completed the case study in Nepal. The team drafted a report on the findings from the Côte d'Ivoire and Kenya case analyses. The team shared the findings with the TWG and has incorporated their feedback as it works to finalize the report. The team also completed data collection in Nepal in June and has started case analysis. The team had been in discussions with the MTaPS Rwanda team about using the findings to support advocacy for the creation of a pharmaceutical service unit.

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<sup>7</sup> MTaPS closed the survey at the end of July with 138 respondents (22 females, 114 males and 2 other).

However, this quarter, the MTaPS Rwanda team shared that MOH is satisfied with its current progress and declined additional support. Given this outcome, MTaPS pivoted to a global survey instead of a country pilot to validate the proposed guidelines. MTaPS finalized the global survey in English and French for dissemination in July. To close out the activity, MTaPS is planning a virtual webinar on the importance of NPSUs in achieving UHC as part of the SDGs.

### ACTIVITY 5.4.1: TESTING BEHAVIORAL NUDGES FOR AMS

With data collection at a fifth hospital this quarter, the team was able to complete baseline data collection this quarter. The team also finalized three behavioral nudge interventions—monitoring ward prescriptions, establishing ward leader boards, and holding two education workshops per hospital—with feedback from USAID. The team then started implementation in the five hospitals in June and anticipates completing the intervention in August, after which it will collect post-intervention data for analysis. So far, the hospitals’ MTCs are taking leadership in sharing the intervention messages with prescribers on WhatsApp group platforms and during in-person weekly departmental meetings. The MTaPS Uganda team trained MTCs on biweekly monitoring of prescriptions by using selected key indicators based on the WHO Point Prevalence Survey tool.

### BEST PRACTICES/LESSONS LEARNED

Leadership changes in the organizations or institutions we work with in-country often lead to delays in MTaPS activity implementation. To mitigate delays, it is important to be adaptive and engage with new leaders and country stakeholders at the earliest opportunity to gain support and reach common ground on the way forward for effective implementation.

### ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<b>Activity 2.4.6: Support AUDA-NEPAD in the ongoing creation and operationalization of the AMA</b> <ul style="list-style-type: none"> <li>Prepare preliminary draft of the reliance framework and present to AMRH for review</li> <li>Draft strategy in consultation with AMRH IMS Technical Committee and selected key stakeholders</li> </ul>	July–September 2023 July–September 2023
<b>Activity 3.3.1: Measuring PSS, including access to medicine</b> <ul style="list-style-type: none"> <li>Conclude web development of web-based PSS Insight tool</li> <li>Draft technical report for PSS Insight pilot</li> <li>Finalize tool documentation for web-based PSS Insight</li> </ul>	July 2023 July 2023 August 2023
<b>Activity 3.3.2: PSS I01 course</b> <ul style="list-style-type: none"> <li>Finalize the AMR module</li> </ul>	September 2023
<b>Activity 3.3.3: Equip local institutions with PSS learning resources</b> <ul style="list-style-type: none"> <li>Conduct report-out session and finalize report on mentorship program</li> </ul>	September 2023
<b>Activity 3.3.4: MTaPS Closeout event/ PSS learning series webinars</b> <ul style="list-style-type: none"> <li>Finalize webinar plan and continue developing the associated briefs or blogs</li> <li>Prepare and submit Global Health Supply Chain Summit abstracts</li> <li>Prepare for USAID case competition event pending competition results</li> </ul>	August 2023 July 2023 August 2023
<b>Activity 3.3.5: High-performing health care (HPHC) tool implementation</b>	

Activity and Description	Date
<ul style="list-style-type: none"> <li>▪ Prepare report for Bangladesh survey</li> <li>▪ Plan and execute dissemination workshop for Bangladesh</li> <li>▪ Onboard consultant and start tool implementation in Tanzania</li> </ul>	<p style="text-align: center;">August 2023</p> <p style="text-align: center;">September 2023</p> <p style="text-align: center;">August 2023</p>
<p><b>Activity 2.2.1: Developing a methodology for assessing the roles of NPSUS and their capacity to fulfill their mandate</b></p> <ul style="list-style-type: none"> <li>▪ Analyze data from the global survey and finalize report</li> <li>▪ Plan and execute global webinar</li> </ul>	<p style="text-align: center;">August 2023</p> <p style="text-align: center;">September 2023</p>
<p><b>Activity 5.4.1: Testing behavioral nudges for AMS</b></p> <ul style="list-style-type: none"> <li>▪ Complete implementation of the interventions in the five hospitals and collect post-intervention data using the same PPS method used during the baseline; continue drafting parts of the manuscript based on new information as it becomes available</li> </ul>	<p style="text-align: center;">August–September 2023</p>



## 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 comprises people, resources, processes, and interactions within the broader health system to ensure access to and appropriate use of safe, effective, quality-assured, and affordable medical products and related services to improve health outcomes. Each of these conditions requires that sex and gender be integrated to ensure sustainable and equitable access to safe, effective, quality-assured medical products and related services to improve outcomes for all sexes and genders.

These outputs support the broader 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 following activities.

In **PY2**, the GWG helped to connect those across 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. Active in PY2 and PY3, in PY4 the GWC only met as needed due to the concern of line-item funding for participation in this group by other members.

In coordination with the MERL team, the MTaPS gender advisor provided key input and recommendations for 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 technical assistance 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 assist the entire program in measuring progress against these two broad indicators.

Three key capacity-building documents and presentations stand out as important to highlight as key successes in PY2. 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 LMICs. The second, entitled "MTaPS Gender Guide for Work Planning", was developed by the MTaPS gender advisor with input from the SMT and disseminated to all program staff to assist in adding gender-inclusion activities to their PY3 work plans. Lastly, a presentation entitled "Transforming Health and Pharmaceutical Policies to be Gender Inclusive" was given by the MTaPS gender advisor during a biweekly MTaPS staff meeting in August 2020. This presentation gave an overview of what a gender-inclusive policy entails across distinct levels within a health system and why it is a critical element of gender mainstreaming and provided context-specific examples of how gender-inclusive policies fit across



MTaPS' five program objectives. Each of these key activities built on and increased MTAps' gender capacity and learning within the program and helped to integrate MTAps' gender indicators.

The **PY3 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 understand the knowledge gaps on 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 PY2) for PY3 work planning. The survey, developed and led by MTAps' partner Overseas Strategic Consulting with input from the SMT, was distributed to all staff. Only one-third of respondents had a good understanding of sex and gender considerations in PSS. Important findings of the survey included that the guide was understandable, easy to read, of the right length, and had relevant entry points. However, it was less useful for work planning, and training was needed to utilize the guide efficiently. Only one-third of respondents used the guide, and only 25–30% of respondents added sex/gender-specific activities to PY3 work plans. If 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 PY3 work plans found that 75% did not include any sex/gender activities, and there were many missed opportunities for sex/gender activities in the plans. Based on survey findings, it was determined that training was necessary for MTAps staff on sex/gender considerations in PSS, and 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 on 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 PY3:

- 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, the MTaPS Knowledge Exchange Series and staff meeting presentations were given to the COR and MTaPS staff.

Throughout **PY3**, the 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 (e.g., AMS under the GHSA). In addition to the blogs, presentations, and contributions to the journal article “Point prevalence survey of antibiotic use across 13 hospitals in Uganda,” one-on-one meetings were conducted with country teams to educate, mentor, and assist in developing sex and gender activities for PY4. Finally, technical reviews of the PY4 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 **PY4 focus** for the core-funded gender portfolio included country-specific sex and gender activities and continuing the momentum of bringing sex and gender to the forefront of MTaPS through scholarly activity, education, and mentorship. Capitalizing on gains in sex and gender awareness, PY4 included the development of knowledge products such as IEC materials and e-Learning modules, writing and publishing academic products such as a journal article to address the need for standardized PSS tools to incorporate sex-disaggregated data, and developing technical guidance on incorporating sex-disaggregated data and gender considerations as part of AMS interventions and MTaPS-supported MIS. To continue building sex and gender awareness in MTaPS, the gender advisor gave Knowledge Exchange and webinar presentations to staff, the COR, and partners and presented a module in PSS 101 for USAID staff. A panel presentation in support of the GHSA action package on AMR entitled “GHSA-Supported AMR Investments: Results and Lessons Learned in Strengthening Infection Prevention and Control (IPC); Enhancing Inclusion; and Enabling Rapid COVID-19 Response and Future Pandemic Preparedness” was presented at the 2022 Global Health Security Conference in Singapore. A Gender Gist blog was published after 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 PY4, due to new requirements of the Philippine DOH, the e-Learning modules developed in Q3 required additional knowledge checks and pre/post-test questions.

In **PY5**, we 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 successful inclusion of sex and gender concepts into Tanzania’s National Action Plan on Antimicrobial Resistance 2023–2028. The highly successful Gender Gist blogs continued with:

- Lawry LL. Where the Wild Things Are: Missing the Forest for the Trees. <https://www.mtapsprogram.org/news-blog/where-the-wild-things-are-missing-the-forest-for-the-trees/>

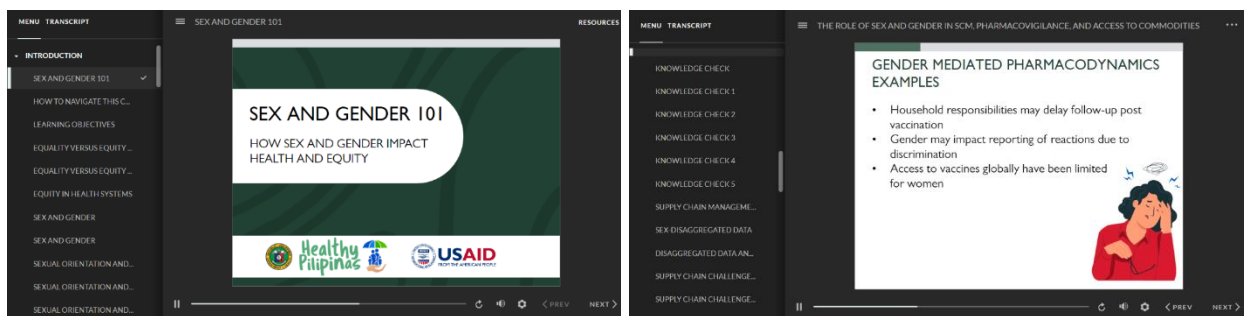
The year consisted of finalizing/publishing technical documents like the MIS guidance and Philippines workforce development plan written in Q1. Finalizing the animation of the e-Learning modules for the Philippines and using a blended learning approach to provide training on gender to participants from the DOH, CHDs, and LGUs through webinars and the e-Learning module on DOH Academy will be a key focus for PY6. The gender advisor worked with Nepal on surveying and educating journalists on sex and gender AMR-specific reporting. The PSS 101 course included a sex and gender section and participatory

exercises to illustrate sex and gender concepts in small groups. Peer-reviewed publications in PY5 that included or were solely focused on sex and gender in PSS included:

- Lawry LL, 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”. *Frontiers in Antibiotics*. 2023. Volume 2. doi: 10.3389/frabi.2023.1154506
- Waswa JP, Kiggundu R, Konduri N, Kasujja H, Lawry LL, Joshi MP. “What is the appropriate antimicrobial use surveillance tool at the health facility level for Uganda and other low- and middle-income countries?” *Journal of Global AMR*. 2023. doi: <https://doi.org/10.1016/j.jgar.2023.07.003>

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

During this quarter, the gender advisor had a sex/gender section in the PSS 101 course for USAID University and finalized the animation and audio for the e-Learning sex and gender slides for the Philippines.



Sex and Gender 101 eLearning MTaPS Philippines

eLearning Module 2 – MTaPS Philippines

The gender advisor also added to a peer-reviewed paper entitled “What is the appropriate antimicrobial use surveillance tool at the health facility level for Uganda and other low- and middle-income countries?” (see above). A new Gender Gist blog was finalized and submitted to the communications team, the end of project report was drafted, and the Q3 PY5 quarterly report was written and finalized. The gender advisor participated in biweekly staff meetings and the expanded COR meeting during this quarter.

## BEST PRACTICES/LESSONS LEARNED

- Publications in journals to highlight sex and gender concepts across PSS disciplines is important to normalize these concepts across a broader community and legitimizes the push of this cross-cutting issue into PSS activities.
- Incorporating sex and gender concepts into blogs that are easy to read helps implementers understand why sex and gender integration is important.
- Teaching sex and gender concepts in PSS to USAID and other partners is important for increasing understanding of how these factors, if overlooked, can stall outcome progress.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Develop a new task order for gender activities in PY6	September 2023
Finalize the new Gender Gist blog with comms	August 2023
Participate in biweekly staff, quarterly technical, and expanded COR meetings	July–September 2023

## 4. PROGRESS BY COUNTRY

### A. BANGLADESH

#### FIELD SUPPORT ACTIVITIES

##### OVERVIEW

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

##### CUMULATIVE PERFORMANCE TO DATE

MTaPS developed the Table of Organization and Equipment for health facilities with a 10- to 500-bed capacity (tertiary level) and updated its reference prices. The program updated the specifications of the MSR list and assisted the MSR List Updating Committee to develop a strategy to regularly review standard reference prices on the updated list. With TA from MTaPS, the procurement oversight bodies at the MOHFW and the DGHS have started implementing a system to measure and monitor procurement performance that includes standard key performance indicators through quarterly assessment.

With MTaPS' assistance, enhanced versions of the UIMS and WIMS were incorporated into the eLMIS in 2019 to streamline the functionalities of the two inventory management systems, ensure real-time logistics transactional data, and contribute to better management of supply chain functions. MTaPS supported FP warehouses to ensure uninterrupted availability of FP commodities, thereby maintaining a stock-out rate below 1% at service delivery points. MTaPS completed scale-up of the eAMS in all 61 DHs across the country in 2020. The eAMS allows real-time asset tracking and makes information easily available for rational procurement, timely maintenance, and repairs, which in turn helps save money.

MTaPS continued assisting the NTP in accurately recording and reporting quality TB data using the e-TB Manager digital platform, making the reporting system fully paperless nationwide. The NTP received paperless reporting from 100% of the reporting cohort sites for Q2 PY5. The NTP consistently oversees and validates data quality, ensuring the data's relevance for decision-making. In PY3, e-TB Manager was enhanced for electronic reporting of aDSM and for interoperability with the Janao app to capture data of patients visiting private practitioners. In Q2 PY5, the system was enhanced to provide a graphic and quantitative summary on selected indicators as a dashboard for indicator reporting. The transition plan for e-TB Manager was developed in PY4 and is being implemented. In collaboration with the NTP, MTaPS continued the countrywide rollout of the eLMIS for TB commodities (i.e., 317 out of 484 sub-districts/upazilas).

MTaPS assisted the DGDA to develop an inspection strategy to ensure good pharmacy practices in PY1 and PY2 and an electronic inspection and licensing system for pharmacies in PY3. In PY4, MTaPS

supported the development of the CAPA plan to address GBT assessment gaps; the establishment of an effective QMS; and the convergence of regional technical standards for medicines registration and application of good review practices. In PY5, MTaPS assisted with training and dissemination of the DGDA five-year strategic plan (2022–2026) and the implementation of the DGDA-Regulatory Information Management System (DGDA-RIMS) for online registration of medical products, including vaccines and biosimilar products, as well as PViMS, an online adverse event reporting and monitoring tool. These two tools were implemented through training, UAT, and live on the DGDA website ([www.dgda.gov.bd](http://www.dgda.gov.bd)). The DGDA has made the DGDA-RIMS fully functional only for vaccines and biosimilars, which require submission with the Common Technical Document (CTD) dossier; it will be implemented for other products in the future. MTaPS supported the DGDA in achieving the highest score for PV function in the WHO GBT assessment conducted in 2021 and is in the process of planning the scaling-up of PViMS to reach around 50 hospitals, 50 marketing authorization holders (MAHs), and a few public health programs. For improved patient safety, MTaPS supported the evaluation of 162 AE reports (95 male patients, 65 female, 2 unknown) and regulatory decisions, updated the patient information leaflet, and disseminated safety concerns information for selected medicines, including all injectable antibiotics.

MTaPS worked with the MOHFW and other stakeholders to develop a situational analysis report to explore options for supporting the implementation of pharmaceutical-related components of the Bangladesh Health Care Financing Strategy (2012–2032), including pharmaceutical expenditure (PE) tracking. The MOHFW’s HEU validated the MTaPS-developed questionnaire, methodology, and data collection protocol as part of the PE tracking exercise.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

### **OBJECTIVE I: PROCUREMENT AND SUPPLY CHAIN SYSTEMS IMPROVED AND MODERNIZED**

***Activity 1.1.1: Continue to assist the MOHFW and the DGHS to address issues with procurement processes and documentation of different procuring entities with an aim to improve efficiency (quality improvement).***

To improve the procurement approval process, MTaPS is developing a handbook on procurement practices for DGHS and MOHFW procurement personnel based on the GOB Procurement Act 2006 and the Procurement Rules 2008. This handbook will help the MOHFW and its key entities complete procurements using good governance and fairness within a reasonable time. The TOR for the DGHS procurement coordination cell was developed and notified as a government order.

***Activity 1.2.1: Collaborate with DGFP to implement the transition to the online inventory management system.***

MTaPS facilitated sessions on SCM and troubleshooting training organized by the DGFP’s Logistics and Supply (L&S) Unit to refresh the knowledge and skills of field managers on SCM, the online inventory management system, and data analysis, which will help staff better manage commodities and other logistics for proper decision-making. MTaPS worked with the DGFP to roll out the online inventory management system in all (23) warehouses and a few sub-district level FP stores. Implementation of the system helps visualization and the use of real-time logistics data for decision-making, which is expected to increase access to health products by clients and reduce product wastage. To ensure the



sustainability of the SCM, technical assistance has been provided to the L&S Unit to develop the OPs of Procurement, Supply, and Store Management (PSSM) for DGFP for the 5th Health, Population and Nutrition Sector Program (HPNSP 2024–2029).



Training on the online version of DGFP eLMIS for DGFP officials at MCH Training Institute in Lalkuthi, Mirpur, Dhaka, on June 13, 2023. Photo Credit: Mohammad Abu Shah Jamal Molla, MTaPS

### ***Activity 1.2.2: Institutionalize the eAMS use at district hospitals.***

With MTaPS' technical assistance, information on approximately 396 assets at the 61 district hospitals was entered; 9 tickets for repair were raised in the eAMS during this quarter, and one ticket was successfully resolved by the facility. Since 2017, a total of 177 repair requests have been received and 117 tickets have been successfully resolved. The eAMS contains information on 9,373 assets, including their location, functional status, and repair and maintenance history. Access to equipment information (which was not available previously) enables efficient tracking of functional status and inventory within a facility, facilitating quick decision-making for repairs, maintenance, procurement and ultimately optimizing operational efficiency. The implementation of the eAMS at sub-district level hospitals (152 out of 431) has been initiated by the MIS unit of the DGHS and facilitated by MTaPS, with the government's own funding.

### ***Activity 1.2.3: Assist CMSD to implement the comprehensive eLMIS.***

MTaPS is providing TA for the smooth functioning of the online inventory management system for CMSD. The system can be replicated in other health facilities to ensure the availability of quality health commodities, reduce waste, and improve the transparency and accountability of health product supply chain management, which can contribute to the health of the population of Bangladesh. To ensure a pathway to sustainability, MTaPS provided technical assistance to the CMSD for the development of the OP of PSSM for DGHS as part of the next sector program HPNSP (2024–2029).

### ***Activity 1.3.1: In collaboration with NTP roll out eLMIS for TB commodities in all subdistricts.***

All the trained upazilas (317 out of 484) from 41 districts (out of 64) in five divisions (Mymensingh, Rangpur, Rajshahi, Khulna, and Chattogram) have successfully completed quarterly stock reports, submitted quarterly commodity requisitions, and made all transactions using the eLMIS. MTaPS resumed



the eLMIS for TB commodities training by organizing six batches of training for upazilas of the Dhaka division. It is expected that all the newly trained upazilas will complete the quarterly stock reports, submit the quarterly commodity requisitions for the next quarter, and use the eLMIS for all transactions.

***Activity 1.3.2: Institutionalize eLearning courses of the relevant directorates of the MOHFW.***

The eLearning course on Basic Logistics Management is available on the Mukthapaath platform; a total of 2,833 participants have enrolled and 793 have received certificates. This course provides an opportunity for new staff of the MOHFW and its entities to learn basic logistics management and for existing staff to refresh their knowledge. This course will also be useful for increasing the knowledge of professionals working in medicine stores, which can contribute to improving the availability of quality medicines. The eLearning course on the basics of e-TB Manager was published on June 25, 2023, also on the Mukthapaath platform. A total of 30 participants (3 female, 27 male) enrolled and 9 (1 female, 8 male) received certificates.

**OBJECTIVE 2: PHARMACEUTICAL REGULATORY SYSTEMS STRENGTHENED**

***Activity 2.1.1: Continue to provide technical assistance in developing and implementation of CAPA plan in selected functions as per WHO formal assessment report for the DGDA to contribute to increasing score on WHO GBT.***

MTaPS assisted the DGDA to update and implement CAPA plans, including SOPs, based on WHO GBT requirements. Capacity building sessions were conducted on the DGDA's five-year strategic plan and on good pharmacovigilance practices (GVP) for MAHs. Support was provided to improve the AE reporting form and merge the safety cell into the adverse drug reaction monitoring (ADRM) cell to optimize the use of limited human resources. The DGDA launched the DGDA-RIMS in May 2023, through which one application (as of June 21, 2023) has been received and evaluated. These efforts will contribute to increasing scores on the WHO GBT towards attaining Maturity Level 3 (ML3).

***Activity 2.2.1: Continue to provide technical assistance for generating evidence-based regulatory decisions towards ensuring medicine safety.***

MTaPS supported workshops of the ADRM cell, technical sub-committee (TSC), and ADRAC for the evaluation of 128 AEs, including aDSM reports received in Q2. ADRAC identified 31 serious reports, with a few safety concerns that were published in the WHO newsletter. The committee-recommended safety decisions were implemented. To enhance the monitoring and submission of AE, the DGDA launched PViMS, an electronic system supported by MTAps for piloting to 5 MAHs. The DGDA is in the process of scaling up PViMS to around 100 facilities (50 MAHs, 50 hospitals, and some public health programs). As of June 21, 2023, the system has received 33 AE reports (from 19 female patients, 14 male) from MAHs. These combined efforts will contribute to ensuring patient safety.

**OBJECTIVE 3: SYSTEMS FOR EVIDENCE-BASED DECISION-MAKING INSTITUTIONALIZED**

***Activity 3.1.1: Assist National TB Control Program to implement relevant components of e-TB Manager transition plan.***

MTaPS has initiated weekly meetings with the NTP to review the progress of the e-TB Manager transition plan and its implementation. Funds for managing the information technology (IT) vendor have been identified from the Global Fund budget. MTAps has shared the list of troubleshooters and/or

master trainers with the NTP for its records and management. Long-term planning for the hardware maintenance through MIS- DGHS was also initiated.

***Activity 3.2.1: Develop handover documents for major IT systems supported by MTaPS in consultation with the respective GOB units.***

MTaPS is working closely with the government entities to develop transition plans for major MTaPS-developed IT systems and their handover. Five out of seven plans have been drafted and are in the review process. With the DGDA, MIS-DGHS, CMSD, and NTP, MTaPS successfully advocated for the proposal of necessary budget allocation in the 5th HPNSP. This financial support is expected to ensure the continued operation and maintenance of the systems beyond MTaPS. MTaPS is also actively involved in building the capacity of these entities to enable them to manage and maintain the systems beyond MTaPS. By transferring expertise, sharing best practices, and providing resources, MTaPS ensures that these government entities are well-prepared for the transition and enables them to sustain the benefits of the IT systems.

**OBJECTIVE 4: NO ACTIVITIES WERE PLANNED FOR THIS OBJECTIVE UNDER THE FIELD SUPPORT WORKPLAN.**

**OBJECTIVE 5: PHARMACEUTICAL FINANCIAL RESOURCE ALLOCATION AND USE OPTIMIZED**

***(PY4) Activity 5.1.1: Continue to support the Health Economic Unit to conduct pharmaceutical expenditure tracking for selected MNCH commodities.***

With MTaPS support, the PE tracking exercise, along with the documentation for standard processes on PE tracking for MNCH commodities, was completed for the HEU following the system of health accounts (SHA 2011) guideline. A dissemination and discussion session on the activities were facilitated by MTaPS for the HEU, with the participation of WHO and Data International. The technical report on the PE tracking exercise is drafted, which will help the HEU showcase the results for a policy brief, and the standard processes will guide them to perform further similar exercises, even for other commodities.

***Activity 5.1.1: Assist HEU to build capacity on pharmaceutical expenditure tracking for MNCH commodities.***

MTaPS assisted the HEU with customization of training modules on PE tracking for MNCH commodities. The customization focused on the SHA 2011 guideline and the standard processes developed for the HEU. The training modules were shared with the HEU for review and feedback by July 2023. The module will help strengthen HEU capacity on the PE tracking system.

**BEST PRACTICES/LESSONS LEARNED**

- Experience from eAMS implementation at DHs was used to implement rollout of the eAMS system in 152 sub-district hospitals in four divisions in Bangladesh. Using the earlier experience allowed for more effective processes during the rollout.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<p><b>Activity 1.1.1:</b> Continue to assist MOHFW and DGHS in addressing issues with procurement processes and documents of different PEs to improve efficiency (quality improvement).</p> <ul style="list-style-type: none"> <li>▪ Hold workshop on quality improvement using procurement performance tools by the MOHFW/DGHS.</li> <li>▪ Prepare a procurement guidebook in Bangla. Hold two workshops to finalize the draft procurement guidebook.</li> </ul>	July–September 2023
<p><b>Activity 1.2.1:</b> Collaborate with DGFP to implement the transition to the online inventory management system.</p> <ul style="list-style-type: none"> <li>▪ Roll out DGFP eLMIS in selected upazila family planning stores (sub-district level).</li> </ul>	July–September 2023
<p><b>Activity 1.2.2:</b> Institutionalize the eAMS use at district hospitals.</p> <ul style="list-style-type: none"> <li>▪ Visit low performing eAMS sites to assist the users in updating the asset entry and for troubleshooting support.</li> </ul>	July–September 2023
<p><b>Activity 1.2.3:</b> Assist CMSD in implementing the comprehensive eLMIS.</p> <ul style="list-style-type: none"> <li>▪ Continue troubleshooting support on the CMSD eLMIS. Provide refresher training to the CMSD officials.</li> </ul>	July–September 2023
<p><b>Activity 1.3.1:</b> In collaboration with NTP roll out eLMIS for TB commodities in all sub-districts.</p> <ul style="list-style-type: none"> <li>▪ Continue scaling up of eLMIS for TB commodities, with additional 22 batches of training planned for this quarter.</li> </ul>	July–September 2023
<p><b>Activity 1.3.2:</b> Institutionalize eLearning courses of MOHFW's relevant directorates.</p> <ul style="list-style-type: none"> <li>▪ Field test the eLearning course on procurement basics and publish it on the Muktopaath platform.</li> </ul>	July–September 2023
<p><b>Activity 2.1.1:</b> Continue to provide technical assistance in developing and implementation of CAPA plan in selected functions as per WHO formal assessment report for the DGDA to contribute to increasing score on WHO GBT</p> <ul style="list-style-type: none"> <li>▪ Support the DGDA in addressing the WHO observations, including implementation of the DGDA-RIMS.</li> </ul>	July–September 2023
<p><b>Activity 2.2.1:</b> Continue to provide technical assistance for generating evidence-based regulatory decisions towards ensuring medicine safety.</p> <ul style="list-style-type: none"> <li>▪ Support AE and aDSM assessment and evaluation, including implementation of the PViMS.</li> </ul>	July–September 2023
<p><b>Activity 3.1.1:</b> Assist NTP to implement relevant components of e-TB Manager transition plan.</p> <ul style="list-style-type: none"> <li>▪ Refresher training for users (low-performing sites) and handover of transition related documents to NTP.</li> </ul>	July–September 2023
<p><b>Activity 3.2.1:</b> Develop handover documents for major IT systems supported by MTaPS in consultation with the respective GOB units.</p> <ul style="list-style-type: none"> <li>▪ Continue coordination with the government for development of the transition plans.</li> </ul>	August 2023
<p><b>Activity 5.1.1:</b> Assist HEU to build capacity on pharmaceutical expenditure tracking for MNCH commodities.</p> <ul style="list-style-type: none"> <li>▪ Discussion on the customized training modules to address feedback and finalization. Orientation to the HEU on the final customized training module.</li> </ul>	July 2023

**Table 2. Quarter 3, FY23, Activity Progress, Bangladesh—FIELD SUPPORT**

Activity	MTaPS Objective(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Continue to assist MOHFW and DGHS in addressing issues with procurement processes and documents of different PEs to improve efficiency (quality improvement).</p> <p><b>Activity Description:</b> MTAps will facilitate discussion on the developments of the tools to monitor procurement performance of the PEs</p>	Obj 1, SO 1.1	<ul style="list-style-type: none"> <li>▪ A procurement consultant was hired and started working on the preparation of the procurement guidebook in accordance with the Public Procurement Act 2006, the Public Procurement Rules 2008, and the Delegation of Financial Power, as well as the direct guidance of the Director Planning, DGHS. The first draft of the guidebook has already been submitted to the Director for review.</li> <li>▪ DGHS notified the “Procurement Cell” to be responsible for the procurement functions within the MOHFW, with a focus on capacity strengthening.</li> </ul>
<p><b>Activity 1.2.1:</b> Collaborate with DGFP to implement the transition to the online inventory management system.</p> <p><b>Activity Description:</b> MTAps will work with DGFP to conduct TOT on the online version of the DGFP eLMIS as part of the transition process from offline to online.</p>	Obj 1, SO 1.2	<ul style="list-style-type: none"> <li>▪ DGFP organized three orientation workshops with 106 participants (25 female, 81 male) to refresh their knowledge and skills on SCM functions through data review and analysis for decision-making purposes.</li> <li>▪ DGFP inventory management system shifted from offline to online at all 23 warehouses and FP stores in 13 sub-districts (out of 493 sub-districts). A total of 83 participants (20 female, 63 male) were oriented on the features and use of the new system.</li> <li>▪ Two meetings were held at DGFP to discuss the eLMIS transition plan and pathway to sustainability.</li> </ul>
<p><b>Activity 1.2.2:</b> Institutionalize the eAMS use at district hospitals.</p> <p><b>Activity Description:</b> Monitor eAMS implementation progress through regular monitoring visits and provide needed technical support to system users.</p>	Obj 1, SO 1.2	<ul style="list-style-type: none"> <li>▪ MTAps visited 22 DHs to provide TA on eAMS operation and roles and responsibilities of the eAMS users.</li> <li>▪ Assessment in 13 DHs has been completed to identify the eAMS functionality status and a report has been drafted.</li> <li>▪ MTAps facilitated sessions in a training on eAMS at 4 divisions, organized by MIS-DGHS as part of the system expansion to all the sub-district level hospitals. A total of 304 participants (21 female, 283 male), including Resident Medical Officers and storekeepers from 152 sub-district hospitals, attended these training.</li> </ul>
<p><b>Activity 1.2.3:</b> Assist CMSD to implement the comprehensive eLMIS</p> <p><b>Activity Description:</b> MTAps will continue providing TA to users of the CMSD eLMIS for streamlined functioning of the system and troubleshooting support as required.</p>	Obj 1, SO 1.2	<ul style="list-style-type: none"> <li>▪ MTAps is continuing assistance for CMSD staff on the use of the eLMIS.</li> <li>▪ A total of 1,607 invoices were generated by the CMSD eLMIS for supply of products to health facilities.</li> <li>▪ MTAps worked closely with the CMSD to address activities such as eLMIS maintenance, enhancement, and scaleup as part of the next five years OP of PSSM for DGHS.</li> </ul>

Activity	MTaPS Objective(s)	Activity Progress
<p><b>Activity 1.3.1:</b> In collaboration with NTP roll out eLMIS for TB commodities in all sub-districts.</p> <p><b>Activity Description:</b> MTaPS will continue the implementation of the eLMIS in the remaining upazilas.</p>	Obj 1, SO 1.3	<ul style="list-style-type: none"> <li>Due to differences in the USAID's revised per-diem policy and Government current practices on per-diem, the training was delayed. MTaPS was able to facilitate 6 batches of training for a total of 37 upazilas and 4 districts. A total of 130 participants (19 female, 111 male) from Gazipur, Manikganj, Kishoreganj, and Tangail districts were trained. It is expected that the newly trained upazilas will use eLMIS for all TB commodities, which will contribute to the uninterrupted supply of TB commodities to the facilities.</li> </ul>
<p><b>Activity 1.3.2:</b> Institutionalize eLearning course of the relevant directorates of MOHFW.</p> <p><b>Activity Description:</b> Inform the relevant government directorates through a consultative workshop about the objectives, benefits, and features of the eLearning courses, and advocate for the respective officials at all levels to attend the courses.</p>	Obj 1, SO 1.3	<ul style="list-style-type: none"> <li>2,833 participants (982 female, 1780 male, 71 unknown) enrolled in the Basic Logistics Management course. Among them, 793 (294 female, 488 male, 11 unknown) have completed the course and received certificates.</li> <li>The field testing for the eLearning course on e-TB Manager was held. A total of 30 professionals (Tuberculosis and Leprosy Control Assistants and District Surveillance Medical Officers) participated in the field-testing, and 9 (1 female, 8 male) received certificates.</li> <li>The development of the videos with voiceover of procurement basics has been completed and they are ready for field testing.</li> </ul>
<p><b>Activity 2.1.1:</b> Continue to provide TA in developing and implementing the CAPA plan for selected functions, as per the WHO formal assessment report for the DGDA, to contribute to increasing the score on WHO GBT.</p> <p><b>Activity Description:</b> CAPA plan implementation through periodic mechanism established by MTaPS with other development partners. UAT and training for implementation of the DGDA-RIMS (OpenRIMS).</p>	Obj 2, SO 2.1	<ul style="list-style-type: none"> <li>MTaPS is supporting SOPs development, audits, CAPA management, investigation, event plan development with implementation, root cause analysis, and competency matrix.</li> <li>DGDA-RIMS officially launched after extensive training and UAT for the DGDA and MAHs.</li> <li>Guided DGDA staff in reviewing and updating the AE report form (yellow card) as version 3.</li> <li>Training was conducted for 96 participants (22 female, 74 male) on the DGDA's five-year strategic plan and for 30 MAHs on GVP to prepare them for implementation of the strategic plan and GVP.</li> </ul>
<p><b>Activity 2.2.1:</b> Continue to provide TA for generating evidence-based regulatory decisions to ensure medicine safety.</p> <p><b>Activity Description:</b> Assess AEs, including aDSM reports. Prepare the regular DGDA newsletter. Implement PViMS.</p>	Obj 2, SO 2.2	<ul style="list-style-type: none"> <li>Three workshops of ADRM, TSC, and ADRAC were facilitated at the DGDA by MTaPS for AE and aDSM review and evaluation, generating regulatory recommendations and taking actions.</li> <li>The ADRAC reviewed 31 serious AE and aDSM reports, along with the safety concerns published in the WHO newsletter and recommended evidence-based actions, updating the patient information leaflet and disseminating safety concerns for several medicines to the MAHs, DGHS, health care professionals, and MOHFW through official letters.</li> <li>PViMS was launched for electronic submission and monitoring of AE and has received 32 AE reports as of June 21, 2023.</li> </ul>

Activity	MTaPS Objective(s)	Activity Progress
<p><b>Activity 3.1.1:</b> Assist NTP to implement relevant components of e-TB Manager transition plan.</p> <p><b>Activity Description:</b> Provide TA to NTP for transition of the e-TB Manager, such as capacitating troubleshooters and master trainers and conducting joint monitoring visits for on-the-job training and troubleshooting.</p>	Obj 2, SO 3.1	<ul style="list-style-type: none"> <li>▪ NTP achieved nationwide paperless recording and reporting of all TB patients through e-TB Manager this quarter.</li> <li>▪ Weekly meetings were conducted with NTP to resolve issues related to the implementation of the transition plan (e.g., server management by MIS, IT vendor hiring and management by NTP, feature upgrading, experience-sharing for trouble shooting, equipment/logistics management, and the creation of a pool of field-level experts).</li> </ul>
<p><b>Activity 3.2.1:</b> Develop handover documents for major IT systems supported by MTAps, in consultation with the respective GOB units.</p> <p><b>Activity Description:</b> Produce comprehensive handover documents that capture all relevant information necessary to ensure the continued functioning of the systems after completion of the MTAps program. MTAps has been ensuring that the handover documents meet the stakeholders' interests and needs and are easily understandable.</p>	Obj 3, SO 3.2	<ul style="list-style-type: none"> <li>▪ MTAps conducted comprehensive discussions with the DGDA, MIS DGHS, CMSD and NTP for development of the transition plans.</li> <li>▪ MTAps provided on-the-job training to MIS DGHS on administrative functions of the electronic Asset Management System.</li> <li>▪ Identified documentary resources (system specific resources, like, developer document, user guide, database schema, source-code etc.) which will be handed over.</li> <li>▪ Drafted five out of seven transition plan documents in collaboration with the respective GOB units.</li> </ul>
<p><b>Activity 5.1.1:</b> Assist HEU to build capacity on pharmaceutical expenditure tracking for MNCH commodities.</p> <p><b>Activity Description:</b> Capacitate HEU for expenditure-tracking exercises, along with a policy brief, to respond to the needs of policymakers and encourage the use of data to inform decision-making.</p>	Obj 5, SO 5.1	<ul style="list-style-type: none"> <li>▪ Drafted the customized training modules on the standard processes for pharmaceutical expenditure and SHA guideline for MNCH commodities and submitted to the HEU for discussion and finalization. It is expected that all training modules will be finalized by July 2023 to capacitate and guide the HEU.</li> </ul>

# GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

## OVERVIEW

As part of Objective 4 of the country workplan, MTaPS Bangladesh provides assistance for ARC by supporting implementation of the NAP-AMR. The GHSA-related goal of MTaPS Bangladesh is to improve ARC by strengthening the capacity of in-country stakeholders and institutions in three result areas: effective MSC on AMR, IPC, and optimizing implementation of AMS to help the country progress to the next higher JEE capacity level.

## CUMULATIVE PERFORMANCE TO DATE

Before the inception of GHSA funding in FY20, MTaPS conducted a mapping exercise under the leadership of the CDC/DGHS to assess the implementation status of the NAP-AMR and identify gaps and priorities. After the inception of GHSA funding, MTaPS' contribution to ARC was further strengthened by successfully facilitating joint stakeholders' meetings, finalizing the AMR framework and indicators for IPC and AMS, and extending AMR activities from the national to the facility level. In collaboration with the CDC, MTaPS updated the National AMR Strategy, updated and costed the NAP-AMR, and developed the STG, AMS guidelines, and National Multisectoral AMS Plan. MTaPS assisted the CDC in developing, field testing, and enhancing a mobile app for the STG for medical practitioners to consult while on the move. MTaPS facilitated and continued providing TA to strengthen implementation of IPC and AMS interventions at nine targeted health facilities. MTaPS has been supporting the government and stakeholders to achieve the global benchmark actions for IHR according to the WHO JEE in the MSC, IPC, and AMS components of the AMR technical area under the GHSA mandate. The combined effect of these interventions is contributing to improve the country's IHR capacity on the JEE scale.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

### RESULT AREA I: EFFECTIVE MSC OF AMR

**Result 1.1: Governance for MSC strengthened.**

**Activity 1.1.1: Continue to support governance, functionality, and implementation capacity of the national MSC mechanisms.**

**Sub-activity 1.1.1.1: Assist CDC to conduct a partner mapping of AMR containment activities and follow up focus group discussions to refine the information captured in the mapping exercise.**

MTaPS finalized the methodology and the survey instruments for the national AMR partners mapping, in consultation with all relevant stakeholders, including the CDC, DGHS, and USAID, and conducted the survey. By September 2023, MTaPS will complete the mapping, including finalizing the mapping report.

**Sub-activity 1.1.1.2: Continue to build the managerial and technical capacity of the NTC towards sustainability by supporting regular coordination and review meetings.**

MTaPS facilitated a meeting of the core working group (CWG) on April 16, 2023. The Additional Director General (Planning) of the DGHS presided over the meeting and discussed the draft AMS guidelines, draft antibiotic policy, National IPC Committee, and use of the STG, among other activities.



The TOR of the National IPC Committee will be finalized in the next meeting, as minor changes are required.

**Sub-activity 1.1.1.3: Support the CDC/DGHS to plan and stage the annual World Antimicrobial Awareness Week (WAAW) for 2022 as well as the 11th One Health Bangladesh Conference**

MTaPS provided technical and logistic support for the 11th One Health Bangladesh Conference in Dhaka (June 12–14, 2023) as one of the major stakeholders in strengthening AMR containment in Bangladesh. Participation included presenting MTAAPS’ global efforts in strengthening the capacity of 13 collaborating countries under the GHSA in a plenary; country efforts on containing AMR through MSC in Bangladesh in an open-paper session; co-chairing a session on AMR mitigation and contributing as the session rapporteur; and facilitating the translation of a video on AMR to Bangla. The video was screened on the second day of the conference. It was later displayed at the MTAAPS booth, which was organized to showcase its initiatives in contribution to AMR in Bangladesh and where participants were mostly interested to see the STG app demonstration. Through active participation in this relevant international conference, MTAAPS reached a wider audience to showcase MTAAPS’ contribution to One Health and AMR mitigation in Bangladesh as well as in other USAID GHSA-focus countries. The activities increase visibility of MTAAPS, which helps it play a better role in implementing the ARC program of the government.

**RESULT AREA 2: IPC ACTIVITIES**

**Activity 2.5.1: IPC practices and services improved.**

**Sub-activity 2.5.1.3: Continue to support facility authorities and committees to review progress and support implementation of facility-based IPC activities.**

MTaPS GHSA staff and consultants, in collaboration with facility authorities and committees, conducted facility supervision, monitoring, and on-the-job IPC training in eight out of the nine MTAAPS-supported health facilities. MTAAPS supported facility visits to Nilphamari District Hospital, Narail District Hospital, Jhenaidah District Hospital, Taraganj Upazila Health Complex, and Lohagara Upazila Health Complex. Facility IPC action plans were reviewed with the IPC committees and updated following the analysis of progress and challenges. It was identified that sufficient color-coded bins are not available in the Lohagara Upazila Health Complex. The activity will contribute to improving IPC practices at the facilities for better prevention of infection.



Monthly meeting of IPC & AMS Committee at Jhenaidah District Hospital, Bangladesh, May 22, 2023. Photo credit: Abdul Kader, Jhenaidah District Hospital

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

***Activity 3.1.1: Collaborate with CDC/DGHS and Quality Improvement Secretariate (QIS) to strengthen AMS governance, planning, and implementation at the national level.***

### **Sub-Activity 3.1.1.2: Support the CDC/DGHS to field test the STG app**

MTaPS received feedback on the STG app following field testing in four selected facilities (Cumilla Medical College Hospital, Munshiganj and Nilphamari District Hospitals, and Taraganj Upazila Health Complex). A total of 74 physicians from selected government health facilities and 13 from nearby private hospitals participated in the testing. Of those 74 participants, 51 successfully provided their feedback on the technical correctness and user-friendliness of the app through the completion of an electronic survey. The causes of the low rate of feedback (compared to the number of invited participants) are that the app can only be used on android mobile devices, the bandwidth of the network remains an issue, and senior medical practitioners showed some resistance to the new technology. The feedback provided was discussed in the STG working group meeting. The group observed that some feedback was related to the content of the STG itself, which may require additional updates, and not the app. The group identified two actions to be taken with respect to the app: the department of “Pharmacology” should be included in the app drop-down menu to identify the background of users, and the app brightness should be optimized for use in low-light settings. MTAps added the pharmacology department in the dropdown menu and is working on improving the app’s brightness. After the field testing, it is planned to disseminate the app throughout the country covering both public and private health facilities to ensure its availability to download and practice. Hence, the team is working with the CDC on the STG app dissemination strategy and implementation steps such as holding a dissemination workshop engaging high level public and private associations/policy makers, issuing notice by CDC to all facilities, and advertising the link sources by August 2023. As a result, doctors will be outfitted with modern tools to practice WHO AWaRe classification, which will help prevent irrational antibiotics prescription, ensure adequate use by patients, and provide overall support to reduce development of resistance.

### ***Activity 3.5.1. Help strengthen AMS program at facility level.***

MTaPS performed a joint supervisory visit to Jhalokathi District Hospital with the program manager (PM)-QIS to assess the progress, efficiency, and effectiveness of interventions and improvements scored so far by the facility-based AMS committee. During the visit, the PM-QIS performed a ward round and corrected deviations, reviewed facility records, discussed existing AMS plan, listed local challenges, and provided support accordingly. It was noted that the facility authority and AMS focal point are to include AMS as an important agenda item in the monthly quality improvement committee meetings. The PM-QIS observed that establishing AMS programs per WHO guidance, as seen in this facility, is a best practice that helps improve stewardship and should be replicated in other non-MTAps-supported facilities in Bangladesh.

## **BEST PRACTICES/LESSONS LEARNED**

- Frequent supervisory visits, particularly joint visits with central level government officials from the CDC or QIS, can minimize the local challenges at the facility level. During the visit with PM-QIS at

Jhalokathi District Hospital, several problems were resolved immediately as the government authority was present to make the required decisions officially.

- To develop a sustainable mechanism for reviewing and mitigating local AMR challenges, the health facility authorities and care providers need adequate information, training, and continued guiding support for a prolonged period. As AMS is a new area of implementation, especially in the newly selected health facilities, they need proper guidance on most of the AMS actions, following the WHO AMS practical toolkit over time to build sustainable capacity.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<p><b>Activity 1.1.1:</b> Continue to support governance, functionality, and implementation capacity of the national MSC mechanisms.</p> <ul style="list-style-type: none"> <li>▪ Continue to conduct surveys using the finalized partner mapping instrument.</li> <li>▪ Analyze the findings and report on gaps.</li> <li>▪ Present in a workshop with recommendation for actions.</li> <li>▪ Facilitate the next CWG meeting.</li> </ul>	August 2023
<p><b>Activity 2.1.1:</b> Strengthen IPC governance structures at the national level, including updating of the multi-year IPC NAP.</p> <ul style="list-style-type: none"> <li>▪ Assessment of national level IPC activities using IPCAT2 will be completed.</li> <li>▪ With the leadership of the CDC and the DGHS, the National IPC Committee will be formed (expected in July; exact date to be determined).</li> </ul>	July 2023
<p><b>Activity 2.2.1:</b> Help expand and sustain the use of the newly developed eLearning course.</p> <ul style="list-style-type: none"> <li>▪ Finalize the IPC eLearning course.</li> <li>▪ Develop IPC eLearning dissemination strategy.</li> </ul>	September 2023
<p><b>Activity 2.5.1:</b> Continue support to strengthen IPC activities through IPC committees in the nine MTaPS-targeted facilities and introduce a mechanism to implement actions and update plans.</p> <ul style="list-style-type: none"> <li>▪ IPC facility implementation plans will be reviewed and updated by the IPC committee in the MTaPS-supported health facilities.</li> <li>▪ Continue joint supervisory visits with CDC/QIS.</li> <li>▪ Facilitate cross-learning between MTaPS-supported and non-MTaPS-supported health facilities, following a process under discussion.</li> </ul>	August 2023
<p><b>Activity 3.5.1:</b> Help strengthen AMS program at facility level.</p> <ul style="list-style-type: none"> <li>▪ Joint supervisory visits with QIS/CDC officials to the low performing facilities.</li> </ul>	September 2023

**Table 3. Quarter 3, FY23, Activity Progress, Bangladesh—GHSA**

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Continue to support governance, functionality, and implementation capacity of the national MSC mechanism.</p> <p><b>Activity Description:</b> MTaPS will focus support to the NTC and its CWG to complement ongoing interventions aiming the country’s progress toward higher JEE capacity levels, consolidate gains, and ensure smooth transition of interventions to the government. A key activity under MSC will be to support the CDC in mapping the country AMR activities at a national level, with the aim of identifying gaps in addressing WHO JEE areas, followed by updating the road map of the NAP-AMR.</p>	5	1.1	<p>The methods, questionnaire, and checklist for the AMR partners’ mapping was developed. Communication with key informants and data collection to identify activities in human, animal and environmental health sectors was initiated.</p> <p>MTaPS supported the 11th One Health Bangladesh Conference with two presentations, translation of a video, and showcasing of MTaPS’ contribution to AMR in the country to the different audiences.</p> <p>MTaPS supported the CWG meeting to discuss and finalize the AMS guidelines and the strategy to increase the use of the STG app.</p>
<p><b>Activity 2.1.1:</b> Strengthen IPC governance structures at the national level, including updating the multisectoral IPC NAP.</p> <p><b>Activity Description:</b> MTaPS provides TA to draft TOR for the National IPC Committee, to constitute IPC committees, and to develop facility IPC plans following the assessment findings, and other areas, such as drafting meeting minutes and invitation letters and translating documents, when needed. MTaPS is also coordinating CWG meetings to identify agenda for actions (i.e., various assessment, NAP updates, developing AMS guidelines, etc.).</p>	5	2.1	<p>MTaPS drafted TOR for the National IPC Committee and facilitated discussion on the TOR in the CWG meeting. The meeting proposed some modifications to the draft TOR, with discussions to be held in the next meeting.</p>
<p><b>Activity 2.2.1:</b> Help expand and sustain the use of newly developed IPC e-learning module in collaboration with key stakeholders.</p> <p><b>Activity Description:</b> The modified IPC eLearning course is under development. MTaPS will upload the course into the Muktapath platform to ensure its use by health care providers.</p>	5	2.2	<p>All six modules on basic IPC in English have been reviewed and improved. The modules were translated into Bangla. Once the English version of the modules are finalized, the Bangla version will be adjusted as needed for finalization.</p>
<p><b>Activity 2.5.1:</b> Continue support to strengthen IPC activities through IPC committees in the nine MTaPS-targeted facilities and introduce a mechanism to implement actions and update plans.</p> <p><b>Activity Description:</b> Conduct monitoring visits at MTaPS-supported health facilities.</p>	5	2.5	<p>MTaPS regularly conducted monitoring visits and on-the-job training at MTaPS-supported health facilities to monitor the functionalities of the IPC committees and IPC teams in implementing the IPC plan and to identify any challenges.</p>
<p><b>Activity 3.1.1:</b> Collaborate with the CDC/DGHS and QIS to strengthen AMS governance, planning, and implementation at the national level.</p> <p><b>Activity Description:</b> MTaPS will support prioritized AMR activities, including field testing of the STG app following approved test protocol.</p>	5	3.1	<p>Field testing was conducted in the initial four MTaPS-supported facilities following the approved protocol. Out of the 74 doctors who participated, 51 provided feedback using the survey link. Around 82% responded to the technical correctness of the app. A small percentage did not comment, did not properly understand the WHO AWaRe classification, or faced internet difficulties.</p>

			Findings shared with the respective working groups of the CDC. MTaPS met the conditions of adding Pharmacology as a department and improving the brightness of the app. The app is now ready for dissemination.
<p><b>Activity 3.5.1:</b> Help strengthen AMS program at facility level.</p> <p><b>Activity Description:</b> Improve facility-based AMS implementation efficiency through joint supervisory visits, on-the-job assistance, and peer-to-peer visits.</p>	5	3.5	MTaPS organized a workshop to share baseline findings; constitute the AMS committee, teams' nomination, and TOR following the QIS notice; and develop an AMS plan at the Jhalokathi District Hospital. Relevant updated information on accountability, leadership, AMS actions, monitoring and reporting areas, and relevant manuals, such as STG, were shared with the AMS committee to increase their capacity to maintain and strengthen the AMS program. The assigned consultant will monitor, review, and provide technical support.

## **B. BURKINA FASO**

### **GLOBAL HEALTH SECURITY AGENDA ACTIVITIES**

#### **OVERVIEW**

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

Burkina Faso has a clear strategy in place to ensure the availability of, access to, and appropriate use of quality-assured antimicrobials in the human and animal health sectors. MTaPS' support is focused on structures that ensure the enforcement and compliance monitoring of existing regulations, policies, and guidelines, including the recently updated 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 requires strong central- and facility-level governance and stewardship mechanisms, such as establishing DTCs in more HCFs and capacitating those that already exist to provide supportive supervision in their facilities and promote AMS practices. In FY23, in addition to activities to strengthen facility-level DTCs, MTaPS is supporting the TS of the OHP and the OHP's AMR-TTC 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**

To facilitate the official establishment of the OHP in Burkina Faso, MTaPS—in collaboration with the USAID GHSC-Procurement and Supply Management (PSM) program and OHP members—supported the TS-OHP to draft and obtain the signature of the Inter-Ministerial Order No. 2020-210/MS/MINEFID/MESRSI/MAAH/MRAH/MEEVCC, which defines the TOR, organization, composition, and functioning of the technical steering committee, TS, and OH focal points.

MTaPS collaborated with other OHP stakeholders to organize a governance meeting of the presidents and vice-presidents of the OHP's seven TTCs to orient them on how to effectively govern their respective committees. MTaPS supported the TS-OHP to review and update the inter-ministerial orders establishing the TTCs, which were then submitted to the respective ministers for signature. MTaPS also worked with the TS-OHP, the AMR-TTC, and OH partners to strengthen the organizational and governance structure of the AMR-TTC by defining the TOR, roles and responsibilities, and composition of the AMR-TTC and its sub-commissions. MTaPS collaborated with the FAO and the Country Health Information Systems and Data Use project to organize OHP meetings and strengthen coordination between the AMR-TTC and OHP. In collaboration with FAO; the Ministry of Water, Energy, and Environment; and other AMR stakeholders, MTaPS supported the leadership of the AMR-TTC to



organize quarterly meetings to review activity implementation. Additionally, MTaPS—in collaboration with WHO—supported the AMR-TTC and the TS-OHP to develop Burkina Faso's 2021-2024 NAP-AMR. MTaPS supported the OHP and the RUA sub-commission to carry out a sensitization workshop on RUA for 89 students (51 male and 38 female) in their sixth and final year of studies in medicine and pharmacy at Nazi Boni University of Bobo-Dioulasso. MTaPS also supported the TS-OHP to conduct a sensitization workshop on RUA for 16 health regions and health districts officers.

MTaPS supported five meetings and one workshop of Burkina Faso's RUA sub-commission and facilitated the participation of five MOH representatives in a two-part inter-university diploma course on antimicrobials, entitled *Antibiologie et Antibiothérapie en Afrique Sub-Saharienne*, organized by the University of Nazi Boni and the University of Montpellier in France.

MTaPS, in collaboration with FAO and other partners, supported the DGSV to develop guidelines and draft a ministerial order regulating antimicrobial use in the animal sector. MTaPS also supported the DGSV to develop a training package based on the guidelines. To strengthen the capacity of service providers, MTaPS then supported 3 TOT sessions for 15 veterinarians (2 female, 13 male) and 42 livestock technicians (4 female, 38 male) using the developed training package. MTaPS supported the DGSV to print 500 copies of the guidelines for dissemination to support AMS at the peripheral level of the health system. MTaPS also supported the DGSV to draft and validate a ministerial order establishing pharmacovigilance in the animal health sector.

WHO and the General Directorate of Pharmacy, Medicines, and Laboratories led a review of Burkina Faso's EML in 2020. As part of the process, MTaPS provided technical assistance to ensure that antibiotics in the EML were classified according to the WHO AWaRe categorization. In FY21, MTaPS supported the National Drug Regulatory Authority (NDRA) to disseminate 1,500 copies of the EML (including the AWaRe categorization of antibiotics) to assist health care professionals to follow proper prescribing practices. In FY22, MTaPS and the WHO also supported the NDRA to develop the 2022 national therapeutic formulary (NTF) for Burkina Faso.

Additionally, MTaPS supported the Directorate of Hospital Pharmacy (DPH) to establish and train DTCs in 10 selected HCFs. A total of 250 DTC members (60 female, 190 male) were trained on AMS. Each DTC developed an action plan to implement and oversee AMS activities in its respective facility. To address the inappropriate use of antibiotics, MTaPS supported the General Directorate of Access to Health Products (*Direction Général de l'Accès aux Produits de Santé* [DGAP]) and the DPH to develop training modules based on the facility-level infectious disease STGs and trained 350 health professionals (including 158 women) in the 10 selected HCFs. MTaPS also supported the Directorate of Quality and Health Care and DPH in printing and disseminating 500 copies of the STGs.

Aligned with what has been achieved, MTaPS supported the DGAP, DPH, and *Direction de l'Information Pharmaceutique et de l'Usage Rationnel des Produits de Santé* to conduct supervision visits to 10 MTaPS-supported HCFs to assess the functionality of their respective DTCs. The visits highlighted both the DTCs' positive feedback on the October 2022 training and demonstrated the need for further support to the 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. MTaPS worked with the DPH to conduct an audit of antibiotic use in *Centre Hospitalier de Banfora*.



## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

### RESULT AREA 1: EFFECTIVE MSC OF AMR

#### *Activity 1.1.2: Provide technical assistance to the AMR-TTC to complete the establishment of and capacitate the AMS subcommittee, including its human, animal, agricultural, and environmental sector TWGs*

MTaPS, in collaboration with the OH TS, organized a quarterly meeting of the RUA sub-commission. Twelve members (3 female, 9 male) attended this meeting. Representatives from Emergency Centre for Transboundary Animal Diseases/FAO and PSM were also in attendance. Key points that were discussed included: (i) strengthening regulation around prescribing, dispensing, and selling drugs, as well as the use of antimicrobials; ii) implementation of the AWaRe categorization of antibiotics; iii) operationalization of the DTCs within health care structures; iv) drafting and adherence of policies within HCFs; v) implementation of surveillance of antimicrobial consumption and use in HCFs; and vi) monitoring local bacterial ecology (overall and by clinical department) within hospitals. The president of the RUA sub-commission and his secretary shared minutes of a meeting that they attended in Addis Ababa, Ethiopia on RUA throughout the African continent. Meeting recommendations included critically examining existing governance and coordination mechanisms for AMS and developing strategies to improve those existing mechanisms. Other suggestions included assessing key issues at the national level regarding the effective implementation of the AMS program and conducting assessments of AMS program implementation, as well as discussing priority interventions and scheduling reasonable timelines for implementation.

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

#### *Activity 3.5.1: Support the DPH, TTC-AMR, and DTCs to monitor the implementation of AMS interventions in selected HCFs*

MTaPS supported the DPH to conduct a supervision in the regional hospital of Kaya (Centre Hospitalier Régional [CHR] de Kaya), Centre Medical avec Antenne Chirurgicale de Zorgho et Pissy, and the teaching hospital SANOU Souro of Bobo-Dioulasso to monitor the functionality of their DTCs and the post-training perception on RUA. The results shared through the DTC highlighted challenges in the functionality of the DTC due to staff turnover, lack of funding, and weak member commitment. At the teaching hospital in Bobo-Dioulasso, the key recommendation was to put a DTC in place. This was accomplished through an official endorsement by the general directorate of the hospital, noting that “The Correct Practice for Prescribing Antibiotics in Burkina Faso” training was highly appreciated, and recommended that it be extended to all medical staff. In addition, staff requested additional support to adapt protocols to the local context.

### BEST PRACTICES/LESSONS LEARNED

Engaging local MOH counterparts starting during the preparatory stage for activities helps ensure that improved communication and exchange of information, and, in turn, helps ensure that interventions can be completed as per the agreed upon timeline.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<p><b>Activity 1.1.2:</b> Strengthen the functionality of the TTC-AMR and the RUA sub-commission</p> <p><b>Description:</b> Support the RUA sub-commission to organize its quarterly meetings</p>	July 2023
<p><b>Activity 3.2.1:</b> Support the DGSV to disseminate the ministerial order regulating and enforcing RUA and to draft a ministerial order on PV in the animal health sector</p> <p><b>Description:</b> Support the DGSV to disseminate the ministerial order regulating and enforcing RUA</p>	July and September 2023
<p><b>Activity 3.5.1:</b> Support the DPH, TTC-AMR, and DTCs to monitor the implementation of AMS interventions in selected HCFs</p> <p><b>Description:</b> MTaPS will support DPH and TTC-AMR to monitor AMS interventions in selected HCFs through supervision and antibiotic use audit</p>	July 2023
<p><b>Activity 3.5.1:</b> Support the Direction de la Pharmacie Hospitalière (DPH), TTC-AMR, and DTCs to monitor the implementation of AMS interventions in selected health facilities.</p> <p><b>Description:</b> MTaPS and the DPH will then support the DTCs of the three selected hospitals to develop a list of authorized prescribers, define prescribing criteria, and develop a guide regulating visits from drug company representatives visiting the facility to promote their products.</p>	August and September 2023

**Table 4. Quarter 3, FY23, Activity Progress, Burkina Faso—GHSA**

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Support the functionality of the TS-OHP</p> <p><b>Activity Description:</b> Provide technical assistance to the AMR-TTC to complete the establishment of and capacitate the AMS subcommittee, including its human, animal, agricultural, and environmental sector TWGs</p>	5.4	1.1	MTaPS supported TS-OHP and the TTC-AMR to: 1) complete a comprehensive assessment of the country's progress toward WHO; 2) raise awareness around the celebration of WAAW; and 3) participate in a roundtable discussion on AMR, including consideration of gender as it relates to AMR.
<p><b>Activity 1.1.2:</b> Strengthen the functionality of the TTC-AMR and the RUA sub-commission</p> <p><b>Activity Description:</b> Provide technical assistance to the AMR-TTC to complete the establishment of and capacitate the AMS sub-committee, including its human, animal, agricultural, and environmental sector TWGs</p>	5.4	1.1	MTaPS supported TS-OHP and the TTC-AMR through the RUA sub-commission to: 1) conduct a sensitization workshop on AMR for the heads of HCFs on RUA; 2) organize three quarterly coordination meetings; and 3) facilitate the participation of three of its members to attend the <i>Antibiologie et Antibiothérapie en Afrique Sub-Saharienne</i> interuniversity diploma courses.
<p><b>Activity 3.2.1:</b> Support the DGSV to disseminate the ministerial order regulating and enforcing RUA and to draft a ministerial order on PV in the animal health sector</p> <p><b>Activity Description:</b> Organize a two-day workshop in eight administrative regions and establish a PV system in the animal health sector</p>	5.4	3.5	MTaPS supported the DGSV to draft the decree/ministerial order creating the national veterinary PV system in Burkina Faso and to design a PV data collection tool and reporting mechanism. The decree/ministerial order is now with the Ministry of Agriculture, Animal Resources, and Fisheries for finalization and official endorsement.
<p><b>Activity 3.5.1c:</b> Develop prescribing criteria based on the WHO AWaRe categorization of antibiotics and guide regulating visits from pharmaceutical company representatives visiting the facility to promote their product</p> <p><b>Activity Description:</b> Support the DTCs of the three selected hospitals to develop a list of authorized prescribers, define prescribing criteria, and develop a guide regulating visits from pharmaceutical company representatives visiting the facility to promote their products</p>			MTaPS worked with the DPH to select three hospitals, including the hospital in Banfora, to conduct an audit of antibiotic use. In June 2023, an audit was conducted of CHR of Banfora. Audits of the CHR of Koudougou and Tenkodogo are still pending and will be conducted by August 2023. In addition, MTAps supported the DPH to lead six supervision activities with the established DTCs.

## C. CAMEROON

### PRESIDENT'S MALARIA INITIATIVE (PMI) ACTIVITIES

#### OVERVIEW

The government of Cameroon 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 WHO Quality of Selected Antimalarial Medicines Circulating in Six Countries of Sub-Saharan Africa (QAMSA) study found that in Cameroon, 37% of the 41 tested antimalarial samples, including artemether/lumefantrine, failed quality testing. This underscored the critical responsibility of public health institutions to enhance their efforts to prevent the distribution of substandard medications that could lead to antibiotic resistance. Legislators in Cameroon have adopted a number of laws to govern the production, importation, and distribution of pharmaceutical items, including Law No. 90-035 of August 10, 1990, which is the main law governing the practice and organization of the pharmacy profession. The DPML is Cameroon's national pharmaceutical regulatory authority that 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.

The WHO GBT is a tool developed to assess various regulatory functions and score a country's regulatory system in terms of ML, ranging from 1 (some elements of regulatory functions) to 4 (regulatory system operating at an advanced level). A 2020 self-assessment conducted using the WHO GBT revealed that the DPML is currently operating at ML 1. The results of the assessment also showed that the DPML had not fully implemented 167 out of the 195 indicators required to achieve WHO ML 3 for a stable, well-functioning, and integrated regulatory system.

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

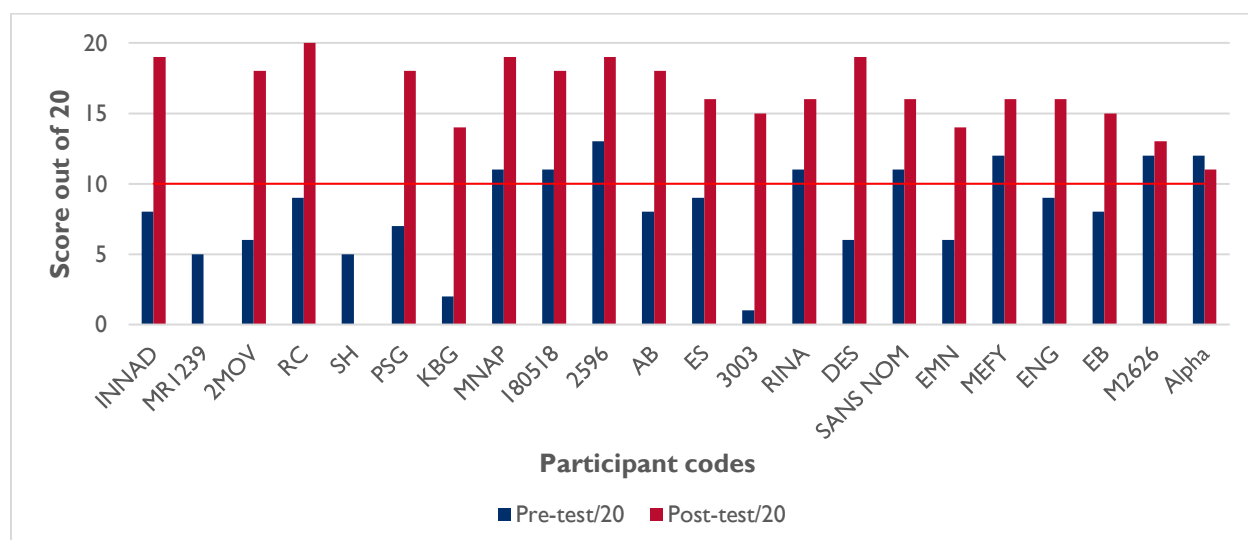
#### CUMULATIVE PERFORMANCE TO DATE

MTaPS began implementing its PMI work plan in Cameroon in October 2022. Three activities were initially planned: Activity 1.2.1: Support the development of legislation to create an autonomous national medicines regulatory agency, Activity 2.4.1: Streamline the system for the registration of medical products, including antimalarial products, by developing registration guidelines and SOPs, and Activity 2.4.3: Enhance the capacity of DPML assessors by training assessors on medicine dossier evaluation according to common technical document (CTD) guidelines. In December 2022, Activity 1.2.1 was cancelled because the DPML chose to allocate all funding to support medicines registration. In February 2023, the work plan was revised and approved, and in April 2023, MTaPS recruited a consultant to facilitate support to national counterparts. All activities were implemented and completed during the third quarter of FY23.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

### **Activity 2.4.2: Enhance the capacity of DPML staff by training evaluators on medical device record evaluation according to CTD guidelines**

From April 25 to 29, 2023, MTaPS supported the DPML to train evaluators on marketing authorization applications for pharmaceutical products. This training brought together 24 participants (17 female). Evaluators received training on a variety of topics including an overview of medical devices; classification of medical devices; Japan's Pharmaceutical and Medical Device Agency experience; essential principles of safety and performance of medical devices and IVD medical devices; clinical investigation and evaluation of medical devices; table of contents of medical devices other than IVD; software as medical device; post-marketing surveillance; medical devices review content; and essential principles of labelling and quality management system. Of the total 24 national participants trained, 22 took the pre-test and 20 took the post-test. In the pre-test, 36% of participants had a score of 10/20 or higher, while in the post-test, 100% of the participants had a score of 10/20 or higher. The lowest scores received were 1/20 in the pre-test and 11/20 in the post-test (figure 3).



**Figure 3. Results of pre- and post-test, training on marketing authorization applications for pharmaceutical products, Cameroon, April 2023.**

### **Activity 2.4.1: Streamline the system for the registration of medical products, including antimalarial products, by developing registration guidelines and SOPs**

MTaPS supported the DPML to organize four workshops to develop a registration guideline and variation guidelines for marketing authorization of pharmaceutical products.

From May 11 to 12, 2023, MTaPS supported the DPML to organize a two-day preparatory workshop to develop the registration guidelines in la Falaise Hotel in Yaoundé. Participants focused on the structure of the two guidelines, the working methodology for the review workshops, and the timetable of activities.

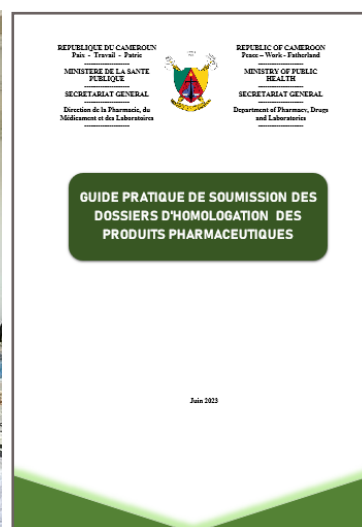
From May 15 to 18, 2023, MTaPS organized a four-day workshop in Ebolowa to review the registration guidelines. Multi-disciplinary participants from the DPML licensing department, sub-committee chairs, academics, and experts in pharmaceutical regulation reviewed the first draft of the guidelines.

From June 13 to 16, 2023, MTaPS supported the organization of a four-day workshop in Ebolowa to review variation guidelines. A total of 25 participants (13 female, 12 male), took part in the workshop. Participants reviewed the entirety of the first draft of the marketing authorization variation guide for pharmaceutical products.

From June 19 to 23, 2023, MTaPS supported the organization of a workshop to validate the registration and variation guidelines. This workshop brought together 23 participants (13 female). During the first three days of the workshop, participants reviewed and validated the draft registration guide, and during the remaining two days, the marketing authorization variations guide was also reviewed and validated. Workshop participants included DPML staff, the General Inspectorate of Pharmaceutical Services, the Legal Affairs and Litigation Department, the Translation Unit, and priority health programs.



Validation of guidelines workshop in Douala, Cameroon, June 2023. Photo credit: Cleophas Mbah, MTaPS



Draft I of the Pharmaceutical Registration Guidelines, Cameroon

## BEST PRACTICES/LESSONS LEARNED

- Coordination, communication, and flexibility are crucial for successful implementation of joint activities with stakeholders. For example, to accommodate unforeseen changes in the DPML schedule, MTaPS had to reschedule the training for evaluators on marketing authorization multiple times. Ongoing flexibility and communication allowed MTaPS to eventually hold the training at a time that was suitable for the partner.

## ACTIVITIES & EVENTS FOR NEXT QUARTER

All activities in the workplan have been completed.

## 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, as well as 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 in place a strong governance mechanism, 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.

### CUMULATIVE PERFORMANCE TO DATE

MTaPS' primary goal is to support Cameroon to move toward the next JEE level for IPC, AMS, and MSC by supporting the completion of WHO IHR benchmark actions. As of March 2023, MTaPS has supported the achievement of 31 (50%) of the 62 total WHO benchmark actions.

Since MTaPS began its work in Cameroon in 2019, the program has supported the MSC of 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 IPC committees to identify and implement self-initiated activities.

MTaPS supported the DPML to carry out a situational analysis of AMS-related policies in the animal and human health sectors, develop a national integrated AMS action plan, establish DTCs in 12 HFs, train 239 health care providers (134 female, 105 male) in AMS, conduct CQI of AMS activities in supported HFs, and classify antibiotics in Cameroon’s national essential medicines list according to the WHO AWaRe categorization.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

### RESULT AREA 2: IPC

#### ***Activity 2.5.1: Continue to strengthen the governance, functionality, and capacity of IPC committees to implement self-initiated IPC activities and CQI using IPC tools, and institutionalized actions***

From April 3 to 14, 2023, MTaPS supported the Directorate of Health Promotion (DPS) to continue its onsite supervision of IPC committees in the remaining nine MTaPS-supported HFs not yet supervised. Supervisors assessed facilities using the IPCAF and HHSFAF tools as part of the CQI process to strengthen the functionality of IPC committees. The supervision had already started during the previous quarter in March 2023, and MTaPS had already supervised four HFs. The objectives of the supervision were to assess IPC core components using the WHO IPCAF tool, assess the implementation of IPC activities in the facility improvement plans, follow up on the implementation of self-initiated activities by IPC committees, follow up on the implementation of recommendations formulated during the last supervision, and identify implementation challenges and discuss possible solutions. Almost all eight of the supervised HFs demonstrated improved IPC scores compared to their last onsite supervision, and two of the HFs attained the advanced level (score >600 on a scale of 800) for IPC (table 5).

**Table 5. Health facilities’ IPCAF scores**

Health facility	Previous score (June 2022)	Current score (March 2023)	Current status
Yaoundé Jamot Hospital	572	532	Intermediate
Obala District Hospital	510	595	Intermediate
Ebolowa Regional Hospital	525	555.5	Intermediate
Sangmelima Reference Hospital	537	572.5	Intermediate
Bafoussam Regional Hospital	368	480	Intermediate
Edea Regional Hospital annex	410	570	Intermediate
Douala General Hospital	578	675	Advanced
Bonassama District Hospital	620	727.5	Advanced
Nkongsamba Regional Hospital	540	610	Advanced

During Q3, MTaPS continued to support IPC committees in MTaPS-supported HFs to implement the self-initiated activities they had proposed in their action plans through virtual monitoring via WhatsApp. MTaPS also supported the DPS and the Directorate for the Control of Epidemics and Pandemics (DLMEP) to organize a two-day workshop from June 30 to July 1, 2023, for IPC stakeholders from the

MTaPS-supported HFs and representatives from the regional and central levels of the health system to present the findings from IPC committees' implementation of self-initiated activities and to document lessons learned. The facility IPC champion and the head of the IPC committees from each of the 13 MTaPS-supported HFs attended the workshop. The HFs took turns presenting the results of their self-initiated activities. These activities covered technical areas including the strengthening of HCAI surveillance and strengthening hand hygiene compliance of health care staff. Some of the HFs documented challenges encountered during activity implementation, such as:

- Poor completion and archiving of hospitalization registers made it difficult to carry out a retrospective search of suspected cases of HCAs from the hospitalization registers
- Some of the surveillance focal persons at HFs found the HCAI notification form too cumbersome to fill out
- Certain newly posted IPC champions expressed the need for training in IPC and HCAI surveillance

Corrective measures taken by the HFs to address these challenges include:

- Sharing findings with HF staff during coordination meetings
- Sensitization of health workers on the proper completion and archiving of hospitalization registers

At the end of the workshop, participants expressed their thanks and committed to incorporate these activities in their routine work.

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

#### ***Activity 3.5.1: Support the governance and functionality of the DTCs to implement AMS programs and actions, including monitoring of AMU and other interventions, to improve AMU at designated HFs***

MTaPS continued to support the DPML to strengthen the governance and functionality of DTCs to implement AMS programs through self-initiated efforts to foster ownership and sustainability. From April 17 to 30, MTaPS supported the DPML to carry out the onsite supervision of DTCs at the 12 supported HFs as part of the CQI process. The objective of this supervision was to strengthen the functionality of DTCs to implement AMS programs and actions, including the monitoring of AMU and other interventions to improve AMU. The supervision team used the WHO Checklist of Essential Health Care Facility Core Elements for AMS Programmes in LMICs and assessed the implementation status of DTC activities in the facility action plans, with a focus on AMS interventions, in addition to identifying implementation challenges and discussing possible solutions. During the supervision, participants revised the facility action plans as well as the concept notes for AMS self-initiated activities. Use of the checklist showed that 83.3% of the DTCs have improved in their essential facility core elements for AMS programs. The exceptions are Sangmelima Reference Hospital and Mbalmayo District Hospital. Both facilities experienced staff turnover that impacted the functioning of their respective DTCs. This onsite supervision provided an opportunity to strengthen the capacity of the new DTC members and provide them with reference documentation.

Figure 4 depicts the evaluation results obtained during the supervision of the functionality of DTCs in the 12 MTaPS-supported HF.

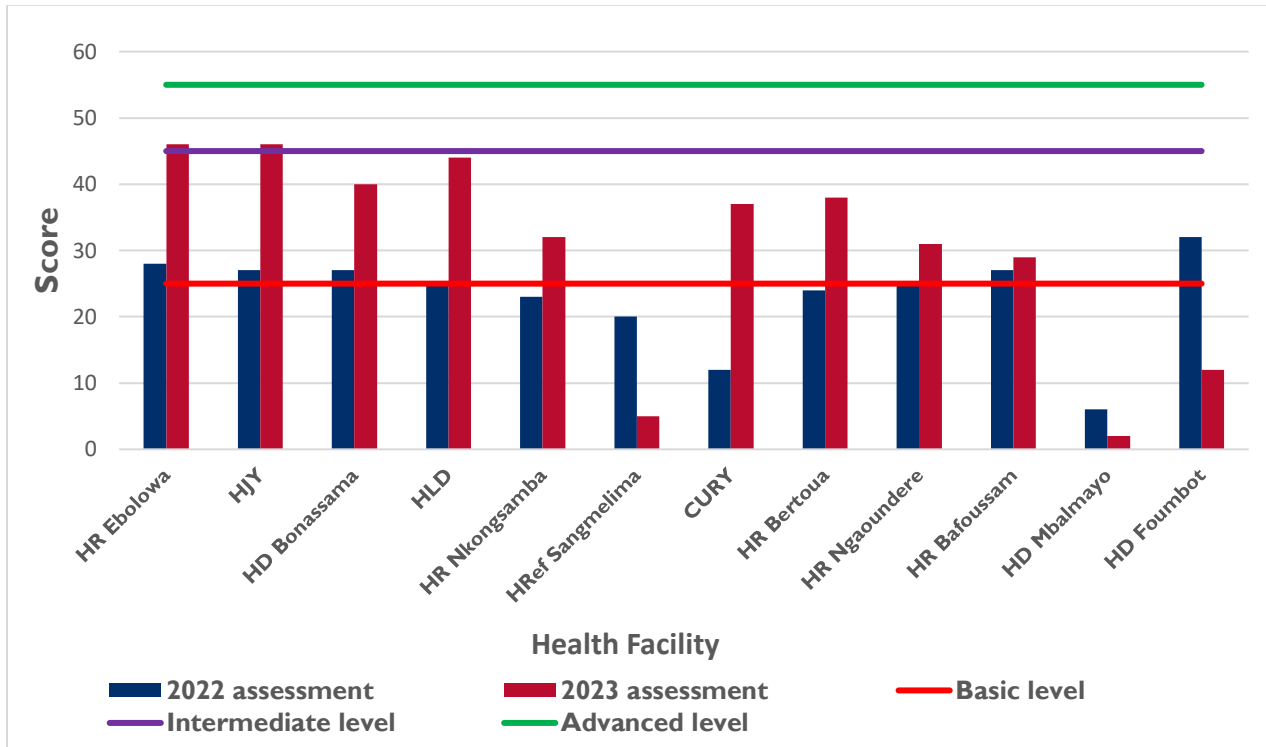


Figure 4. Results of assessment of DTCs using the WHO checklist for essential health care facility core elements for AMS programs

During Q3, MTaPS also supported the DLMEP to develop, finalize, and validate the classification of antibiotics in Cameroon’s national essential medicines list according to the WHO AWaRe categorization. During a five-day workshop in Kribi, South Region from June 12 to 16, 2023, MTaPS supported the stakeholders to finalize and validate the classification of antibiotics according to AWaRe categories. The workshop brought together 34 participants (22 female)



Participants at the AWaRe categorization list validation workshop, June 2023. Photo credit: Armelle Tchato, MTaPS

from different departments of the MOPH, HFs, public health programs, and researchers from university institutions. During this workshop the participants provided technical input into the choice of selected antibiotics and validated the categorization of different antibiotics in the AWaRe categories. Cameroon now has a validated AWaRe categorization guideline.

## BEST PRACTICES/LESSONS LEARNED

- Supervision of HFs is more productive when done by both national counterparts and supporting partners in collaboration than when the national counterparts are left to do it on their own.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<b>Activity 1.2.1:</b> Continue to support the institutionalization, ownership, and uptake of AMR-related e-learning courses through multisectoral efforts	July 2023
<b>Activity 2.5.1:</b> Continue to strengthen the governance, functionality, and capacity of IPC committees to implement self-initiated IPC activities and CQI using IPC tools, and institutionalized actions	July 2023
<b>Activity 2.5.2:</b> Support the functionality and scale up of the newly established pilot systems for HCAs and multidrug-resistant organism surveillance under the leadership of the facility IPC focal persons and committees to strengthen pandemic preparedness	July 2023
<b>Activity 3.5.1:</b> Support the governance and functionality of the DTCs to implement AMS programs and actions, including monitoring of AMU and other interventions, to improve AMU at designated HFs	July and August 2023

**Table 6. Quarter 3, FY23, Activity Progress, Cameroon—GHS**

Activity	MTaPS Objective(s)	GHS Result(s)	Activity Progress
<p><b>Activity 2.5.1:</b> Continue to strengthen the governance, functionality, and capacity of IPC committees to implement self-initiated IPC activities and CQI using IPC tools, and institutionalized actions</p> <p><b>Activity Description:</b> MTAps supported IPC committees in collaboration with the DPS to organize a workshop to review results and lessons learned from self-initiated activities implementation.</p>	5.4	2.5	MTaPS is supporting the IPC committees in the 12 supported HFs to evaluate the results from their self-initiated activities and identify lessons learned.
<p><b>Activity 3.1.1:</b> Support the classification of antibiotics in the human sector following recommendations from the WHO AWaRe categorization</p> <p><b>Activity Description:</b> MTAps supported the DPML to classify antibiotics according to the WHO AWaRe categorization.</p>	5.4	3.1	MTaPS supported the DPML to produce the first draft of the AWaRe categorization. MTAps then supported three workshops for documentation and literature reviews, and then to finalize and validate the document.
<p><b>Activity 3.5.1:</b> Support the governance and functionality of the DTCs to implement AMS programs and actions, including monitoring of AMU and other interventions, to improve AMU at designated HFs</p> <p><b>Activity Description:</b> MTAps collaborated with the DPML to support the DTCs at target facilities to implement their self-initiated activities.</p>	5.4	3.5	MTaPS supported the DPML to conduct a supportive supervision of DTCs at the 12 MTAps-supported HFs. MTAps also supported these DTCs to implement self-initiated activities identified in their action plans.

## 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 rational use of antimicrobials 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 Global Action Plan on AMR and in Côte d'Ivoire's NAP-AMR, and both documents strongly emphasize MSC. MTaPS has been providing technical support to consolidate MSC on AMR, in addition to supporting the IPC and AMS technical areas, with direct technical assistance to the national AMR TWG and relevant ministries. Planned activities for FY23 were built on the work done during the previous 4 years of the program, including supporting Côte d'Ivoire to strengthen the governance of IPC committees, improve IPC practices, conduct AMS practices in health facilities, and develop and implement systems to monitor antimicrobial use and consumption nationally and at health facilities.

#### CUMULATIVE PERFORMANCE TO DATE

MTaPS' support to Côte d'Ivoire to strengthen AMR containment is guided by WHO IHR benchmark actions. MTaPS aims to help the country move up to the next JEE level across the three result areas. As of March 2023, MTaPS has supported the completion of 34 WHO benchmark actions—10 contributing to MSC/AMR, 15 to IPC, and 9 to AMS, while 2 other benchmark actions are at various stages of completion (ongoing).

Since MTaPS was launched 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 then supported the development of IPC guidelines and an AMS action plan. Through a decree in April 2019, the Ivorian government formalized the OHP to institutionalize a national MSC mechanism to address public health threats, including AMR. MTaPS supported the country to establish an AMR TWG to monitor AMR activities. This TWG is connected to the OHP through a national coordinating body called the MSC Group (or MCG). MTaPS helped 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, IPC TWG, Multisectoral Technical Committee 4 (MTC4), and AMS Multisectoral Technical Committee 5 (MTC5) to develop and validate more than 15 reference documents, including the AMR governance manual, national AMR policy, 2019–2020 multisectoral NAP-AMR, national IPC plan, animal-sector IPC guidelines, and the national AMS policy, guidelines, and plan. MTaPS also supported the AMS MTC to develop the AMR M&E Plan and the AMR operational advocacy plan and to update the inter-ministerial decree officially establishing DTCs in Côte d'Ivoire.

MTaPS supported a situational analysis of the capacity and functionality of ICCs and DTCs in four university teaching hospitals, 12 regional hospitals, and four private clinics in the human health sector, as well as in the veterinary clinic of the Ministry of Animal Resources and Fisheries' Regional Directorate of Bouaké and in the Antirabic Center of Cocody in the animal health sector. MTAps facilitated the development and validation of documents and training modules in IPC and AMS, training of HCPs, and the establishment of a CQI process in HFs. Supported ICCs and DTCs are now functional, with clear TORs and capacity building plans. MTAps also supported the AMS TWG to develop and finalize a list of antibiotics based on the AWARe classification categories. The IPC TWG and the AMS TWG identified and selected 3 MTAps-supported facilities as centers of excellence for IPC and AMS activities.

MTaPS assisted the AMR TWG to develop the AMR 2021–2025 M&E Plan and routine data collection tools to improve the reporting of achievements to health authorities in Côte d'Ivoire. 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.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

### **RESULTS AREA 1: EFFECTIVE MSC OF AMR**

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

Following the development of the AMR 2021–2025 M&E Plan and routine data collection tools, MTAps supported the AMR TWG to train 12 M&E focal points in the use of data collection tools and indicators. During the workshop, participants reviewed the current 2021–2023 AMR NAP and proposed an AMR operational plan for 2023.

MTaPS also supported the MCG in organizing a coordination meeting in June 2023 to address the emergence of multidrug-resistant bacteria at university teaching hospitals in Abidjan. In response to this development, participants recommended the following: to conduct a situational analysis, to set up an alert system, and to agree on a response and consensual management system for health care–associated infections.

### **RESULTS 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 IPC***

In April 2023, MTAps supported the MTC4 to organize the supervision of IPC committees of the three centers of excellence (Centre Hospitalier Universitaire [CHU] de Bouaké, Centre Hospitalier Régional [CHR] de Gagnoa, and Clinique Le Grand Centre de Yopougon). The objective of that supervision was to strengthen IPC committees' capacities. To better target efforts, DMHP developed a tool to properly assess the IPC committees' functioning and capacities. This tool was used during supervision visits. Clinique Le Grand Centre of Yopougon scored an 84% (advanced level), and CHR de Gagnoa also scored at an advanced level with 79%. Interestingly, CHU de Bouaké's score decreased from 73% in



2021 to a basic level of 59% in 2023. The decrease is due to the appointment of new IPC committee members.

### RESULTS AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

#### **Activity 3.1.1 (Year 3): Support the AMR TWG to improve the NEML using the WHO AWaRe**

MTaPS also supported MTC5 to organize the antibiotics AWaRe categorization workshop. In attendance were 43 participants (30 male, 13 female). Participants classified the list of antibiotics according to the AWaRe categorization. The workshop recommended making the national list of antibiotics registered in Côte d'Ivoire (for facilities that are not using the NEML) and the list of antibiotics to include in the NEML available. They also drafted an inter-ministerial decree to enforce the implementation of the AWaRe categorization in health facilities.

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

MTaPS supported the MTC5 to organize a joint mission to set up three centers of excellence at Clinique Le Grand Centre de Yopougon, CHR de Gagnoa and CHU de Bouaké. MTaPS also assessed functionality and capacity in AMS of the DTCs of CHR de Gagnoa and CHU de Bouaké. An adapted WHO tool for assessing AMS and the medicine supervision tool were used for the assessment. Regarding the functioning of the DTCs, CHR de Gagnoa progressed from an intermediate level of 41% to an advanced level of 48%, whereas CHU de Bouaké kept an intermediate score of 44%. The WHO facility assessment tool graded CHR de Gagnoa at 64.25% and CHU de Bouaké at 68%.

### BEST PRACTICES AND LESSONS LEARNED

- Strong and committed DTC members are critical to the effectiveness of the committee even if they are not in designated leadership positions. This was demonstrated at the CHR de Gagnoa, where a medical doctor carried out a prescription audit, and in CHU de Bouaké, where an audit of rational use of antimicrobial activities was conducted.

### ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<p><b>Activity 1.1.1:</b> Support the MCG to monitor the implementation of the approved NAP-AMR.</p> <p><b>Activity description:</b> MTaPS will continue to support the AMR TWG to prepare the 2022 AMR progress report and coach the AMR national focal point in her new role as the head of the AMR MCG.</p>	August 10, 2023
<p><b>Activity 1.2.1:</b> Support the AMR TWG to use e-Learning platforms to scale up training on AMR/AMS/IPC for health professionals.</p> <p><b>Activity description:</b> MTaPS will support the DAP, INSP, and identified universities and professional associations to train IPC and AMS committee members of the three centers of excellence.</p>	September 2023
<p><b>Activity 1.2.2:</b> Support the AMR TWG to share lessons learned and experiences in the implementation of the NAP-AMR.</p> <p><b>Activity description:</b> MTaPS will support the AMR TWG in organizing a five-day lessons learned and experience sharing workshop.</p>	September 2023

Activity and Description	Date
<p><b>Activity 2.1.1:</b> Support the AMR TWG to strengthen the IPC program at the national and facility levels.</p> <p><b>Activity description:</b> MTaPS will support the AMR TWG to conduct quarterly assessments of the three selected IPC centers of excellence using the WHO HHSFAF and water and sanitation for health facility improvement (WASH FIT) tools. MTaPS will support the update and implementation of the respective facility IPC improvement plans.</p>	2023
<p><b>Activity 2.5.1:</b> Strengthen the functionality of IPC committees in the human health sector and the capacity of HCPs to implement IPC</p> <p><b>Activity description:</b> MTaPS will support regional IPC focal points and regional IPC trainers to conduct a quarterly supervision of the IPC committees at the three selected IPC centers of excellence.</p>	September 2023
<p><b>Activity 3.5.1:</b> Support the AMR TWG to improve a governance and oversight system for AMS in health facilities, including monitoring the implementation of related policies, guidelines, and standards.</p> <p><b>Activity description:</b> MTaPS will support the AMR TWG to monitor and supervise AMS capacities of the centers of excellence.</p>	July–August 2023

**Table 7. Quarter 3, FY23, Activity Progress, Côte d'Ivoire—GHSA**

Activity	MTaPS Objective(s)	GHSA Result(s)	MNCH Result(s)
<b>Activity 1.1.1:</b> Support the MCG to monitor the implementation of the approved NAP-AMR.	5.4	1.1	MTaPS supported the AMR TWG to develop and disseminate data collection tools. MTAps also supported the MCG to organize a coordination meeting to address the emergence of multidrug-resistant bacteria in three university hospitals.
<b>Activity 2.5.1:</b> Strengthen the functionality of IPC committees in the human health sector and the capacity of HCPs to implement IPC.	5.4	2.1	MTaPS supported the MTC4 to organize the supervision IPC committees of three centers of excellence (CHU de Bouaké, CHR de Gagnoa, and Clinique Le Grand Centre de Yopougon).
<b>Activity 3.1.1 (Year 3):</b> Support the AMR TWG to improve the NEML using the WHO AWaRe.	5.4	3.1	MTaPS supported MTC5 to develop and finalize the national list of antibiotics registered in Côte d'Ivoire (for facilities that are not using the NEML) and the list of antibiotics to include on the NEML. They also drafted an interministerial decree to enforce the implementation of the AWaRe categorization.
<b>Activity 3.5.1:</b> Support the AMR TWG to improve a governance and oversight system for AMS in health facilities, including monitoring the implementation of related policies, guidelines, and standards.	5.4	3.5	MTaPS supported the MCT5 to designate the three centers of excellence (Clinique Le Grand Centre de Yopougon, CHU de Bouaké and CHR de Gagnoa) and to strengthen the capacity and functionality of the respective committees.

## **E. DRC**

### **GLOBAL HEALTH SECURITY AGENDA ACTIVITIES**

#### **OVERVIEW**

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

The strategic approach and actions are focused on supporting the critical path to achieving higher capacity levels as outlined in the JEE tool and the WHO benchmarks for IHR capacities. In DRC, the goal of achieving good patient outcomes will be met using multidisciplinary and multisectoral collaboration to improve 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 experience and results. Through MTaPS, USAID is contributing to addressing the challenges mentioned above to help DRC achieve higher WHO IHR capacity levels in AMR technical areas.

#### **CUMULATIVE PERFORMANCE TO DATE**

Since DRC conducted its JEE in March 2018, the country has made progress with the AMR recommendations identified in the JEE report by developing a NAP-AMR in 2019. Since its startup in DRC, MTaPS has supported the NC-AMR to implement the NAP-AMR and achieve progress in the MSC, AMS, and IPC technical areas. As of March 2023, MTaPS DRC supported 27 (44%) of the 62 WHO benchmark actions—10 contributing to MSC/AMR, 8 to IPC, and 9 to AMS. To contribute to DRC's progress toward higher WHO IHR capacity levels in the AMR technical areas, MTaPS also continued supporting the NC-AMR and its AMS and IPC subcommittees to hold their respective quarterly meetings.

MTaPS supported the establishment of 12 DTCs in 5 provinces in DRC to oversee AMS interventions at HF. MTaPS is also supporting DTCs to conduct quarterly assessments of antimicrobial use, including antibiotic prescribing patterns and patients' knowledge on antibiotic prescriptions, as part of their CQI programs. MTaPS collaborated with the WHO to support the National Pharmaceutical Regulatory Authority (ACOREP), to develop and integrate the WHO AWaRe categorization of antibiotics into the revised NEML and disseminate it in Nord Kivu and Ituri. A study on the aggregate consumption of antimicrobials in DRC revealed that at least 70% of antibacterial medicines consumed were in the WHO Access category, which is above the WHO's recommended minimum of 60%. However, DRC needs further support with AWaRe compliance at the HF level. An assessment in May 2021 in MTaPS-

supported facilities showed that only 2 out of the 7 (29%) HFs assessed met the WHO recommendation of over 60% of antibiotic prescriptions in the Access category.

In collaboration with WHO and FAO, MTaPS supported the Directorate of Animal Disease Control (*Direction de Lutte contre les Maladies Animales [DLMA]*) in conducting IPC assessments in the animal health sector. Using an adapted IPCAF tool, the DLMA, ACOREP, and the MOH’s Directorate of Hygiene (*Direction d’Hygiène*) carried out the assessment at four farms and four animal health clinics. Afterward, each facility developed an improvement plan to reduce health care-acquired infections (HCAI) and the use of antimicrobials. MTaPS also supported the Directorate of Hygiene to use the WHO IPCAT2 to assess hygiene conditions in the human health sector at the central level of DRC’s health system and to develop an improvement plan, which is currently being implemented.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

### RESULT AREA I: EFFECTIVE MSC ON AMR

#### **Activity 1.2.1: Support the 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 16 and 22, 2023, MTaPS provided technical support to ACOREP and the DLMA to prepare and brief participants on the planned joint MSC supervision.

On June 19, 2023, MTaPS supported the ACOREP and DLMA to organize a workshop to answer the TrACSS tripartite survey questionnaire to assess the level reached by the DRC in the fight against AMR. Participants included the WHO; stakeholders from the animal health, human health, agriculture, and environment sectors; and the Codex Alimentarius. The results of the evaluation suggested that several components have remained at the same score since 2022. Table 8 below summarizes achievement against selected DRC benchmark actions and indicators from 2021 to 2023.

**Table 8. TrACSS questionnaire results from 2021 through 2023\***

One Health approach			
Year	2021	2022	2023
Multisector & One Health coordination	D	D	D
Country progress with development of a NAP on AMR	D	D	D
Raising awareness and understanding of AMR risks and response	C	C	C
Youth education on AMR	Not yet	Not yet	No
Human health sector			
Training and professional education on AMR in the human health sector	C	C	C
National monitoring system for consumption and rational use of antimicrobials in human health	B	B	B
National surveillance system for AMR	B	B	C
IPC	B	B	C
Optimizing antimicrobial use in human health	C	C	C
Adoption of AWaRe classification of antibiotics in the NEML	C	C	C

Animal health sector			
Training and professional education on AMR in the veterinary sector	C	C	C
Training and professional education on AMR in the aquatic animal health sector	No data	C	C
Progress with strengthening veterinary services	B	B	B
National surveillance system	No data	C	C

\*Legend: A = no capacity, B= limited capacity, C= developed capacity, D= demonstrated capacity, E= sustained capacity.

## RESULT AREA 2: IPC

### Activity 2.1.1: Support the NC-AMR in conducting regular assessments of IPC practices, including implementation of guidelines and regulations in the animal and human health sectors

From April 27 to 28, 2023, MTaPS supported the Directorate of Hygiene to conduct its second IPC assessment at the central level using the WHO IPCAT2 tool. The assessment covered six IPC components:

1. Existence of an effective IPC program;
2. IPC guidelines;
3. Education and training in IPC;
4. Surveillance of HCAI;
5. Multimodal strategies; and
6. Monitoring/audit of IPC practices, feedback, and control activities.

The assessment showed significant improvement in all IPC components, thanks to continuous support from MTaPS. These improvements in IPC are expected to contribute to a reduction in the numbers of HAIs. Next, MTaPS supported the MOH to develop another improvement plan in alignment with the results obtained. The MOH will assess the implementation of this plan in six months.

From May 2 to 20, MTaPS supported the Directorate of Hygiene to conduct a second IPC assessment using the IPCAF tool in the 3 hospitals in Kinshasa (for *Clinique Universitaire de Kinshasa* [CUK], Monkole, and Saint Joseph) that underwent IPC assessments in 2020, and conducted baseline assessments in 4 hospitals in the eastern part of DRC (Heal Africa, Kyeshero, *Hôpital Général de Référence* [HGR] Bunia, and *Centre Médical Evangélique* [CME] Bunia) (table 9).

**Table 9. Results of IPC assessments in 7 hospitals in DRC, May 2023**

Component	CUK		Monkole		Saint Joseph		Heal Africa	Kyeshero	HGR Bunia	CME Bunia
	2020	2023	2020	2023	2020	2023	2023	2023	2023	2023
IPC strategy	75	50	72.5	40	10	30	65	65	20	15
IPC SOPs	95	68.5	95	91.5	45	64.5	86.5	74.5	34	41
IPC education and training	70	47.5	40	47.5	10	35	70	62.5	10	17.5
HCAI surveillance	70	70	26	92.5	17.5	37.5	85	27.5	12.5	37.5
Multimodal strategy	70	70	0	80	0	45	85	65	5	15
Monitoring and feedback	60	40	47	75	30	40	87.5	55	0	5
Workload	70	40	50	90	35	65	95	60	30	45

Environment and materials	47.5	92.5	100	100	40	95	92.5	90	47.5	77.5
Total out of 800	557.5	478.5	430.5	616.5	187.5	412	656	499.5	159	253.5
Overall level		Intermediate		Advanced		Intermediate	Advanced	Intermediate	Inadequate	Basic

Legend: Inadequate: 0–200, Basic: 201–400, Intermediate: 401–600, Advanced: 601–800

The 2023 results show that out of the seven human health facilities assessed, two are advanced in IPC practices (Monkole and Heal Africa), three are intermediate in IPC (CUK, Saint Joseph and Kyeshero), one is classified as basic in IPC (CME Bunia), and one is classified as inadequate in IPC (HGR Bunia). Two out of three hospitals assessed for the second time improved in 2023 compared with 2020 (Monkole and Saint Joseph). However, CUK’s performance decreased in almost all areas of IPC. This decline may be linked to the fact that some of the facility management staff were absent at the time of the assessment, and thus were unable to share evidence of progress. The 2023 evaluation for the four hospitals in the Eastern DRC was the first one using the IPCAF tool since the previous assessment there had used the WHO IPC scorecard tool. As such, it was not possible to make a comparison with past performance. Notably, the IPCAF assessment showed that the Heal Africa Hospital in Goma performed better than the other three facilities. Following the assessments, each hospital developed facility improvement plans in line with their specific results.

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

#### **Activity 3.5.1: Strengthen DTCs established with MTaPS’ support to oversee implementation of AMS activities and conduct stewardship practices at their respective facilities**

In May and June 2023, MTaPS supported the DTCs at Heal Africa, Kyeshero, Nyankunde, and Bunia hospitals to conduct their quarterly assessments of antimicrobial use as part of their CQI program. The following data collected are antimicrobial prescription patterns, patient knowledge of prescribed medicines, duration of treatment, compliance with standard malaria treatment guidelines, antibiotic prophylaxis in cesarean sections, and compliance with WHO AWaRe categorization of antibiotics. Table 10 shows trends in antibiotic prescribing patterns:

**Table 10. Trends in antibiotic prescribing practices, DRC**

DTCs	WHO Standard	% of prescriptions with antibiotics							
		Baseline	Review 1	Review 2	Review 3	Review 4	Review 5	Review 6	Review 7
Heal Africa	30	19	86.6	43	50	56.7	43	13.95	18
Kyeshero	30	73.3	70	50	58.2	49.8	83.3	100	77
HGR Bunia	30	18.3	0	50	57	25	24.8	63.3	23
CME Bunia	30	46.7	0	16	33	96.7	90	70	24

Heal Africa, HGR Bunia, and CME Bunia hospitals demonstrated good antibiotic prescribing patterns. In terms of the percentage of antibiotics prescribed from the WHO Access category, HGR Bunia maintained the same performance of 72% in both the first and second reviews, while CME Bunia experienced a slight decrease from 68% in the first review to 62% in the second. Both hospitals



complied with WHO AWaRe recommendations, however, as more than 60% of antibiotics used to treat common infectious diseases were from the Access category. This demonstrates the effectiveness of DTCs in promoting adherence to guidelines and good prescribing behaviors.

From June 24 to July 5, 2023, MTaPS supported ACOREP to revitalize the DTCs at *Cliniques Universitaires de Lubumbashi* (CUL) and HGR Kenya hospitals in Lubumbashi, and Mwangeji and Dilala hospitals in Kolwezi. After briefing DTC actors and meetings with hospital managers, MTaPS and ACOREP assisted the DTCs in collecting CQI data.

Additionally, MTaPS provided technical support to ACOREP to organize a WHO-funded TOT workshop to revise its DTC training modules and establish a pool of trainers who will be able to support not only DRC, but also other countries in the area with AMS and DTC-related trainings.

**Activity 3.5.2: Develop/update and disseminate national stewardship and clinical/treatment guidelines that include the WHO AWaRe categorization of antibiotics.**

To lay the groundwork for the development of guidelines for the appropriate use of antimicrobials in the DRC, MTaPS worked with the University of Kinshasa’s School of Medicine and Pharmacy and the National Institute of Biomedical Research (INRB) to organize a series of preparatory meetings in April and May 2023 with experts from the School of Medicine and Pharmacy and INRB. These meetings allowed stakeholders to adopt the methodology, determine the list of participants, determine regions for the collection of data on bacterial ecologies, and define roles and responsibilities for the development of the guidelines.

From June 6 to 12, 2023, MTaPS supported ACOREP, in collaboration with the National Pharmacovigilance Committee (CNPV), to organize a one-week workshop to produce the first draft of the national antibiotic use guidelines for use in health facilities in the DRC. MTaPS will support ACOREP to organize a meeting to present and validate the final document during the next quarter of FY2023.

**BEST PRACTICES/LESSONS LEARNED**

- It is important for the MOH to take the lead in establishing contacts with public and private partners involved in activity implementation. The MOH’s involvement reduces the risk of resistance from partners and facilitates activity implementation.

**ACTIVITIES AND EVENTS FOR NEXT QUARTER**

Activity and Description	Date
<b>Activity 1.1.1:</b> Provide technical and logistical support to the NC-AMR and related TWGs (AMS and IPC) for effective monitoring and planning of AMR activities.	July–August 2023
<b>Activity 1.2.1:</b> Support the 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.	July–August 2023
<b>Activity 2.1.1:</b> Support the NC-AMR in conducting regular assessments of IPC practices, including implementation of guidelines and regulations in the animal and human health sectors.	July–August 2023
<b>Activity 3.5.1:</b> Strengthen DTCs established with MTaPS’ support to oversee implementation of AMS activities and conduct stewardship practices at their respective facilities.	July–August 2023
<b>Activity 3.5.2:</b> Develop/update and disseminate national stewardship and clinical/treatment guidelines that include the WHO AWaRe categorization of antibiotics.	July–August 2023

**Table 11. Quarter 3, FY23, Activity Progress, DRC—GHSA**

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Provide technical and logistical support to the NC-AMR and related TWGs (AMS and IPC) for effective monitoring and planning of AMR activities.</p> <p><b>Activity Description:</b> MTaPS will support ACOREP to organize meetings of the IPC and AMS subcommittees to evaluate their work plans and prepare the next meeting of the NC-AMR.</p>	N/A	1.1	MTaPS continued to support the NC-AMR and its subcommittees to implement recommendations from previous meetings, in collaboration with FAO and WHO.
<p><b>Activity 1.2.1:</b> Support the 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.</p> <p><b>Activity Description:</b> MTaPS will support the different sectors to organize a joint supervision during which participants will collect information that will help with filling out the template for the tripartite evaluation (TrACSS).</p>	N/A	1.2	MTaPS supported the MOH to organize the 2023 TrACSS and to produce improvement plans.
<p><b>Activity 2.1.1:</b> Support the NC-AMR in conducting regular assessments of IPC practices, including implementation of guidelines and regulations in the animal and human health sectors.</p> <p><b>Activity Description:</b> MTaPS will support the Directorate of Hygiene to carry out an evaluation of IPC components at the central level and in HFs in Kinshasa and the provinces of North Kivu and Ituri. In the same vein, MTaPS will work with ACOREP on an evaluation of IPC components in animal HFs in Kinshasa.</p>	N/A	2.1	MTaPS conducted seven facility-level IPC assessments in the human health sector, and one IPC assessment at the central level. MTaPS supported the supervised institutions to produce remedial action plans.
<p><b>Activity 3.5.1:</b> Strengthen DTCs established with MTaPS' support to oversee implementation of AMS activities and conduct stewardship practices at their respective facilities.</p> <p><b>Activity Description:</b> MTaPS will support the DTCs, ACOREP, and the PV center to organize a quarterly data analysis meeting.</p>	N/A	3.5	MTaPS continued to support DTCs to organize quarterly data collection as part of their CQI program. To revitalize the currently inactive DTCs in Lualaba and Haut Katanga, MTaPS collaborated with ACOREP and CNPV to visit them and develop action plans.
<p><b>Activity 3.5.2:</b> Develop/update and disseminate national stewardship and clinical/treatment guidelines, which include the WHO AWaRe categorization of antibiotics.</p>	N/A	3.5	MTaPS collaborated with universities, health institutions, and the MOH to develop the first draft of DRC's guidelines for the use of antibiotics, including the WHO AWaRe categorization of antibiotics.

# MATERNAL, NEWBORN, AND CHILD HEALTH (MNCH), FAMILY PLANNING (FP), REPRODUCTIVE HEALTH (RH), AND TUBERCULOSIS (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 Year 5 were built on the work that MTAps achieved in previous years, as well as achievements of the previous USAID-funded Systems for Improved Access to Pharmaceuticals and Services program. These activities include coordination among the various country programs and partners that are providing pharmaceutical system or supply chain support, implementing policies and practices that optimize use of Regional Distribution Centers (*Centrales de Distribution Régionales* [CDR]), building technical and managerial capacities in pharmaceutical management in coordination with other partners (Global Health Supply Chain–Technical Assistance [GHSC-TA], Integrated Health Program [IHP], and the new MOMENTUM MIHR program and MSSFPO projects in eastern DRC), and strengthening civil society engagement by enhancing the involvement of formal groups that have community representation in medical product management (monitoring and oversight at HFs and CCSs).

## CUMULATIVE PERFORMANCE TO DATE

During previous project years, MTAps supported the medicine TWGs in Nord Kivu and Ituri to strengthen their stewardship roles and establish a subgroup focused on MNCH health products, thereby improving the use of the national supply chain system to distribute medicines and improving collaboration with donors and implementing partners (USAID, the Global Fund [GF], the European Union [EU], UNICEF, MSH, Cordaid International, Caritas, *Santé Rurale* [SANRU], ASRAMES, *Centrale d'Approvisionnement et de Distribution de Médicaments Essentiels de Bunia* [CADIMEBU], Interchurch Medical Assistance [IMA], Save the Children, UNFPA, Medair, PPSSP, etc.). The provincial medicine TWGs are now fully functional and have taken leadership to ensure the effective redistribution of an estimated \$179,740 of commodities at risk of expiry at the ASRAMES CDR in Nord Kivu. They also took leadership to avoid wasting around 95 months of supply (MOS) of oral rehydration salts (ORS); MTAps and other partners recommended redeploying the stock in all the 34 health zones (HZ) in Nord Kivu instead of keeping it only in the six UNICEF supported HZs supported by the iCCM program.

In FY2023, MTAps provided ongoing support to 350 community members to monitor and oversee medicine management (including MNCH and FP/RH commodities) with a focus on stock management, accountability between the HFs and the community, logistics data collection, storage conditions, transportation and distribution, findings from stock taking, 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 Ituri DPS to establish Technical and Logistics Management Units (TLMU), composed of four experts each, to

improve LMIS data reporting rates, completeness, and quality. Thanks to the TLMU's efforts, the LMIS data reporting rate in Ituri has already improved.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

### OBJECTIVE I: PHARMACEUTICAL SECTOR GOVERNANCE STRENGTHENED

#### **Activity 1.1.1: Work with DPM to establish an autonomous pharmaceutical regulatory agency in DRC for sustainable registration of essential medicines, especially for MNCH, FP/RH, and TB medicines**

MTaPS supported ACOREP to hold a workshop to revise and update the Directory of Registered Medicines authorized for marketing and distribution in DRC. During the next quarter, MTAps will support ACOREP to post the updated version of the directory on the ACOREP website.

#### **Activity 1.1.2: Support the functioning of provincial medicines TWGs in Nord Kivu and Ituri**

On April 26, MTAps supported the Nord Kivu DPS to organize its medicines TWG meeting. In attendance at the meeting were 27 participants, (23 male, 4 female), including representatives from *Médecins Sans Frontières* (MSF), Cordaid, UNFPA, PPSSP, SANRU, Medair, ASRAMES, the DPS, and specific program members from the TB, malaria, RH, and HIV programs. Participants discussed the following issues:

- Products at risk of expiry at the ASRAMES regional warehouse with a total value of around 20,160.16 US dollars: Participants recommended that the CDR, the DPS, and the *Projet de Développement du Système de Santé* (PDSS)/World Bank develop distribution plans to redeploy these commodities elsewhere.
- Distribution of priority health commodities (HIV, TB, MNCH, malaria) to HZs and areas under control of armed groups: This distribution was possible thanks to collaboration with humanitarian agencies working in emergency relief and the humanitarian corridor.
- Reception of FP commodities donated to the province of Nord Kivu: Participants recommended harmonizing the management of all FP stock, including new stock from the central government of DRC, stock from USAID/MIHR, and the hold stocks from UNFPA.

The RH-FP subgroup was tasked with producing a distribution plan including these elements. In May, MTAps supported the medicines TWG of Nord Kivu to implement recommendations from the meeting held in April, especially for the surveillance of health products with a high risk of expiry. MTAps supported the DPS to hold a one-day provincial medicine TWG meeting on May 5, 2023, to carry out the same activities in Ituri province. Participants included representatives from partner organizations (Cordaid, SANRU, CADIMEBU, Memisa, Caritas, etc.), the DPS, and program members from the TB, malaria, RH, and HIV programs. A total of 28 participants (21 male, 7 female) attended the meeting. Key issues discussed during this meeting included:

- The evaluation of Quarter 1 PY5 distributions of malaria, HIV, TB, and FP products
- The validation of the HIV-TB and malaria distribution plans for Quarter 2
- Medicines capital analysis in the Memisa-supported HZs
- Post-exposure prophylaxis (PEP) kit and FP products mapping in Ituri province

- DHIS2 & InfoMED monitoring reports

Participants recommended monitoring data coding and publication in InfoMED/DHIS2 to improve completeness and submitting the distribution plans to the CDR to avoid any unnecessary delays.

On June 7, 2023, in Goma and June 28, 2023, in Bunia, MTaPS supported the medicines TWGs of Nord Kivu and Ituri provinces to organize meetings. A total of 19 participants (17 male, 2 female) in Goma, and 31 participants (17 male, 14 female) in Bunia attended the meeting. Participants included representatives from technical and financial partners, the DPS, and program members from the TB, malaria, RH, mental health, expanded vaccination, and HIV programs. In Nord Kivu, participants presented and validated the distribution plans for HIV/AIDS, TB, FP/RH, and malaria health commodities. Key challenges identified included the stock-out of medicines for pediatric TB treatment and the transport of FP/RH health commodities to non–USAID-supported HZs. Participants recommended that Cordaid and the TB program should place an urgent order for pediatric commodities, and the National Reproductive Health Program (*Programme National de la Santé de la Reproduction [PNSR]*) program should advocate for funds or means of transportation of FP/RH commodities from CDR to HZs.

In Ituri, participants analyzed key indicators related to administrative, logistical, and financial stock management at CADIMEBU CDR, assessed the use of CDRs by HZs and other partners in Quarter 2, 2023, and presented an analysis of logistics data from InfoMED. Participants noted multiple issues, including insecurity and poor road conditions in areas covered by CDR CADIMEBU, the need to update the InfoMED health pyramid to align with DHIS2, and an overstock of certain TB, HIV, and FP items in HZs. The identified HZs will relocate overstocked HIV, TB, and FP commodities to understocked HZs under the coordination of the DPS and with the support of technical and financial partners.

***Activity 1.2.1: Enhance the role of CODESAs and community outreach units (CAC) in health commodities management at the health center and community levels***

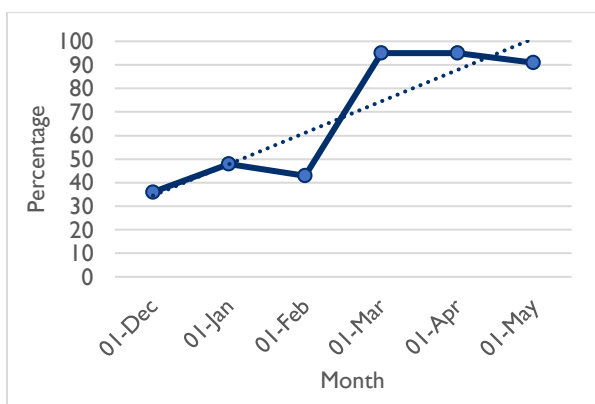
From June 16 to 25, MTaPS assisted the DPS to brief 155 (27 female, 128 male) new health community leaders (CODESAs) and health care providers from the MTaPS supported HZs in Nord Kivu (Goma, Nyiragongo, Karisimbi and Kirotshe) on supporting collaboration between the community and health facilities on pharmaceutical inventory management, addressing issues with the transportation and distribution of medicines, and other health commodity management issues to empower community members to alert leaders about issues with the availability and management of health commodities. MTaPS also assisted two DPS staff members from Nord Kivu and four HZ management team members to organize supportive supervision visits to 10 facilities to assess and strengthen collaboration between community members and chief nurses in medicine stock management. Supervisors supported the development of remedial action plans, including jointly signing physical inventory reports for pharmaceutical products, validating financial reports, and developing health community development plans.

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

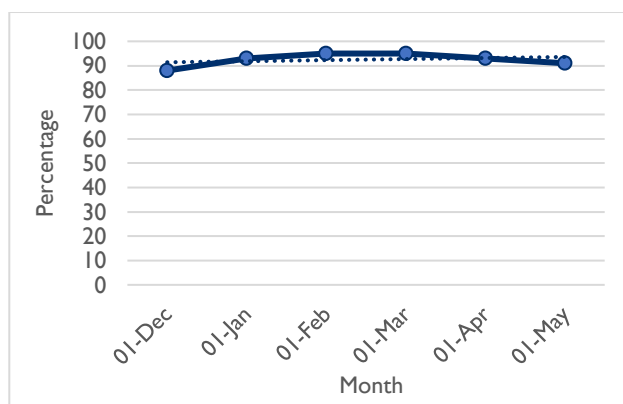
***Activity 3.2.1: Assist the DPS and HZs to strengthen the data collection system to improve the availability, quality, visibility, and use of logistics data for decision making***

In May, MTaPS supported PNAM and the DPS in Nord Kivu to establish a TLMU in Nord Kivu. During a three-day workshop in Goma, an expert from PNAM trained 13 participants (3 female, 10 male) in data collection, analysis, and reporting to improve LMIS use in Nord Kivu. Workshop participants were able to identify root causes leading to weak LMIS data visibility and quality in Nord Kivu. The workshop led to the establishment of a TLMU in Nord Kivu composed of four permanent experts, and it allowed 11 HZ management teams to gain access to DRC’s InfoMED LMIS to visualize, submit, and publish data. The HZ management teams made a commitment to increase their on-time reporting rate and data completeness.

In Ituri, MTaPS supported the TLMU to organize a quarterly meeting to collect and analyze data to make informed decisions. The TLMU advised HZs to correct inconsistent data on DHIS2 and publish the data in InfoMED. Data on the availability of FP, HIV, TB, and malaria products indicated an overstock of Microgynon, cycle beads, and pediatric rifampin/isoniazid/pyrazinamide. The TLMU in Ituri proposed actions for specific thematic subgroups to address this issue. As shown in figures 5 and 6 below, the two TLMUs have made significant progress in improving their reporting rates in InfoMED.



**Figure 5. Reporting rate of LMIS data in InfoMED (Nord Kivu), December 1, 2022-May 1, 2023**



**Figure 6. Reporting rate of LMIS data in InfoMED (Ituri), December 1, 2022-May 1, 2023**

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

**Activity 5.1.1: Support the DPS to implement recommendations from the survey on the consumption of contraceptives in the private sector to fill the information gap on CYP in Nord Kivu and Ituri**

In June, MTaPS supported PNSR and DPS in Nord Kivu to organize a five-day workshop for 19 participants (2 female, 17 male) from DKT International, MIHR, the DPS, PNSR, HZs, and HFs to collect, adjust, and analyze data on contraceptive consumption in the public sector. During the workshop, PNSR presented the results of last year’s survey and encouraged the DPS and the FP/RH provincial coordination to work with technical and financial partners to implement the recommendations based on the survey. MTaPS plans to support the same exercise for Ituri in July 2023, and will compile the results from both provinces to adjust FP statistics, given the inclusion of private sector data in the calculation of the CYP and prevalence rate.



**Activity 5.2.1: Collaborate with the MSSFPO and MIHR projects to support HZs to ensure the availability of the reduced package of FP products at the community level in Nord Kivu and Ituri provinces**

MTaPS continued to collaborate with USAID’s MOMENTUM projects (MIHR in Nord Kivu and MSSFPO in Ituri) in DRC to ensure efficient coordination of their support to USAID-supported HZs. During two meetings in Goma on April 19 and May 31, MTAps and MIHR agreed that MTAps and MIHR should meet on a monthly basis and collaborate on community activities, and that MTAps will continue supporting MIHR and PNSR/DPS to develop distribution plans for all supported HZs and monitor stock status to ensure continuous and appropriate stock availability in USAID supported HZs.

MTaPS also held two meetings with Engender Health (part of the MSSFPO consortium) to strengthen collaboration in supply management and distribution plans for FP products. Attendees defined key roles for all involved parties, and confirmed that in Bunia, a FP/RH shipment was already received from GHSC-TA Francophone Task Order (FTO) through CADIMÉBU CDR. In 2023, MSSFPO organized two distributions of contraceptive commodities with technical support from MTAps. These distributions reached 15 HZs, including 5 supported by MTAps (Bunia, Lita, Rwampara, Nizi and Gety). MTAps also collaborated with MIHR, MSSFPO, the DPS, HZs, CCSs, and other implementing partners (UNFPA, DKT, IPAS, etc.) to prepare the terms of reference and training materials for the upcoming training of community relays (*relais communautaires* [RECO]) and health care providers on managing and using FP and MNCH commodities.

**BEST PRACTICES/LESSONS LEARNED**

- As a well-managed health workforce is critical for health systems strengthening, the TLMU was designed as a group of staff with clear job descriptions, objectives, targets, and reports to produce. The improvement to LMIS data completeness in Nord Kivu and Ituri after TLMUs were established demonstrates the importance of having such groups with a clear and specific scope of work.
- Given the state of siege in effect in Nord Kivu and Ituri, improved collaboration between stakeholders (local, humanitarian, and technical and financial partners) can increase the supply of health products in remote and hard-to-reach regions and HZs. For example, certain humanitarian organizations perceived as politically non-aligned were able to support the delivery of all health commodities (including HIV, malaria, FP, MNCH, etc.) to HZs that other public, private, and nonprofit partners could not reach due to conflict or security challenges.

**ACTIVITIES AND EVENTS FOR NEXT QUARTER**

Activity and Description	Date
<b>Activity 1.1.1:</b> Work with the DPM toward the establishment of an autonomous pharmaceutical regulatory agency in DRC for sustainable registration of essential medicines, especially for MNCH, FP/RH, and TB medicines.	July–August 2023
<b>Activity 1.1.2:</b> Support the functioning of provincial medicines TWGs in Nord Kivu and Ituri.	July–August 2023
<b>Activity 1.2.1:</b> Enhance the role of CODESAs and CACs in health commodities management at the health center and community levels.	July–August 2023
<b>Activity 3.2.1:</b> Assist the DPS and HZs to strengthen the data collection system to improve the availability, quality, visibility, and use of logistics data for decision making.	July–August 2023
<b>Activity 5.1.1:</b> Support the DPS to implement recommendations from the survey on the	July–August 2023



consumption of contraceptives in the private sector to fill the information gap on CYP in Nord Kivu and Ituri.	
<b>Activity 5.2.1:</b> Collaborate with the MSSFPO and MIHR projects to support HZs to ensure the availability of the reduced package of FP products at the community level in Nord Kivu and Ituri provinces.	July–August 2023

**Table 12. Quarter 3, FY23, Activity Progress, DRC—MNCH, FP, RH, TB**

Activity	MTaPS Objective(s)	MNCH Result(s)	Activity Progress
<b>Activity 1.1.1:</b> Work with the DPM to establish an autonomous pharmaceutical regulatory agency in DRC for sustainable registration of essential medicines, especially for MNCH, FP/RH, and TB medicines.	1.1	N/A	MTaPS supported ACOREP to organize a nine-day meeting to update the annual registration of essential medicines. The results of the update are still pending.
<b>Activity 1.1.2:</b> Support the functioning of provincial medicines TWGs in Nord Kivu and Ituri.	1.1	N/A	In collaboration with other stakeholders involved in supply chain (UNPFA, Cordaid, SANRU, PDSS, etc.), MTAps continued to support the DPS to hold meetings to discuss issues and recommend improvements to the supply of health commodities in the provinces of Ituri and Nord Kivu.
<b>Activity 1.2.1:</b> Enhance the role of CODESAs and CACs in health commodities management at the health center and community levels.	1.2	N/A	MTaPS provided support to HZs and the DPS to organize meetings and supportive supervision to nurses and community-based organization leaders to enhance joint collaboration, transparency, and management of commodities.
<b>Activity 3.2.1:</b> Assist the DPS and HZs to strengthen the data collection system to improve the availability, quality, visibility, and use of logistics data for decision making.	3.2	N/A	MTaPS supported PNAM and the DPS to establish the TLMU in Nord Kivu. In Ituri, the TLMU met to improve the quality of data and reporting rates.
<b>Activity 5.1.1:</b> Support the DPS to implement recommendations from the survey on the consumption of contraceptives in the private sector to fill the information gap on contraceptive CYP in Nord Kivu and Ituri.	5.1	N/A	This activity was already completed in Nord Kivu and remains ongoing in Ituri. MTAps will compile the results from both provinces and share them during the next quarter.
<b>Activity 5.2.1:</b> Collaborate with the MSSFPO and MIHR projects to support HZs to ensure the availability of the reduced package of FP products at the community level in Nord Kivu and Ituri provinces.	5.2	N/A	MTaPS worked closely with MSSFPO and MIHR to support the DPS to produce FP/RH distribution plans and improve availability of stock.

## SUPPLY CHAIN ACTIVITIES

### OVERVIEW

In DRC, MTaPS' supply chain work aims to support DRC to build a stronger pharmaceutical system in the country and ensure the achievement of USAID-supported health goals, including supporting private-sector and civil society engagement to strengthen the pharmaceutical supply chain system, expanding access to essential medical products, and progressing toward universal health coverage.

MTaPS' technical assistance aims to build the capacity of the *Association des Gestionnaires de la Chaîne d'Approvisionnement* (AGCAL) and other CSOs to implement interventions to contribute to good supply chain governance and support resource mobilization. In PY5, MTaPS is implementing activities in line with the USAID DRC Health Office Commodity and Supply Chain Roadmap and its results framework for 2021–2022, ensuring that quality health products are available at service delivery points. The project is focused on building the leadership and technical capacities of local institutions (AGCAL and others) 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 (HETC), in collaboration with other financial and technical partners to rationalize 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 universal health coverage program. In collaboration with the WHO and SANRU, the office of the President of DRC, members from the Prime Minister's office, the MOH, the Ministry of the Economy, the pharmacist professional board, the physician professional board, ACOREP, and civil society members, MTaPS successfully advocated to the government to grant health products "social product status" instead of "business product status." This will reduce or eliminate tariffs and taxes on health products and services de facto, resulting in a significant cost and price reduction. MTaPS is continuing to support stakeholders and ministries to enact and promulgate the developed draft ministerial decrees to enforce the application of this status change.

In addition, MTaPS collaborated with UNFPA to support AGCAL to recruit three key staff members, including an Executive Manager, a Provincial Representative for Ituri, and a Provincial Representative for Nord Kivu. Under the support of MTaPS, the established office of AGCAL in Kinshasa has obtained some of the necessary legal documents to establish it as an authorized and recognized organization in DRC. During the next quarter, MTaPS will support AGCAL to obtain all the remaining legal documents to allow it to become autonomous.

### QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

#### OBJECTIVE I: PHARMACEUTICAL SUPPLY CHAIN GOVERNANCE STRENGTHENED

***Activity 1.3.1: Facilitate the integration and enhance the role of local private and CSOs in pharmaceutical and supply chain management at the national, provincial, and facility levels***

To support the integration of AGCAL into the existing pharmaceutical supply chain platforms at the national and provincial levels in DRC, as well as with international platforms, MTaPS worked with ACOREP to include AGCAL in one-week workshop from June 6 to 12, 2023 to produce the first draft of the national antibiotic use guidelines for use in health facilities in the DRC.

Additionally, MTaPS worked with the AGCAL Executive Director to prepare the terms of reference and budget for the integration of AGCAL into the other national and provincial pharmaceutical supply chain bodies, such as the *Commission Nationale du Medicament (CNM)*, the *Groupe de Travail Medicament (GTM)*, and other TWGs to enhance their role as key actors in supply chain governance. MTaPS will support this activity during the next quarter in Kinshasa, Goma, and Bunia.

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

**Activity 2.3.1: Facilitate the establishment of AGCAL at the national and provincial levels**

In order to complete planned recruitment to fill vacant AGCAL positions, MTaPS collaborated with the UNFPA during the previous quarter to support AGCAL to recruit three key staff members: an Executive Manager, a Provincial Representative for Bunia, and a Provincial Representative for Goma. To ensure the remuneration of these key staff members, MTaPS supported AGCAL to develop a memorandum of understanding (MOU) between MTaPS, AGCAL, and other partners to harmonize payments to AGCAL to incentivize progress. This MOU is currently under discussion between the MTaPS contracts team and AGCAL. In addition, MTaPS is currently supporting AGCAL to recruit 24 additional Provincial Representatives to support institutional capacity strengthening in all provinces in the DRC.

MTaPS and AGCAL are still working on providing AGCAL with an office space. Initially, AGCAL had planned to set up offices on the premises of PNAM in Kinshasa, ASRAMES in Goma, and CADIMEBU in Bunia. Given AGCAL’s mission and objectives, proximity to these institutions would facilitate their collaboration with AGCAL. However, following some difficulties with this approach, MTaPS, AGCAL, and the USAID Mission are discussing alternative options.

MTaPS is continuing to support AGCAL to obtain all necessary legal documents to establish it as an authorized and recognized organization in DRC (table 13).

**Table 13. Status of legal documents, DRC**

N°	Names of documents	Obtained	In progress, fees already paid	Remaining documents, to be paid during Q4
1	Council of Health NGOs ( <i>Brevet d’adhésion au conseil national des ONG de la Santé</i> )	Yes	N/A	N/A
2	Certificate of Registration at the Ministry of Health	Yes	N/A	N/A
3	Favorable Opinion to Obtain Legal Personality	No	Yes	N/A
4	Legal Personality from Ministry of Justice	No	Yes	N/A
5	Order Partnership from Ministry of Health	No	No	Yes
6	Partnership Agreement	No	No	Yes

### **Activity 2.3.2: Development of AGCAL leadership and change management competencies**

The goal of this activity is to support AGCAL to develop its competencies in leadership and change management, using a blended learning approach. The MTaPS team has identified an MSH staff member with expertise to coordinate and lead this activity remotely. This training will be for 15 participants, including 12 AGCAL staff as well as 3 MTaPS staff members.

### **BEST PRACTICES/LESSONS LEARNED**

Given that this is MTaPS/DRC's first time working with AGCAL, frequent communication and information sharing between all involved stakeholders is especially important. As such, MTaPS and AGCAL hold regular biweekly meetings (often with the participation of the USAID mission) to lay the groundwork for future activities and share achievements, lessons learned, and areas for improvement.

### **ACTIVITIES AND EVENTS FOR NEXT QUARTER**

<b>Activity and Description</b>	<b>Date</b>
<b>Activity 1.3.1:</b> Facilitate the integration and enhance the role of local private and CSOs in pharmaceutical and supply chain management at the national, provincial, and facility levels.	July–August 2023
<b>Activity 2.3.1:</b> Facilitate the establishment of AGCAL at the national and provincial levels.	July–August 2023
<b>Activity 2.3.2:</b> Develop AGCAL leadership and change management competencies with demonstrated application.	July–August 2023

**Table 14. Quarter 3, FY23, Activity Progress, DRC—SUPPLY CHAIN**

Activity	MTaPS Objective(s)	Activity Progress
<p><b>Activity 1.3.1:</b> Facilitate the integration and enhance the role of local private and CSOs in pharmaceutical and supply chain management at the national, provincial, and facility levels.</p>	1.3	<p>MTaPS continued to make preparations for AGCAL’s integration into the national supply chain framework in DRC. During Q4, MTAps will work with stakeholders, including Acorep, to integrate AGCAL into the supply chain framework at the provincial level in Kinshasa, Ituri, and Nord Kivu.</p>
<p><b>Activity 2.3.1:</b> Facilitate the establishment of AGCAL at the national and provincial levels.</p>	2.3	<p>As part of the planned integration of AGCAL into the supply chain framework at the provincial level, MTAps made preparations for the enrollment and sensitization of new members from universities in Kinshasa, Goma, and Bunia.</p>
<p><b>Activity 2.3.2:</b> Develop AGCAL leadership and change management competencies with demonstrated application.</p>	2.3	<p>MTaPS worked with AGCAL to identify participants, find a facilitator, and determine dates for the training on leadership and change management competencies.</p>
<p><b>Activity 4.1.1:</b> Collaborate with the MOH through the DPM, PNAM, and the Ministry of the Economy to assist the HETC to rationalize the prices of health products to increase access for vulnerable populations.</p>	4.1	<p>MTaPS and AGCAL are collaborating to continue to support stakeholders and ministries to enact and promulgate the developed draft ministerial decrees to enforce the recognition of health products as having “social product status” instead of “business product status.”</p>

## F. ETHIOPIA

### OVERVIEW

Ethiopia is one of the countries selected to implement AMR prevention and containment interventions through funding from the GHSA. During a 2016 assessment using the World Health Organization (WHO) Joint External Evaluation (JEE) Tool (Version 1), Ethiopia demonstrated “limited capacity” (level 2 of 5) for IPC and AMS. The goal of MTaPS Ethiopia’s GHSA portfolio is to build the capacity of government stakeholders to effectively combat the development and spread of AMR. MTaPS provides targeted technical assistance to Ethiopian stakeholder institutions in three result areas of the AMR action package: effective MSC, IPC, and optimizing use of antimicrobial medicines through effective implementation of AMS programs. These interventions are meant to support the country on its pathway toward improving its 2016 JEE baseline scores to meet the priorities of the GHSA.

### CUMULATIVE PERFORMANCE TO DATE

In Ethiopia, MTaPS has worked in close collaboration with the MOH and RHBs to implement priority actions of the WHO Benchmarks for IHR capacities on MSC, AMS, and IPC. As of March 2023, MTaPS support contributed to the completion of 100% of capacity levels 2, 3, and 4 actions, and 20% of capacity level 5 actions for MSC. MTaPS supported the revision of the NAP-AMR, establishment of an AMR unit within the MOH, and development of sector-specific action plans. To strengthen the operational capacity of the NAMRAC, MTaPS facilitated its restructuring, including updating its membership to ensure broader stakeholder participation, revision of its TOR, and development of TORs for its IPC and AMS TWGs. In PY5, MTaPS engaged with various civil society organizations, including the women’s federation, youth federations, and the Ethiopian Pharmaceutical Association (EPA) for an AMR awareness and sensitization forum. MTaPS supported development of the sector-specific AMR action plan for the human health, animal health, and environment sectors, which was officially launched during WAAW 2022.

MTaPS supported the implementation of AMS interventions at selected hospitals. With MTaPS support, the NEML and national STG for general hospitals were revised, based on the WHO AWaRe categorization of antibiotics. As of March 2023, MTaPS support contributed to the completion of 100% of capacity level 2, 67% of level 3, and 14% of levels 4 benchmark actions for AMS. As part of strengthening AMS and IPC practices, MTaPS supported the revision of the AMS practical guide and implementation of quality improvement (QI) programs at 8 hospitals, with a focus on optimizing use of antimicrobials for surgical prophylaxis and improving hand hygiene practices.

As part of improving the country’s capacity in IPC and emergency response to COVID-19, MTaPS supported the revision of the IPC reference manual and IPC training materials and built the capacity of IPC focal persons at the national, regional, and facility levels by providing training to 2,712 HCPs. MTaPS also supported the MOH in identifying gaps in the national IPC program using the WHO’s national IPCAT2, aided in the design of a central-level IPC improvement plan, and provided technical support to HFs to improve their IPC performance using the WHO IPCAF tool. An initial group of 21 hospitals conducted IPCAF self-assessments with support from MTaPS. A later assessment conducted at 4 of the



hospitals showed substantial improvement in their IPCAF score with 1 of the 4 progressing from inadequate IPC score to the higher end of the basic level score, the second from the basic to the intermediate level, and the other 2 hospitals maintaining their IPC levels but improving their IPC score by 20–25%. In PY5, MTaPS contributed to the development of guidance documents for a HAI surveillance system and the establishment of IPC COEs. MTaPS also supported the MOH in validating the IPC facility-level assessment tool (IPC-FLAT), which was customized from WHO’s IPCAF with MTaPS support during year 1. As of March 2023, MTaPS support contributed to completion of 80% of capacity level 2, 100% of level 3, 80% of level 4, and 60% of level 5 benchmark actions for IPC.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

In Q3, MTaPS Ethiopia accomplished the following key results:

- MTaPS supported the organization of an OH Regional AMR Advisory Committee (RAMRAC) meetings in two regions (Addis Ababa and Oromia).
- MTaPS supported the EPA in carrying out a festive celebration of the 11th National AMR Day on June 22, 2023, in Addis Ababa. With EPA support, AMR day was also celebrated at 15 universities across the country.
- MTaPS provided technical assistance to the EPA to carry out two rounds of the TOT course on AMR, an accredited course for CPD.
- MTaPS supported the MOH to validate the IPC-FLAT. The validation included developing scoring rate, refining the indicators for clarity, and refining verification criteria.
- MTaPS provided technical assistance to the MOH in revising the AMS practical guide, which is critical for evidence-based selection, prescribing, and use of antimicrobials.
- As part of the support to improve hand hygiene practices at HFs, MTaPS adapted WHO’s hand hygiene posters, printed them, and distributed 450 copies to MTaPS-supported hospitals.

### RESULT AREA 1: EFFECTIVE MSC OF AMR

#### ***Activity 1.1.1: Support MOH and national AMR MSC stakeholders to implement and monitor progress of the national AMR prevention and containment strategic plan.***

In coordination with the MOH, MTaPS conducted a meeting with officials of Amhara RHB on May 11, 2023, regarding the overall progress of regional MSC on AMR and support needed to advance this effort. The RHB conceded that the region’s response toward AMR was not adequate, partly because of the heavy engagement of MSC members and regional officials in responding to ongoing emergencies. After the discussion, the RHB promised to mobilize stakeholders in the region and committed to conducting needs identification, prioritizing interventions, and preparing a draft plan for the upcoming year.

During the quarter, MTaPS supported Addis Ababa Regional Health Bureau (AA RHB) to conduct an OH RAMRAC meeting from April 19 to 20, 2023, at Bishoftu. The meeting agenda included the RAMRAC plan, its performance over the past 6 months, and global/national updates on AMR. A total of 38 (13 female) RAMRAC members and experts, including representatives of the health, agriculture, and environment bureaus, took part. From the performance report and discussions, it was noted that the

progress in the agriculture and environment sectors is still very slow compared with the health sector; therefore, further discussion with the leadership of these sector organizations was proposed.

MTaPS also supported the Oromia RHB to conduct an OH RAMRAC meeting held on June 2, 2023, at Bishoftu, with 46 participants (5 female) representing regional AMR stakeholders from the human, agriculture, and environment sectors. The meeting agenda included updates on AMR, sample AMR-related surveillance reports, and the RAMRAC TOR and action plans for the next planning period. From the presentations and subsequent discussions, it became clear that the RAMRAC had been inactive for a long time and that it needed revitalization, including revision of the TOR and plan of action, to incorporate relevant stakeholders and indicate clear roles and responsibilities for them. Furthermore, meeting participants proposed that stakeholders sign a memorandum of understanding (MOU) to establish a regional steering committee to provide oversight and policy direction to the RAMRAC. The Oromia RHB stepped up to coordinate finalization of the RAMRAC TOR and plan of action and to arrange an advocacy meeting to establish the steering committee and sign an MOU.

### **Activity 1.2.1: Support MOH and national AMR MSC stakeholders to improve awareness, education, and training on AMR**

To ensure sustainability of local training, MTAps supported the EPA to carry out 2 rounds of a TOT course on AMR from April 24 to 27, 2023, and from May 1 to 4, 2023, in Addis Ababa. A total of 49 (all male) clinical pharmacists and pharmacologists participated. Pre- and post-tests were conducted, with 98% of trainees scoring more than 80% on the post-test. All the trainees with scores over 80% were certified as trainers. These test results indicate that the training was highly successful. The EPA will use these trainers to scale up the AMR training, which is part of the approved CPD course, to all regions of the country.

In coordination with the EPA, the MOH, and the WHO, MTAps supported a festive celebration of the 11<sup>th</sup> National AMR Day on June 22, 2023, in Addis Ababa. Under the theme of “Leadership in Antimicrobial Resistance Prevention and Containment,” the 11<sup>th</sup> National AMR Day aimed to raise awareness and serve as a forum for dialogue and information sharing among policy makers, health workers, students, and the public about AMR. More than 110 participants (64 in person [15 female] and 50 virtual [16 female]) representing the health, agriculture, and environment sectors, the NAMRAC, the OH steering committee, international and development partner organizations, civil society representatives, student and professional associations, media, and HFs attended the event. With EPA support, AMR Day was also celebrated at 15 universities across the country.



Stakeholders take part in the 11<sup>th</sup> National AMR Day, Ethiopia, June 22, 2023. Photo credit: Joney Woldegebreal, MTAps

## RESULT AREA 2: IPC

### **Activity 2.2.1: Support the MOH and selected HFs to regularly track information on IPC and use it for CQI**

As part of scaling up the QI program, MTaPS supported integrated training on IPC and AMS for health workers at 4 hospitals: Debre Markos (March 29–April 1, 2023), Tirunesh Bejing (April 10–13, 2023), Jimma University (May 1–5, 2023) and Worabe (May 17–19, 2023). The training workshops aimed to increase AMR awareness and strengthen staff capacity on IPC and AMS. The course emphasized the use of antimicrobials for surgical prophylaxis (AMS) and hand hygiene practices at surgical wards (IPC). A total of 193 health professionals (45 female) participated in the training. To promote ownership, in the presence of hospital leadership, trainers provided hospital staff with technical guidance on prioritization of interventions and development of evidence-based action plans.

MTaPS also supported five intervention sites in conducting repeat IPC/AMS assessments to measure outcomes of the QI program.

As part of the support to improve hand hygiene practices at health care facilities, MTaPS adapted the WHO's hand hygiene posters, printed them, and distributed 450 copies of the posters to MTaPS-supported hospitals. The hand hygiene posters provide information on “How to Hand Wash,” “How to Hand Rub,” and “The 5 Moments of Hand Hygiene” when providing patient care.

In addition, MTaPS provided technical support to the MOH to organize a workshop at Adama from June 7 to 9, 2023, for a total of 19 participants (4 female), including members of the national IPC TWG, IPC experts, and hospitals that tested the tool, to validate the IPC-FLAT, which MTaPS had customized for Ethiopia from the WHO's IPCAF during year 1. The validation process included developing a scoring rate, improving clarity of the indicators, and refining verification criteria.



IPC poster on display in a patient care area, Bishoftu Hospital, Ethiopia. Photo credit: MTaPS

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

### **Activity 3.2.1: Improve awareness and knowledge on AMR to achieve behavioral change in antimicrobial prescribing and use**

MTaPS supported the MOH in a review of the AMS practical guide from April 28 to 30, 2023, at Adama. A total of 15 (2 female) experts from academia, hospitals, RHBS, the MOH, the Ethiopian Public Health Institute (EPHI), the Ethiopian Food and Drug Administration (EFDA) and MTaPS, participated. The practical guide has already been reviewed by the MOH and is currently under technical review by

MTaPS home office technical experts. This guide will help HCPs improve their adherence to STGs and use evidence-based practices to select and prescribe antimicrobials, which will contribute to optimal use of antimicrobials.

MTaPS provided TA to the MOH and the AA RHB to provide AMC survey training to health professionals from 20 hospitals in Addis Ababa, from May 15 to 16, 2023. The training package included simulated data entry exercises using the WHO AMC survey Excel sheet. A total of 40 participants (19 female), comprising 2 health care workers from each facility, took part in the training. Afterward, participants were tasked with conducting an AMC survey at their respective hospitals. As part of follow-up to this assignment, a review meeting was conducted from May 31 to June 1, 2023, to evaluate the progress at each hospital. Almost all facilities had collected data and shared their experiences on the progress of data analysis. The AA RHB and MOH staff, in collaboration with MTAps, committed to following up on the remaining AMC data collection, aggregation, and reporting.

At a MOH request, MTAps provided TA to the MOH and the EPHI to build the capacity of health professionals on the effective implementation of the AMS programs at HFs through an integrated approach that incorporates IPC interventions and effective use of data from diagnostic laboratories. Accordingly, MTAps supported the provision of an integrated TOT course on AMS, IPC, and diagnostic stewardship, for HCPs drawn from AMR surveillance sites. This course took place from May 17 to 19, 2023, at Adama. The TOT was attended by 30 health professionals (6 female), drawn from 8 hospitals under the EPHI's AMR surveillance network across the country.

### ***Activity 3.5.1: Strengthen AMS implementation at targeted HFs***

On May 11, 2023, a team of experts from the MOH and MTAps visited Tibebe Ghion hospital to monitor progress in the implementation of the QI program on AMS and IPC. The hospital team presented the progress of implementation based on the mid-term review findings. In the presentation, the hospital reported that the QI program on AMS helped to enforce the use of Cefazolin for surgical prophylaxis. Accordingly, ceftriaxone use for surgical prophylaxis has been reduced by 14% while use of cefazolin for surgical prophylaxis increased from 7% to 39%. Wastage of 400 vials of cefazoline was prevented, which translates to savings of 14,664 Ethiopian birr (ETB). However, the use of ceftriaxone continues in post-surgery due to surgeons' fear of possible infection and their lack of trust on evidence generated from other countries on the effectiveness of single dose prophylaxis. The hospital's presentation on IPC also indicated significant progress, especially in improving access to hand rubs (hand sanitizer) in surgical wards. However, little improvement has been achieved in IPC infrastructure and practice.

MTaPS also supported the revision of the hospital medicines list for three hospitals (Tibebe Ghion, Bushoftu, and Jimma University) based on the WHO AWaRe classification of antibiotics. Clinicians from different departments, as well as experts from the nursing, pharmacy, and microbiology departments participated in the revision. The revised draft medicines lists were submitted to the hospital for their review and further approval by the DTC.

## BEST PRACTICES/LESSONS LEARNED

- Revitalization of the IPC TWG and support for regular TWG meetings can significantly strengthen the technical leadership of national and facility-level IPC programs. As a member and secretary of the IPC TWG, MTaPS promotes strengthening of the TWG both to spearhead national leadership on IPC and ensuring sustainability of previous accomplishments.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Support the MOH's Pharmaceuticals and Medical Equipment Lead office (PME LEO) to finalize and launch the AMS practical guide to address current updates on AMS, including AWARe classification of antibiotics	July–August 2023
Continue mentorship and support for the implementation of the QI initiative on AMS and IPC	July 2023
Finalize and launch e-Learning modules on AMS	July–August 2023
Facilitate re-establishment of the national AMR advisory committee and support national and regional AMR advisory committee meetings	July 2023
Experience sharing workshop on QI program among MTaPS-supported hospitals	July 2023
Test and launch the IPC e-Learning course	July 2023

**Table 15. Quarter 3, FY23, Activity Progress, Ethiopia**

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Support the MOH and national AMR MSC stakeholders to implement and monitor progress of the national AMR prevention and containment strategic plan.</p> <p><b>Activity Description:</b> Support the MOH and national AMR MSC stakeholders to implement and monitor progress of the revised NAP-AMR 2021–2025.</p>	5.4	1.1	MTaPS conducted joint meetings with Amhara RHB Pharmacy Director and MOH delegate, on the region’s AMR prevention and containment interventions and strengthening the regional AMR Advisory committee on May 11, 2023. Regional AMR advisory committee meetings were conducted for Addis Ababa and Oromia RHBs.
<p><b>Activity 1.1.2:</b> Support PMED to assume full ownership for organizing effective MSC through regular meetings of AMR stakeholders, including animal health and environmental protection.</p> <p><b>Activity Description:</b> Support PMED to conduct regular meetings of AMR stakeholders, including NAMRAC, IPC and AMS TWGs; and in-progress review of regional and sector-specific action plans.</p>	5.4	1.1	MTaPS actively participated and supported the MOH in the JEE orientation and self-evaluation exercise from May 29 to 31 at Hawassa. The event was organized by the EPHI together with the WHO. The country conducted the first JEE and assessed the IHR core capacities in 2016. The meeting for NAMRAC is scheduled for July 7, 2023. MTAps provided TA to the national multisectoral AMR group to conduct the seventh Tripartite AMR Country Self-Assessment Survey (TrACSS).
<p><b>Activity 1.2.1:</b> Support the MOH and national AMR MSC stakeholders to improve awareness, education, and training on AMR.</p> <p><b>Activity Description:</b> Support stakeholders to improve awareness on AMR among the community, HCPs, and policymakers, through evidence-based information sharing, communication, and education.</p>	5.4	1.2	MTaPS supported the EPA to carry out two rounds of a TOT course on AMR for pharmacists, from April 24 to 27, 2023, and May 1 to 4, 2023, in Addis Ababa. A total of 49 (all male) clinical pharmacists and pharmacologists from academia, hospitals, and community pharmacies attended. MTAps also supported the EPA and the MOH in the colorful celebration of the 11th AMR Day on May 22, 2023.
<p><b>Activity 2.2.1:</b> Support the MOH and selected HFs to regularly track information on IPC and use it for CQI.</p> <p><b>Activity Description:</b> Provide TA to selected hospitals for orientation, guidance, and mentorship on using the national IPC assessment tool for CQI of IPC. Conduct training on CQI. Support HFs to undertake annual IPC assessments as part of their regular review cycle. Support MOH in implementing the national HAI surveillance guidance at selected hospitals.</p>	5.4	2.2	During the quarter, MTAps supported the provision of IPC-AMS integrated training at four hospitals. In collaboration with MOH, MTAps also supported data collection, aggregation, and analysis of QI interventions implemented, with a focus on IPC and AMS. Moreover, MTAps supported the MOH to validate the IPC-FLAT tool, which is critical for monitoring progress of IPC practices at health care facilities.



Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 2.2.2:</b> Build capacity of the MOH to provide IPC training to HCWs.</p> <p><b>Activity Description:</b> Support the Clinical Services Directorate/MOH and the national IPC TWG in developing an e-Learning platform for IPC training based on the IPC guideline. Support the MOH and eight selected HFs in providing IPC-specific in-service training for HCWs, using both platforms, and ensure incorporation of IPC trainings to the approved courses for CPD.</p>	5.4	2.2	As part of ensuring sustainability and improving access to IPC training, MTaPS has been working with the MOH to develop an IPC e-Learning course. In this quarter, MTaPS provided support to the MOH to organize an e-Learning module development and review workshop for the IPC course. The module has been developed and submitted for review. In addition, MTaPS supported basic IPC training for 30 health professionals in collaboration with the MOH.
<p><b>Activity 2.5.1:</b> Support the MOH to sustain IPC improvement practices at national, regional, and facility levels.</p> <p><b>Activity Description:</b> Advocate and support the MOH and RHBs to create model IPC sites (COEs) to showcase best practices and to serve as learning sites for others. Includes TA to establish criteria for identifying the sites and provide targeted support to selected hospitals to build their capacity for IPC and help them fulfill the requirements for model sites.</p>	5.4	2.5	In this quarter, MTaPS participated and contributed to various meetings and discussions organized by the MOH, which are very relevant to sustaining IPC-related activities. MTaPS participated at the national IPC TWG meeting on May 18, 2023, and June 2, 2023, where various issues were discussed, including the IPC progress report presented by the MOH. MTaPS also participated in a workshop organized by the MOH to develop IPC SOPs. In addition, MTaPS participated in a workshop organized to provide orientation to key performance indicators for IPC.
<p><b>Activity 3.1.1:</b> Support adherence to the STGs, EMLs, and other related AMS standards.</p> <p><b>Activity Description:</b> Support popularizing and disseminating both EML and STG to larger audiences in human health care.</p>	5.4	3.1	MTaPS supported the MOH to review the AMS practical guide through a workshop conducted from April 28 to 30, 2023. A total of 15 (2 female) experts drawn from academia, hospitals, RHBs, the MOH, the EPHI, the EFDA, and MTaPS participated in the event. MTaPS also supported 3 hospitals in the revision of their hospital medicine list based on AWaRe categorization of antibiotics.
<p><b>Activity 3.2.1:</b> Improve awareness and knowledge on AMR to achieve behavioral change in antimicrobial prescribing and use.</p> <p><b>Activity Description:</b> Support PMED and the RHBs in capacity building of HCPs and HF management to enhance their knowledge and skills on AMS program design and implementation. Strengthen implementation of AMS programs at designated HFs. Support development of AMS e-Learning course.</p>	5.4	3.2	MTaPS provided TA to the MOH and the AA RHB in the provision of training on AMC survey to 20 hospitals from May 15 to 16, 2023. MTaPS also technically supported the provision of an integrated TOT course on AMS, IPC, and diagnostic stewardship for HCPs from AMR surveillance sites over May 17–19, 2023. MTaPS also supported the MOH in finalizing the review of a self-paced AMS e-Learning course for health professionals—through a workshop from May 25 to 26, 2023.
<p><b>Activity 3.5.1:</b> Strengthen AMS implementation at targeted HFs.</p> <p><b>Activity Description:</b> Support in developing and/or adapting job aids, such as audit and feedback tools, SOPs, AMS data collection tools for drug use evaluation, antimicrobial use and consumption surveys, and training on AMS core components. Support the standardization of implementation approaches in selected hospitals as models to optimize antimicrobial use.</p>	5.4	3.5	MTaPS, in collaboration with the MOH, has been providing onsite support through supportive supervision and remote support mechanisms to hospitals implementing QI programs. This support has continued in this quarter, as hospitals conduct repeat assessments to understand the changes made because of the QI interventions. MTaPS supported the MOH/PMED and the EPHI in the provision of TOT on integrated AMS programs and diagnostic stewardship.



## **G. INDONESIA**

### **FIELD SUPPORT ACTIVITIES**

#### **OVERVIEW**

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

#### **CUMULATIVE PERFORMANCE TO DATE**

Since June 2021, MTaPS has provided vital support to Indonesia's MOH in HTA and PE activities. As part of this support, Indonesia has completed 10 deliverables, as follows:

1. Virtual pre-conference HTAsiaLink report
2. Report documenting the literature review, stakeholder engagement, and observations on collaboration in HTA topic selection process
3. Summary of the PE data sources
4. High level aggregated figures of PE
5. Incorporation of national-level PE data into overall HA data and inclusion in national (HA) reports 2021 on PE section
6. Report documenting recommendations and potential interventions to strengthen HTA topic selection processes, use, uptake, and impact
7. Ninth HTAsiaLink conference digest book
8. Report of implementing the PE training
9. MCDA tool for HTA topic selection
10. Final version of HTAsiaLink paper on "A framework to an improved collaboration on HTA in the Asia-Pacific region: a role for HTAsiaLink"

#### **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

MTaPS completed a PE tracking training from May 9 to 13, 2023, which was attended by Pusjak PDK, Directorate General (DG) of Pharmaceutical and Medical Devices, Indonesian FDA, University of Indonesia, USAID-Health Financing Activity (HFA), and WHO. In addition, a plan for implementing PE tracking in 2023 and its institutionalization was prepared.

For HTA activities, MTaPS supported the call for topic announcement event for the 2024 cycle on June 6, 2023. The meeting was attended by representatives from professional organizations, industries, academia, hospitals, relevant government units, and other HTA enthusiasts. This activity is the second time MTaPS has been involved in the process of selecting HTA topics in Indonesia; the difference is that

starting in 2023, there has been a manual for selecting topics prepared by MTaPS, Pusjak PDK, and InaHTAC—the manual is a living document which will still be undergoing revisions in the future.

Regarding the HTA capacity building on the trastuzumab study, on June 23, 2023, the research team—supported by MTaPS—presented the milestones to date to a panel of experts (clinicians and researchers in HTA) to obtain input from RWE calibration results before going to the next step: economic evaluation analysis.

## **OBJECTIVE I: STRENGTHEN THE INSTITUTIONALIZATION OF MORE SYSTEMATIC, TRANSPARENT, AND EVIDENCE-INFORMED DECISION-MAKING IN INDONESIA**

### ***Activity 1.1.1: Strengthen the topic selection process for the HTA committee, InaHTAC***

MTaPS supported the call for topic announcement event for the 2024 cycle on June 6, 2023. The meeting was attended by representatives from professional organizations, industries, academia, hospitals, relevant government units, and other HTA enthusiasts. The current cycle includes active topic identification as prescribed in the MTaPS report on topic selection process assessment and recommendation. The InaHTAC held the first stakeholder meeting to identify potential topics on June 21, 2023. The active identification produced 23 relevant topics by July 11, 2023.

The latest revision of the HTA topic selection manual was presented to InaHTAC on June 21, 2023. The report summarized the two-year manual co-development process that engaged InaHTAC's stakeholders from the beginning of the MTaPS program. The manual development includes stakeholder inquiry through surveys, focus group discussion, and interviews, desk reviews, co-designing, and collaborative write-up. The Pusjak PDK will lead the finalization of the draft and transfer them into policy as MTaPS provides additional assistance when needed.

### ***Activity 1.1.2: Build capacity of key stakeholders on HTA methods***

MTaPS held workshops in the application of RWE and MCDA. The two methods were applied to Indonesia's HTA for the first time.

RWE was used in Indonesia's HTA to calibrate evidence cost-effectiveness results to the local context. On June 23, 2023, MTaPS participated in the expert review meeting on the trastuzumab assessment progress report together with Pusjak PDK, University of Gajah Mada, InaHTAC, and the expert panel. The team presented the milestones in Indonesia's first official HTA evaluation using the RWE calibration technique on the trastuzumab study. The panel's concerns regarding the choice of chemotherapy regimens were addressed in a follow-up analysis. The study is planned to be completed by September 2023.

MTaPS held capacity building sessions for Pusjak PDK and InaHTAC on MCDA applications in HTA, covering social aspects of conducting participatory MCDA with relevant stakeholders and foundations for mathematical calculations in scoring and criteria weighting techniques. The goal is to improve the validity of the decision-making and buy-in process of HTA results, thus gaining support for the policy translations.

MTaPS and Pusjak PDK agreed to conduct an MCDA case study in TB control (latent TB diagnostic tools—tuberculin skin test versus interferon-gamma release assays) using the evidence-informed

deliberative process framework. Actors and stakeholders from TB-related units identified and assigned to roles scoring, criteria weighting, data collection, and result deliberation. The exercise provided insights into improving Indonesia's HTA appraisal criteria by elaborating on the existing criteria indicators in reference to the latest frameworks.

#### **Activity 1.1.4: Strengthen the appraisal process for the HTA committee, InaHTAC**

The landscaping report draft was discussed with Pusjak PDK on June 21, 2023, regarding several occasions for input and refinements. The report was presented to the InaHTAC chair and other members and was well-received. MTaPS recommends definitive roles for the panel members in each of the appraisal stages, and more refined appraisal aspects or criteria. The InaHTAC agreed to improve the transparency of the deliberative process and to include perspectives from patients and the industry. The InaHTAC and Pusjak PDK greenlit the one-month draft schedule to develop the appraisal manual outline and to finalize the outline in a workshop to be held by the end of July 2023.

#### **Activity 1.1.5: Writing the HTAsiaLink conference digest and publications**

The final version of the HTAsiaLink paper on “A framework to an improved collaboration on HTA in the Asia-Pacific region: a role for HTAsiaLink” is planned to be submitted to the *International Journal of Technology Assessment in Health Care*. Before submitting, MTaPS will do a final check and recheck with the co-authors for the administrative-related submission.

MTaPS shared its latest lessons learned from working with Indonesia's stakeholders to leverage RWE for drug reimbursement and national-level decision-making on health financing at the 2023 annual conference of the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) held in the US on May 7–10 in Boston.

## **OBJECTIVE 2: PROMOTE TRANSPARENCY IN PE TRACKING TO IMPROVE VALUE IN PURCHASING IN INDONESIA**

#### **Activity 2.1.4: Build capacity of the HA team to compile PE data**

The PE tracking training was held on May 9-12, 2023, facilitated by the MTaPS technical lead. This training was attended by Pusjak PDK, DG Pharmaceutical and Medical Devices, Indonesian FDA, University of Indonesia, and USAID-HFA.

This training discussed the stages of PE tracking, including PE tracking methodology, collection, and management of pharmaceutical spending data; mapping pharmaceutical spending data to the 2011 SHA dimensions; data analysis; preparation of policy briefs; and discussions on the institutionalization of PE activities in Indonesia. The results of this training are the 2023 PE tracking implementation plan.

A meeting with development partners was held on May 13, 2023, attended by WHO, USAID, USAID-CHISU, USAID-HFA, USAID-MTaPS, and representatives from Pusjak PDK. It was agreed that meetings with development partners would be held every quarter to discuss the need for technical assistance and funding for the institutionalization process of PE in HA activities.

## BEST PRACTICES/LESSONS LEARNED

- Although full involvement of MOH staff in revising the HTA topic selection manual text is a tedious and detailed back-and-forth process, the process helps ensure ownership, implementation, and sustainability of the manual by ensuring that all the involved staff agreed on the procedures; this process, however, comes at the cost of a prolonged timeline.
- Using the MCDA process optimizes rational decision making and deliberation. Because of its flexibility and limitations, engaging in MCDA requires participants to engage in continuous learning and innovation.
- Stakeholder engagement is more of a process than an outcome. Some key stakeholders, including BPJS-K, patient groups, and industries, are involved in the HTA process only as topic nominators and are still not participating or are not fully engaged in the HTA topic selection process. To build ownership and understanding of HTA, their role needs to be expanded.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Development of HTA appraisal outline	July-August 2023
Technical assistance for HTA topic selection process 2023	July-August 2023
Attend the 15th IHEA World Congress on Health Economics at the Cape Town International Convention Centre	July 8-12, 2023
HTA consolidation meeting on HTA appraisal and capacity building on HTA study	July 25-28, 2023
Development of PE tracking manual	July-August 2023
Technical assistance for PE tracking implementation 2023	July-August 2023

**Table 16. Quarter 3, FY23, Activity Progress, Indonesia—FIELD SUPPORT**

Activity	MTaPS Objective(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Strengthen the topic selection process for the HTA committee, InaHTAC</p> <p><b>Activity Description:</b> Analyze the current topic selection process to understand the prioritization and selection criteria, key actors and institutions engaged, roles and responsibilities, and incentives; MTaPS will provide hands-on practice and implement updates/modifications to the current process based on the literature review, stakeholder engagement, and expertise of MTaPS HTA practitioners</p>	1.1	<p>The latest revision of the topic selection manual was presented to InaHTAC on June 21, 2023. Pusjak PDK will lead the finalization of the draft and transfer them into policy as MTaPS provides additional assistance when needed. InaHTAC held a meeting to announce the call for 2024 HTA topics on June 6, 2023; 157 participants took part, representing relevant stakeholders. The selected topics will be announced in October.</p>
<p><b>Activity 1.1.2:</b> Build capacity of key stakeholders on HTA methods</p> <p><b>Activity Description:</b> Provide training on MCDA and use of RWE using hands-on and collaborative research approaches to further strengthen the capacity of researchers and stakeholders for HTA; local health economics expert will be contracted to provide on-the-ground support, in addition to MTaPS home office-based HTA technical experts</p>	1.1	<p>Twelve regular meetings were conducted on RWE calibration on the trastuzumab study. Recommendations from the experts meeting on June 23, 2023, included the following: classify chemotherapy drugs in early trials and review the assumption of a 50% portion of patients who receive trastuzumab, as per the national health insurance mandate may not be too reasonable.</p> <p>Five regular capacity building meetings were conducted at MCDA for HTA topic selection, assessment, and appraisal. General principals are that MCDA applications in HTA consist of social and mathematical aspects. As agreed, the team will focus on the mathematical aspects. Several mathematical calculations for scoring and criteria weighting techniques were introduced through hands-on exercises using daily life examples. Participants were encouraged to explore the available digital tools and references provided in the cloud-shared folder.</p>
<p><b>Activity 1.1.4:</b> Strengthen the appraisal process for the HTA committee, InaHTAC</p> <p><b>Activity Description:</b> MTaPS supported InaHTAC to streamline the appraisal process, leading to additional inputs to HTA appraisal best practices using MCDA; input can further be used by InaHTAC or future activities to develop an HTA appraisal operational manual; by September 2023, MTaPS will develop a draft outline of HTA appraisal operational manual, with notes, citations, and recommendations for best practices</p>	1.1	<p>The landscaping report draft was discussed with Pusjak PDK on several occasions for input and refinement. InaHTAC agrees to develop definitive roles for the panel members in each of the appraisal stages, and more refined appraisal aspects. InaHTAC and Pusjak PDK greenlit the one-month draft schedule to develop the appraisal manual outline and finalize the outline in a workshop to be held by the end of July 2023.</p>
<p><b>Activity 1.1.6:</b> Document Indonesia HTA experience improving national HTA capacity through thought leadership activities, and disseminate through papers, conferences, and support of the InaHEA biennial scientific meeting</p> <p><b>Activity Description:</b> MTaPS continues to support InaHTAC and other research partners to present and publish their work and achievements internationally to bolster collaborative learning and strengthen their capacity to conduct HTA using advanced methods</p>	1.1	<p>MTaPS shared its latest lessons learned from Indonesia at the ISPOR 2023 annual conference in Boston on May 7–10. MTaPS presented “Using Real-World Evidence for Health Technology Assessment: Capacity Building of Parameter Calibration for Economic Evaluation of Trastuzumab Addition to Chemotherapy in Early Breast Cancer.” The final version of the HTAsiaLink paper “A framework to an improved collaboration on HTA in the Asia-Pacific region: a role for HTAsiaLink” is planned to be submitted to the <i>International Journal of Technology Assessment in Health Care</i>.</p>

Activity	MTaPS Objective(s)	Activity Progress
<p><b>Activity 2.1.4:</b> Build capacity of the national health account team to implement the PE tracking</p> <p><b>Activity Description:</b> Local and MTAps headquarters staff will facilitate a five-day virtual/in-person training for the HA team and consultants to ensure that they have the skills to facilitate the PE tracking process in the future. In addition to the training, MTAps will provide mentoring and remote support for HA 2022 production to assist PE analysis. MTAps will guide consultants recruited by Pusjak PDK to collect, organize, and map PE data.</p>	<p>I.1</p>	<p>MTaPS facilitated a PE tracking training on May 9-13, 2023. This training was attended by Pusjak PDK, DG Pharmaceutical and Medical Devices, Indonesian FDA, University of Indonesia, USAID-HFA, and WHO. PE tracking included tracking methodology, collection and data management, mapping data mapping to the 2011 SHA dimensions, data analysis, policy briefs, and institutionalization. The results of this training included an action plan on the 2023 PE tracking and institutionalization implementation plan.</p>

## **H. JORDAN**

### **FIELD SUPPORT ACTIVITIES**

#### **OVERVIEW**

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

#### **CUMULATIVE PERFORMANCE TO DATE**

MTaPS facilitated successful procurement reform in the five priority regulatory actions, including three legislative articles in the government procurement bylaw and two institutional policies in the JFDA and the MOH. With the GPD, MTaPS developed FA implementation guidelines and trained key stakeholders and personnel responsible for procurement from other government entities. MTaPS completed a comprehensive assessment of the pharmaceutical supply chain in collaboration with the MOH's PSD. MTaPS has introduced improvements in clinical practice at both the MOH and RMS. It has worked with two pilot hospitals to develop three prophylactic antibiotic protocols and one antibiotic treatment protocol. These protocols were reviewed by the MOH central Pharmacy and Therapeutics Committee and Quality Directorate (QD), approved by the Minister of Health, and disseminated to all MOH hospitals for implementation. Moreover, MTaPS collaborated with the MOH QD to outline key performance indicators and audit tools. In the main hospital of the RMS, MTaPS worked with the AMR Central Committee to develop 27 standardized clinical protocols, including screening of patients for colonization upon admission to the ICU and antibiotic use. MTaPS initiated a novel approach to raising AMR awareness in collaboration with local stakeholders, targeting middle and high school students. In collaboration with the National Advisory Committee for Infection Prevention and Control, MTaPS developed and launched a standardized, certified IPC training program for all MOH and RMS hospitals. MTaPS also provided technical assistance in developing a training module for primary health care (PHC). Together, these interventions contributed to pharmaceutical systems strengthening in Jordan in the key areas of governance, human resources, pharmaceutical service delivery, information, and financing.

#### **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

MTaPS developed six priority procurement and supply management policies to enhance the availability and distribution of essential medical products. These policies were granted official approval from the Secretary General for Technical and Administrative Affairs at the MOH. Under the patronage of His Excellency the Minister of Health and the General Director of the RMS, the IPC focal points from the MOH and RMS were awarded certificates for completing HCAC's Healthcare Certified Infection Prevention (HCIP) Training Program conducted by MTaPS in collaboration with the RMS and the MOH IPC Directorate.



## OBJECTIVE I: STRENGTHEN PHARMACEUTICAL-SECTOR GOVERNANCE

### **Activity 1.1.1: Provide technical and planning support to the multistakeholder National Vaccines Procurement Modernization Committee (NPPMC)**

Canceled: the committee is no longer being convened by its leadership and is no longer active.

### **Activity 1.1.2: Provide technical assistance to the GPD in institutionalizing framework agreement procedures**

With MTaPS' support, the FA TWG completed an advanced draft of the FA SOPs, which will be submitted to the National Committee for Procurement Policies (NCPP) for further review and approval. Also with MTaPS' support, the GPD organized an informational session on June 22, attended by 46 private-sector pharmaceutical representatives (24 female), to communicate its intent to implement FAs in future bidding processes, receive supplier feedback, address any concerns, and explore potential solutions collaboratively.

The General Director of the GPD and Head of the Jordanian Association of Pharmaceutical Manufacturers also took part in the workshop. Most participants demonstrated support for FA implementation: in an evaluation of the session, 96% of attendees requested additional workshops relevant to FA, and 60% showed interest in participating in future FAs. Implementing FAs will enhance procurement contracts; reduce duplication, workload, and costs; and promote efficiency and effectiveness in procurement when applied appropriately.



*Pharmaceutical suppliers take part in the information session on FA implementation in procurement of pharmaceuticals, June 22, 2023. Photo credit: MTaPS Jordan*

### **Activity 1.1.3: Provide technical assistance to the GPD in developing procurement negotiation procedures**

MTaPS, in collaboration with the GPD, received and addressed additional comments and completed the final draft of the procurement negotiation SOPs. MTaPS also developed an annex for the SOP specifically focused on negotiations within FA settings to address the unique conditions associated with FAs. This will contribute to enhancing the effectiveness and success of future procurement negotiation processes. MTaPS also developed a negotiation plan and a report template to be used by the negotiation teams at public-sector health procurement entities to ensure proper documentation, transparency, accountability, knowledge retention, and continuous improvement. The negotiation and the FA SOPs will be submitted to the NCPP for approval during Q4.

### ***Activity 1.2.1: Conduct pharmaceutical procurement training to stakeholders using the MTaPS procurement training curriculum***

During Year 4, MTaPS developed a three-module capacity-building program. Module 1 on procurement management and Module 3 on FA negotiation and fair competition have been successfully delivered to public procurement officials. In Q3, MTaPS, in collaboration with the Public Finance Management Activity (PFMA), conducted training on Module 2 on the government procurement bylaw for 40 participants (19 female) from various departments including the MOH (PSD, Vaccines Department, and Policies Department) and Jordan University Hospital. Participants engaged in discussions and expressed interest in receiving further training on related subjects, such as contract management, inventory management, and quantification. The training is expected to contribute to increased compliance, promote transparency and accountability, mitigate risks, build capacity, and foster fair competition. In Q4, MTaPS will ensure that all training materials and technical documents are transferred to relevant counterparts as part of the handover process.

## **OBJECTIVE 2: INCREASE THE INSTITUTION'S CAPACITY TO MANAGE PHARMACEUTICALS AND SERVICES, INCLUDING REGULATION OF MEDICAL PRODUCTS**

### ***Activity: 2.1.1: Update and/or develop priority PSD policies***

MTaPS developed six procurement and supply management priority policies. These policies were identified collaboratively with the PSD team and considered recommendations from the supply chain assessment conducted in FY22. Following the development phase, MTaPS obtained official approval of these policies from the Secretary-General for Technical and Administrative Affairs at the MOH. This highlights the recognition and endorsement of the policies' vital role in enhancing the availability and distribution of essential medical products and demonstrates the MOH's commitment to optimizing the health care supply chain and ensuring the provision of high-quality health care services to the population.

### ***Activity 2.1.2: Develop a three-year operational plan for the PSD***

On May 15, 2023, MTaPS held a kick-off workshop to initiate the development of the PSD operational plan in alignment with the MOH 2023–2025 National Strategy. Fourteen key PSD staff (4 female) attended the workshop. Participants discussed potential development approaches, timeline, and implementation steps. This was followed by a workshop on June 4, 2023, for 16 PSD staff (4 female). This workshop focused on analyzing the current situation at the PSD, including identifying the main priorities and challenges.

MTaPS held a follow-up meeting with 14 PSD staff (4 female) to introduce mechanisms to support development of the operational plan given the approaches and identified challenges. As a result of these workshops, participants completed drafting priority interventions for the PSD, which will help to effectively develop the operational plan. Next quarter, MTaPS will continue to engage with PSD staff to further act on the identified priorities and follow up on next steps. Developing an operational plan for the MOH strategy will optimize resource allocation, facilitate monitoring and evaluation, and promote coordination. It is an essential tool for turning strategic objectives into actionable ones, ultimately driving the organization toward its long-term goals and vision.

**Activity 2.1.3: Support the MOH in strengthening the forecasting of needed pharmaceuticals for annual procurement**

Canceled, as agreed during the USAID/Jordan, WHO, and MOH joint meeting.

**OBJECTIVE 3: OPTIMIZE PHARMACEUTICAL-SECTOR FINANCING, RESOURCE ALLOCATION, AND USE**

**Activity 3.1.1: Develop and implement the “financial management for pharmaceutical procurement” training module**

This activity will commence in Q4.

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

**Activity 4.1.1: Support the Royal Medical Services in the implementation of the Comprehensive Antimicrobial Stewardship Program**

At an MTaPS-organized meeting, the Jordanian American Physicians and the re-established AMR Central Committee of the RMS finalized the 27 draft AMS protocols. MTaPS, in collaboration with the AMR Central Committee, incorporated the Jordanian American Physicians' feedback into the protocols and finalized and prepared them for dissemination to all RMS hospitals for implementation. To follow up on the implementation of the protocols, the RMS quality department will implement a pilot at the Al Hussain Hospital ICU using the audit tools and KPIs previously developed with MTaPS' support. MTaPS will support the RMS to utilize the pilot results as a benchmark to evaluate adherence to the protocols. The process will help identify any discrepancies in the outcomes, acknowledge challenges, and inform interventions (such as follow up training) to address issues.

**Activity 4.1.2: Conduct an assessment of RMS information systems relative to ASP activities**

With MTaPS' support, the RMS quality department conducted a baseline assessment of the electronic medical record (EMR). The assessment confirmed that the EMR can capture and aggregate the documentation required for AMS protocol implementation.

**Activity 4.1.3: Support the MOH in rationalizing the use of antimicrobials at select health facilities**

MTaPS and the MOH Institutional Development and Quality Control Directorate (IDQCD) completed development of the implementation audit tools and KPIs for the hospital antibiotic prophylaxis protocols to be used by all MOH hospitals. MTaPS received an official request from the PCPD to provide support in organizing orientation workshops for Al-Mafraq and Al-Salt hospital staff on the protocols for four priority surgical procedures and an antibiotic management protocol for urinary tract infections. The workshops, which would contribute to improved implementation of the protocols, are being considered for inclusion in the MTaPS Y6 work plan.

**Activity 4.2.1: Provide technical and logistic support to the multisectoral Advisory Committee for IPC (ACIPC) in overseeing the implementation of IPC interventions according to the NAP-AMR**

MTaPS, in collaboration with the MOH, organized certificate ceremonies for 35 participants from the MOH (21 female) and 28 from the RMS (21 female) who successfully completed the HCIP Training Program. The MOH ceremony was held under the patronage of His Excellency the Minister of Health,

and the RMS ceremony was held under the patronage of the esteemed General Director of the RMS. The newly trained staff can contribute to further standardization of IPC interventions in Jordanian health facilities, which in turn will contribute to improved patient safety and quality of care.



The HCIP Certificate Ceremony for IPC focal points from the MOH, June 19, 2023, Amman, Jordan. Photo credit: MTaPS

#### ***Activity 4.2.2: Support the MOH in conducting dental IPC assessments for priority clinical units in health facilities***

Following an MOH request to include both public and private facilities in the IPC assessment of dental clinics to allow for development of comprehensive IPC guidelines for dentistry, MTaPS conducted a literature review and estimated study costs. Considering the time and the financial and logistical constraints, MTaPS concluded that support can currently be provided to assess only the public-sector dental clinics.

#### ***Activity 4.2.3: Conduct basic IPC training for IPC focal points in MOH PHC***

Completed in Q2.

#### ***Activity 4.3.1: Support the MOH in raising community awareness on AMR and rational use of antibiotics***

As a member of the National AMR Awareness Committee, MTaPS supported the HCAD by drafting AMR-related awareness messages targeting students, seniors, health service providers, and individuals with diverse educational backgrounds residing in both urban and rural areas to enhance community understanding and follow IPC and AMR practices. The HCAD and other MOH stakeholders will finalize and disseminate these messages through MOH social media pages.

#### ***Activity 4.3.2: Continue to support the School Health Directorate (SHD) in raising awareness on AMR among school students***

In coordination with the SHD, MTaPS held a recognition ceremony for 31 (18 female) health educators who implemented the CASS program. Under the patronage of the MOH Primary Healthcare Administrative Director, the event included a short MTaPS-developed film on CASS implementation. This film was also made available through USAID Jordan's Instagram and the MOH Website/Facebook. The SHD and HCAD incorporated CASS activities into the AMR NAP 2023–2025. Under the AMR NAP, the SHD intends to extend CASS activities to additional schools. MTaPS will provide tailored CASS IEC materials to support the SHD in this expansion.

## BEST PRACTICES/LESSONS LEARNED

- Local stakeholders such as hospital-based AMR committees, the IPC Directorate, and the SHD are willing to participate and improve practices if they are supported with international and local evidence, clarity of purpose, locally contextualized approaches, tools, and follow-up technical support.
- Standardizing and enhancing pharmaceutical services while preserving the quality of care can be achieved by strategically developing and implementing treatment or prophylaxis protocols that align with the principles of evidence-based medicine, local relevance, and feasibility.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<b>Activity 1.1.2:</b> Submit the Framework Agreement implementation procedures for official approvals. Support the dissemination and training process.	July–September 2023
<b>Activity 1.1.3:</b> Submit the negotiation implementation procedures for official approvals. Support the dissemination and training process.	July–September 2023
<b>Activity 2.1.2:</b> Develop the Procurement and Supply Directorate operational plan inception report and conduct final draft with M&E plan.	July–September 2023
<b>Activity 4.1.1:</b> Disseminate 27 ICU protocols through the RMS central committee.	July–September 2023
<b>Activity 4.1.3:</b> Disseminate the prophylaxis protocols implementation policy.	July–September 2023
<b>Activity 4.3.1:</b> Finalize the AMR awareness messages targeting the community.	July–September 2023
<b>Activity 4.3.2:</b> Provide additional IEC material to MOH SHD.	July–September 2023
<b>All activities:</b> Archive and validate relevant documents on the shared drive.	July–September 2023
<b>All activities:</b> Finalize and submit Year 5 deliverables to USAID Mission.	July–September 2023
<b>All activities:</b> Conduct work planning meetings with counterparts to discuss Year 6 activities and recommendations.	July–September 2023



**Table 17. Quarter 3, FY23, Activity Progress, Jordan—FIELD SUPPORT**

Activity	MTaPS Objective(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Provide technical and planning support to the multistakeholder National Vaccines Procurement Modernization Committee (NVPMC).</p> <p><b>Activity Description:</b> Coordinate technical and planning activities of the NVPMC.</p>	1	The activity was canceled as the committee is no longer being convened by its leadership and is no longer active.
<p><b>Activity 1.1.2:</b> Provide technical assistance to the GPD in institutionalizing framework agreement (FA) procedures.</p> <p><b>Activity Description:</b> Provide technical and logistical support to the TWG to implement the drafted action plan.</p>	1	An advanced draft of the FA SOPs was completed and will be submitted to the NCPP for further review and approval.
<p><b>Activity 1.1.3:</b> Provide technical assistance to the GPD in developing procurement negotiation procedures</p> <p><b>Activity Description:</b> Develop procurement negotiation procedures and tools needed for GPD staff.</p>	1	MTaPS received and addressed additional comments and completed a final draft of the negotiation SOPs.
<p><b>Activity 1.2.1:</b> Conduct pharmaceutical procurement training to stakeholders using the MTaPS procurement training curriculum.</p> <p><b>Activity Description:</b> Build stakeholders' (e.g., PSD, Vaccines Department, Policies Department) capacities in procurement best practices.</p>	1	Conducted training on Module 2 of the training program, which focuses on the government procurement bylaw, in collaboration with a USAID-funded activity (PFMA), for 39 participants (20 female). This activity will contribute to increased compliance, promote transparency and accountability, mitigate risks, build capacity, and foster fair competition.
<p><b>Activity 2.1.1:</b> Update and/or develop priority PSD policies.</p> <p><b>Activity Description:</b> Review the developed PSD policies with the IDQCD.</p>	2	Obtained official approval of the PSD policies from the MOH Secretary-General for Technical and Administrative Affairs.
<p><b>Activity 2.1.2:</b> Develop a three-year organizational strategic plan for the Procurement and Supply Directorate.</p> <p><b>Activity Description:</b> Facilitate a multidisciplinary process of consultation and validation and identified strategic priorities, opportunities, and risks facing the supply chain.</p>	2	MTaPS organized a kick-off workshop to initiate the development of the PSD operational plan in alignment with the MOH National Strategy for 2023–2025. This was followed by a meeting to introduce mechanisms that will support the development of an operational plan. As a result of these workshops, participants completed drafting priority interventions for PSD that will help to effectively develop the operational plan.
<p><b>Activity 2.1.3:</b> Support the MOH in strengthening the forecasting of needed pharmaceuticals for annual procurement.</p> <p><b>Activity Description:</b> Standardize practices and procedures of quantification, including how to determine data requirements.</p>	2	The activity will not continue based on the agreements during the USAID/Jordan, WHO, and MOH joint meeting.
<p><b>Activity 3.1.1:</b> Develop and implement the “financial management for pharmaceutical procurement” training module.</p> <p><b>Activity Description:</b> MTaPS will prioritize training on financial management areas related to procurement and supply chain.</p>	3	This activity will commence Q4.
<p><b>Activity 4.1.1:</b> Support the Royal Medical Services (RMS) in the implementation of the Comprehensive Antimicrobial Stewardship Program (ASP).</p>	4	The 27 protocols and implementation procedures for the prevention, treatment, and management of critical care infections have been developed and finalized. The RMS quality department will implement a

<p><b>Activity Description:</b> Develop antimicrobial treatment guidelines for RMS AI Hussain Hospital.</p>		<p>pilot at the AI Hussain Hospital ICU using the audit tools and KPIs previously developed with MTaPS' support.</p>
<p><b>Activity 4.1.2:</b> Conduct an assessment of RMS information systems relative to ASP activities. <b>Activity Description:</b> Assess the ability of the RMS EMR and information technology systems to capture and aggregate required information.</p>	4	<p>The assessment confirmed that the EMR can capture and aggregate the necessary information.</p>
<p><b>Activity 4.1.3:</b> Support the MOH in rationalizing the use of antimicrobials at select health facilities. <b>Activity Description:</b> Develop the MOH rational use of antimicrobials prophylaxis protocols in selected health facilities.</p>	4	<p>MOH antimicrobials prophylaxis protocols are approved by the Minister of Health and disseminated. An institutional policy, audit tools, and KPIs for monitoring the implementation of the disseminated protocols have been developed.</p>
<p><b>Activity 4.2.1:</b> Provide technical and logistic support to the multisectoral Advisory Committee for IPC (ACIPC) in overseeing the implementation of IPC interventions according to the NAP-AMR. <b>Activity Description:</b> Provide technical and logistic support to the ACIPC regarding the implementation of IPC interventions.</p>	4	<p>A certification ceremony acknowledged the participants from the MOH and RMS who have successfully completed the HCIP training program requirements.</p>
<p><b>Activity 4.2.2:</b> Support the MOH in conducting dental IPC assessments for priority clinical units in health facilities. <b>Activity Description:</b> Provide technical support for the ACIPC and related stakeholders, including the Dentistry Directorate, to conduct IPC assessments for priority dental clinical units.</p>	4	<p>In response to the MOH request to broaden the IPC assessment of the dental clinics to include both the private and public sectors, MTaPS conducted a literature review and estimated required costs. Considering the time and the financial and logistical constraints, support can currently be provided to only assess the public-sector dental clinics.</p>
<p><b>Activity 4.2.3:</b> Conduct basic IPC training for IPC focal points in MOH PHC. <b>Activity Description:</b> Build the capacity of health care providers from primary health care centers on IPC best practices.</p>	4	<p>Activity completed in Q2.</p>
<p><b>Activity 4.3.1:</b> Support the MOH in raising community awareness on AMR and rational use of antibiotics. <b>Activity Description:</b> Development of tailored digital community messages to raise awareness on AMR.</p>	4	<p>Completed drafting AMR-related awareness messages targeting different community audiences and shared them with the MOH HCAD and other MOH stakeholders.</p>
<p><b>Activity 4.3.2:</b> Continue to support the School Health Directorate (SHD) in raising awareness on AMR among school students. <b>Activity Description:</b> Conduct AMR awareness sessions for school students.</p>	4	<p>Held a recognition ceremony to acknowledge the health educators who implemented the CASS program.</p>



## I. 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 governance and human resources capacity at the national, county, and facility levels as well as supporting county, sub-county, and facility-level IPC, OSH, and WASH activities for sustainable capacity; and optimizing the use of antimicrobials through AMS. MTaPS is focusing its support on the sustainability of AMR containment at the national, county, and HF levels by strengthening core governance structures for AMR containment at all levels and applying a structured CQI approach to promote control of HAIs, contain AMR, and improve patient safety.

#### CUMULATIVE PERFORMANCE TO DATE

As of March 2023, MTaPS supported the completion of 58% (36/62) of the WHO IHR benchmark actions. As of March 2023, MTaPS supported completion of 25% (2/4) of capacity level 2 actions, 50% (2/4) of capacity level 3 actions, 100% (4/4) of capacity level 4 actions, and 60% (3/5) of capacity level 5 actions for MSC. MTaPS is supporting MSC activities at both the national level and in its focus counties. Key MTaPS activities have included strengthening the MSC structures at national (NASIC) and county (CASIC) levels, developing and disseminating standardized AMR communique and bulletins to One Health stakeholders, and developing the NAP-AMR M&E framework and CASIC work plans in MTaPS-supported counties.

As of March 2023, MTaPS supported completion of 80% (4/5) of capacity level 2 actions, 83% (5/6) of capacity level 3 actions, 80% (4/5) of capacity level 4 actions, and 40% (2/5) of capacity level 5 actions for IPC. MTaPS activities focused on strengthening the IPC governance structures at national and county levels, developing and reviewing the IPC guidelines, applying IPC assessment tools, training HCWs, and monitoring implementation of IPC and WASH activities using a CQI approach in the focus counties and HFs.

As of March 2023, 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 0% (0/7) of capacity level 5 actions for AMS. MTaPS interventions focus on strengthening AMS governance structures at the national level and in the focus counties and HFs; reviewing the Kenya Essential Medicines List (KEML) and incorporating the AWaRe categorization of antibiotics; developing and disseminating the national AMS guidelines, regulatory guidance on optimal use of antimicrobials to HCWs and the public, and AMS curricula at the pre-service and in-service levels; training HCWs on AMS; and monitoring implementation of AMS activities using a CQI approach in the focus counties and HFs.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

MTaPS, in collaboration with Kisumu County and the NASIC, launched and disseminated the Kisumu CASIC One Health 2023–2025 work plan. The high-level launch event was attended by the county leadership and other key stakeholders. MTaPS also supported a Kilifi CASIC 2021–2023 work plan implementation progress review and the development of the Nyeri CASIC 2023–2025 work plan.

MTaPS conducted AMS mentorship and supportive supervision visits in 17 MTaPS focus HFs and one community pharmacy across three MTaPS counties: Murang'a, Kisumu, and Nyeri. The team held an MTC/AMS refresher training for newly appointed committee members in Kisumu County. MTaPS also provided technical assistance to HFs with developing and presenting abstracts highlighting AMS and IPC interventions at conferences held this quarter. Four AMS and seven IPC abstracts were presented at the IPNET-Kenya conference, and four AMS abstracts were presented at the Pharmaceutical Society of Kenya (PSK) conference.

In collaboration with the MOH Division of Patient and Health Worker Safety and other partners, MTaPS participated in the dissemination of the findings from the review of the pilot implementation of the national IPC M&E framework (2022) reporting system. In collaboration with the National Nurses Association of Kenya (NNAK), the team held two webinars on IPC. MTaPS held CIPCAC review meetings in the four focus counties and conducted facility IPC support supervision and mentorship visits to all 20 facilities.

### RESULT AREA I: EFFECTIVE MSC OF AMR

#### ***Activity 1.1.1: Continue strengthening NASIC for coordination, policy direction, review, and M&E of the national AMR plan and help to move towards sustainable capacity***

MTaPS, in collaboration with Kisumu County, supported the launch of the One Health Kisumu CASIC work plan on April 18, 2023, which drew 50 participants (27 male, 23 female) from the departments responsible for human health, environment, and agriculture; representatives from county leadership; partners; and other stakeholders, including the media, community pharmacies, and universities. The high-level event led to commitment from four media houses for free airtime to hold One Health radio talk shows to raise awareness on the AMR containment efforts in the county. In Kilifi County, MTaPS conducted a CASIC 2021–2023 work plan implementation progress review workshop with 16 participants (10 male, 6 female). The findings were used to advocate for county support for the AMR agenda. MTaPS also collaborated with Nyeri County to develop the county's next CASIC work plan, engaging 33 participants (19 male, 14 female) from the county departments responsible for health, agriculture, and environment and representatives from private- and public-sector HFs.

MTaPS also supported the finalization of an AMR bulletin 2023, which highlighted One Health AMR activities including WAAW 2022 and the development and costing of the 2023–2027 NAP and M&E framework.

## **RESULT AREA 2: IPC**

### ***Activity 2.1.1: Continue strengthening governance bodies for IPC at the national, county, and facility levels for sustainable capacity***

During the MOH M&E lessons learning and feedback workshop, MTaPS presented findings and recommendations from the ongoing pilot of the AMR, IPC, and patient safety M&E system in Nyeri and Kisumu counties. Participants were drawn from the four pilot counties (Nyeri, Kisumu, Machakos, and Trans-Nzoia) and implementing partners. Additionally, MTaPS held CIPCAC quarterly meetings in Kisumu and Kilifi counties attended by 11 participants (4 male, 7 female) and 17 participants (8 male, 9 female), respectively. The meetings reviewed the implementation of the work plans, including documenting achievements, challenges, lessons learned, and recommendations. Kilifi's CIPCAC work plan has now been included in the Kilifi County Integrated Development Plan.

### ***Activity 2.2.1: Continue providing technical assistance to scale up a continuing professional development (CPD) - and re-licensure-linked in-service IPC training course through the relevant professional associations***

To increase the pool of trained HCWs, MTaPS collaborated with the NNAK to conduct two CPD-accredited webinars on SSIs with 271 participants (80 male, 191 female) and environmental cleaning and reprocessing of reusable medical devices in hospitals with 270 participants (91 male, 179 female).

### ***Activity 2.5.1: Continue support to county, sub-county, and facility-level IPC, OSH, and WASH activities for sustainable capacity***

MTaPS and the departments of health services of Murang'a, Kilifi, Kisumu, and Nyeri counties conducted facility IPC supportive supervision and mentorship sessions in 20 focus HFs to track compliance to IPC practices, monitor implementation of planned IPC activities, provide onsite mentorship, document best practices and achievements, and update IPC CQI work plans. Consultative meetings were conducted during these visits to advocate for support of IPC programs.

MTaPS supported four representatives from Nyeri County and three from Murang'a County to present abstracts during the 10th IPNET-Kenya conference in May 2023. The abstracts covered COVID-19, hand hygiene, SSIs, and OSH. In collaboration with Kisumu, Nyeri, Murang'a, and Kilifi counties, MTaPS supported 16 HFs in commemorating World Hand Hygiene Day on May 5, and 706 HCWs (238 male, 468 female) participated in continuous medical education, tree planting, video clips, cake cutting, and other activities. To enhance compliance to standard IPC practices, MTaPS reproduced and disseminated 9,500 copies of hand hygiene and SSI SOPs to all focus HFs.

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

### ***Activity 3.1.1: Strengthening AMS governance structures at national and county levels***

MTaPS facilitated an MTC/AMS refresher training in Kisumu County, targeting the new committee members from MTaPS focus facilities and key Kisumu County Health Management Team officers in April 2023. The new MTC members are key in providing leadership and mentorship with the implementation of AMS CQI action plans in their facilities. The 39 participants (16 male, 23 female) included a representative from one non-MTaPS site—Muhoroni County Hospital—with the aim of increasing

collaboration and scale up of AMS programs across the county. Participants shared experiences with implementing MTC/AMS CQI action plans and were supported to develop 2023 action plans.

**Activity 3.1.2: Strengthening institutionalization of AWARe categorization of antibiotics**

Working with the Directorate of Health Products and Technologies, MTaPS continued to provide technical assistance in the review of the 2019 KEML and incorporating the AWARe categorization. MTaPS also held a validation meeting with the KEML TWG in May 2023 with 29 participants (17 female, 12 male). In addition, the team finalized publication of the 2023 Kenya National Medicines Formulary.

**Activity 3.2.1: Strengthening and scale up healthcare human resource capacity for AMS through pre- and in-service trainings**

MTaPS participated in the opening panel discussion entitled “Emerging Trends in Pharmaceutical Care” highlighting emerging roles for pharmacists in the AMR space during the 2023 PSK conference.

**Activity 3.5.1: Continue support to county, sub-county, and facility-level AMS activities for sustainable capacity**

In June, MTaPS and Murang’a, Kisumu, and Nyeri counties provided onsite technical assistance and mentorship during quarterly AMS supportive supervision visits to monitor the implementation of AMS CQI action plans and assess utilization of M&E tools for reporting outpatient antimicrobial prescribing indicators. A total of 17 HFs and one community pharmacy were supervised (two in Murang’a, seven HFs and one community pharmacy in Kisumu, and eight in Nyeri). In addition, the team supported the AMS teams in Kilifi, Mariakani Nyakach, Gertrude’s, and Nyeri hospitals with the review of AMS-related abstracts presented at the PSK and IPNET-Kenya conferences in May.

MTaPS also conducted a visit to Nyeri County and PCEA Tumutumu Hospital with MTaPS Technical Director Dr. Emmanuel Nfor in May. The visit allowed the county to share its experience in forming and implementing a One Health approach to tackle AMR through the CASIC. The county team and PCEA Tumutumu Hospital staff were updated on MTaPS’ support and shared their experiences with implementing MTC/AMS CQI action plans.

**QUARTER 3 BEST PRACTICES/LESSONS LEARNED**

- The Health Facility Improvement Fund has offered a key avenue for sustaining IPC and AMS programs. This was well demonstrated in Kisumu and Nyeri counties, where 100% and 77%, respectively, of all revenue collected by the facilities is returned to the facility to improve service delivery.
- Utilization of hybrid committees (IPC, MTC, AMS, quality improvement, and OSH) supports the implementation of AMR program interventions in low human resource settings, thereby yielding more results by capitalizing on the synergy of these programs.

**ACTIVITIES AND EVENTS FOR NEXT QUARTER**

Activity and Description	Date
<p><b>Activity 1.1.1:</b> Continue strengthening NASIC for coordination, policy direction, review, and M&amp;E of national AMR plan and help to move towards sustainable capacity</p> <ul style="list-style-type: none"> <li>▪ Support the finalization of the next iteration of the Nyeri CASIC work plan</li> </ul>	July–September 2023

<ul style="list-style-type: none"> <li>▪ Support the validation and launch of the 2023–2027 NAP-AMR and its M&amp;E framework</li> <li>▪ Continue supporting and providing technical assistance during CASIC meetings in MTaPS focus counties</li> </ul>	
<p><b>Activity 2.1.1:</b> Continue strengthening governance bodies for IPC at the national, county, and facility levels for sustainable capacity</p> <ul style="list-style-type: none"> <li>▪ Offer technical support for NIPCAC meeting at the national level</li> <li>▪ Finalize and support dissemination of the revised national IPC guidelines</li> <li>▪ Continue supporting and providing technical assistance during CIPCAC meetings in four counties</li> <li>▪ Review HAI guidelines</li> <li>▪ Develop a mobile application for AMR/IPC documents</li> </ul>	July–September 2023
<p><b>Activity 2.2.1:</b> Continue providing technical assistance to scale up a continuing professional development (CPD)- and re-licensure-linked in-service IPC training course through the relevant professional associations</p> <ul style="list-style-type: none"> <li>▪ Provide training and capacity building for HCWs on IPC focusing on emerging and re-emerging infections and health worker safety</li> <li>▪ Hold webinars with professional associations</li> </ul>	July–September 2023
<p><b>Activity 2.5.1:</b> Continue support to county, sub-county, and facility-level IPC, OSH, and WASH activities for sustainable capacity</p> <ul style="list-style-type: none"> <li>▪ Provide supportive supervision and mentorship/sessions in targeted facilities in the four focus counties</li> <li>▪ Develop a success story of significance change at facility level</li> <li>▪ Hold IPC performance review meetings for all 20 focus HFs</li> <li>▪ Monitor M&amp;E recording and utilization of IPC reporting tools and in Kenya Health Information System</li> <li>▪ Sensitize surgical teams on surgical prophylaxis in the four counties</li> </ul>	July–September 2023
<p><b>Activity 3.1.1:</b> Strengthening AMS governance structures at national and county level</p> <ul style="list-style-type: none"> <li>▪ Support the digitalization of AMC surveillance tools and rollout within the MTaPS focus counties</li> <li>▪ Provide technical assistance during NASIC and CASIC meetings in the four counties</li> <li>▪ Support the development/review of good prescribing standards policy/guidelines</li> <li>▪ Support the development of a PPS training package</li> </ul>	July–September 2023
<p><b>Activity 3.1.2:</b> Strengthening institutionalization of AWaRe categorization of antibiotics</p> <ul style="list-style-type: none"> <li>▪ Disseminate practical guides for AWaRe implementation in MTaPS focus counties and provide monitoring and support to implement these guides</li> <li>▪ Support the finalization of the 2023 KEML incorporating the AWaRe categorization</li> <li>▪ Support the launch of the Kenya National Medicines Formulary</li> </ul>	July–September 2023
<p><b>Activity 3.2.1:</b> Strengthening and scale up healthcare human resource capacity for AMS through pre- and in-service trainings</p> <ul style="list-style-type: none"> <li>▪ Conduct quarterly AMS CPD training sessions with professional associations</li> </ul>	July–September 2023
<p><b>Activity 3.5.1:</b> Continue support to county, sub-county, and facility-level AMS activities for sustainable capacity</p> <ul style="list-style-type: none"> <li>▪ Conduct quarterly supportive supervision visits in the four MTaPS focus counties</li> <li>▪ Support focus HFs with compiling and reporting AMS indicators as part of integrated reporting</li> <li>▪ Support documentation of lessons learned and best practices, including publications</li> <li>▪ Develop selected AMS-related SOPs</li> </ul>	July–September 2023

**Table 18. Quarter 3, FY23, Activity Progress, Kenya—GHSA**

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Continue strengthening NASIC for coordination, policy direction, review, and M&amp;E of the national AMR plan and help to move towards sustainable capacity</p> <p><b>Activity Description:</b> Support NASIC in implementing the NAP-AMR M&amp;E framework; review progress with the NAP AMR 2017–2022 as prelude to the review of the next NAP; support CASICs in four target counties</p>	5.4	1.1	<ul style="list-style-type: none"> <li>▪ Launched Kisumu CASIC 2023–2025 work plan (50 participants; 27 male, 23 female)</li> <li>▪ Conducted Kilifi CASIC work plan progress review (16 participants; 10 male, 6 female)</li> <li>▪ Supported Nyeri CASIC to develop its 2023–2025 work plan (33 participants; 19 male, 14 female)</li> <li>▪ Held consultative meetings with MOH Division of Patient and Health Worker Safety (5 participants; 2 male, 3 female)</li> <li>▪ Supported the finalization of the AMR bulletin 2023</li> </ul>
<p><b>Activity 2.1.1:</b> Continue strengthening governance bodies for IPC at the national, county, and facility levels for sustainable capacity</p> <p><b>Activity Description:</b> Support MOH in implementing the national IPC M&amp;E framework; development/review of SOPs; meetings with national IPC TWG and NIPCAC; meeting with CIPCACs; monitoring of implementation of HF action and IPC CQI plans</p>	5.4	2.1	<ul style="list-style-type: none"> <li>▪ Presented findings from the pilot of the AMR, IPC, and patient safety M&amp;E tools for Nyeri and Kisumu counties during the MOH M&amp;E feedback workshop (May 29–31, 2023)</li> <li>▪ Conducted quarterly CIPCAC meetings in Kilifi (17 participants; 8 male, 9 female) and Kisumu (11 participants; 4 male, 7 female)</li> <li>▪ Held consultative meetings with county health management teams and facility IPC committees during supportive supervision visits in all MTAps-supported facilities</li> </ul>
<p><b>Activity 2.2.1:</b> Continue providing technical assistance to scale up a continuing professional development (CPD)- and re-licensure-linked in-service IPC training course through the relevant professional associations</p> <p><b>Activity Description:</b> Continue to roll out the IPC CPD course in collaboration with health professional associations; collaborate with national MOH IPC team and stakeholders to introduce IPC agenda/courses for in-service training</p>	5.4		<ul style="list-style-type: none"> <li>▪ Held NNAK CPD-accredited webinars on SSIs and environmental cleaning and disinfection and reprocessing reusable medical devices for 271 participants (80 male, 191 female) and 270 participants (91 male, 179 female), respectively</li> </ul>
<p><b>Activity 2.5.1:</b> Continue support to county, sub-county, and facility-level IPC, OSH, and WASH activities for sustainable capacity</p> <p><b>Activity Description:</b> Support county and HF IPC champions to implement and review IPC CQI action plans and report on key IPC indicators through the Kenya Health Information System; disseminate and implement existing and newly prioritized IPC guidelines, SOPs, and job aids; document and share best practices and lessons learned</p>	5.4		<ul style="list-style-type: none"> <li>▪ Conducted quarterly supportive supervision in 20 IPC MTAps focus facilities (two in Murang’a, eight in Kisumu, eight in Nyeri, and two in Kilifi)</li> <li>▪ Provided technical support to focus facilities in Nyeri, Kisumu, and Kilifi with writing of and presenting seven IPC abstracts for the IPNET conference</li> <li>▪ Developed and distributed SOPs on hand hygiene and SSIs to all 20 MTAps-supported facilities</li> <li>▪ Supported 16 HFs in commemorating World Hand Hygiene Day (706 participants; 238 male, 468 female)</li> </ul>

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 3.1.1:</b> Strengthening AMS governance structures at national and county level</p> <p><b>Activity Description:</b> Support PPB in finalizing and utilizing the AMS surveillance tool; provide technical assistance to county AMS focal person in four MTaPS focus counties; support development/review and use of national outpatient prescription and inpatient treatment review sheets</p>	5.4	3.1	<ul style="list-style-type: none"> <li>Conducted MTC/AMS refresher training in Kisumu County targeting the seven focus HFs and one non-MTaPS sites (Muhoroni County Hospital); 39 participants (16 male, 23 female)</li> </ul>
<p><b>Activity 3.1.2:</b> Continue to strengthen institutionalization of AWWaRe categorization of antibiotics</p> <p><b>Activity Description:</b> Support revision of 2019 KEML; develop and implement of SOPs, tools, and job aids; disseminate practical guide for AWWaRe in four focus counties</p>	5.4	3.1	<ul style="list-style-type: none"> <li>Conducted KEML TWG validation meeting (29 participants; 12 male, 17 female) to validate the input received from the TWG, the infectious diseases team during the AWWaRe categorization workshop, and engagements with health professional associations</li> </ul>
<p><b>Activity 3.2.1:</b> Continue to strengthen and scale up health care human resource capacity for AMS through pre- and in-service trainings</p> <p><b>Activity Description:</b> Support PPB in incorporating AMR and AMS in core preservice curricula for pharmacy training programs; ongoing provision of AMS CPD curriculum in collaboration with professional bodies; support development of a PPS training package; scale up patient-focused AMS interventions</p>	5.4	3.2	<ul style="list-style-type: none"> <li>Participated in the opening panel discussion entitled “Emerging Trends in Pharmaceutical Care” highlighting emerging roles for pharmacists in the infectious disease space, particularly AMR, during the annual PSK conference</li> </ul>
<p><b>Activity 3.5.1:</b> Continue support to county, sub-county, and facility-level AMS activities for sustainable capacity</p> <p><b>Activity Description:</b> Support implementation for patient-focused AMS interventions in the 22 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</p>	5.4	3.5	<ul style="list-style-type: none"> <li>Conducted quarterly supportive supervision and mentorship in 17 MTaPS focus HFs and one community pharmacy (seven facilities and one community pharmacy in Kisumu, eight in Nyeri, and two in Murang’a)</li> <li>Reviewed AMS abstracts from focus HFs in Nairobi, Kisumu, Kilifi, and Nyeri; four abstracts were presented at the IPNET and PSK conferences in May 2023</li> <li>Conducted program oversight visits with MTaPS technical director Dr. Emmanuel Nfor to Nyeri County and PCEA Tumutumu Hospital</li> </ul>



## J. MALI

### GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

#### OVERVIEW

In Mali, MTaPS program implementation 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–FY23 Q1, MTaPS worked with the GCMN-RAM to develop TOR for the group as well as for its IPC and AMS TWGs. With MTaPS' support, the GCMN-RAM has been able to organize 7 coordination meetings of the 12 initially planned to monitor progress on the implementing the NAP-AMR. Additionally, MTaPS supported the IPC and AMS TWGs to organize their respective meetings. To date, the IPC TWG has organized eight meetings. The IPCAT2 tool has been used annually since 2020 to evaluate IPC core components at the national level. In 2023, IPCAT2 results indicated that two components have improved since 2022, and Mali had a score of at least 50% on four of the six IPC components assessed at the national level. The average score increased from 50% in 2022 to 54% in 2023. The AMS TWG also held four regular meetings.

In 2023, the evaluation using the WHO checklist of essential national core elements for AMS programs indicated that all core components had a score of at least 75%, including 75% for the national plan and strategy; 75% for regulations and guidelines; 80% for awareness, training, and education; and 100% for supporting technology and data.

MTaPS supported the DGSHP and DPM to establish 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 DGSHP to organize four virtual meetings to monitor the implementation of IPC activities described in the 16 facility action plans. MTaPS also supported three supervision visits to the HFs. MTaPS supported the DPM and the National Agency for the Accreditation and Evaluation of Health Facilities (ANAES) in organizing six virtual meetings and conducting one DTC supervision visit to each of the 16 HFs. Additionally, MTaPS supported the National Institute of Public Health, DGSHP, and DPM to develop the 2023–2027 NAP-AMR, 2021–2025 AMS action plan, and 2023–2027 IPC strategic plan.

Further, MTaPS supported the development and implementation of e-Learning platforms that are now installed and operational at both the DGSHP and the *Faculte de Medecine et d'Odontostomatologie* (Faculty of Medicine and Odontostomatology). MTaPS supported the DPM to print and disseminate 1,520

toolkits that include the facilitator guide, participant manual, and infectious diseases treatment guidelines to HCWs.

## QUARTER 3/YEAR 5 ACHIEVEMENTS & RESULTS

### RESULT AREA I: EFFECTIVE MSC OF AMR

#### **Activity 1.1.1. Provide technical and operational support to the GCMN-RAM and its two sub-committees (IPC and AMS)**

MTaPS supported the GCMN-RAM to organize the AMR coordination group meeting. The objectives of this meeting were to assess the implementation of NAP-AMR activities carried out in 2022, analyze the achievement of MTAps PY5 activities, and develop a sustainability plan for MTAps-supported activities. Thirty participants (11 female) from the human health, animal health, environmental, and agriculture sectors attended the meeting. Participants recommended establishing an ad-hoc group to work on the political adoption of the NAP-AMR, formalize the AMR thematic group in the OH platform, and appoint sectoral focal points.



AMR coordination group meeting, Mali, April 2023. Photo credit: Famory Samassa, MTAps

MTaPS, in coordination with USAID/Breakthrough ACTION, *Reponse aux différentes Crises Causees par la COVID-19 au Mali* of Expertise France, Regional Program Support to Pandemic Prevention in ECOWAS of the German Agency for International Cooperation, and other projects and donors, supported the OH platform to organize a May 2023 workshop for 28 OH participants (11 female, 17 male) representing the animal health, human health and environmental sectors. Workshop objectives included drafting the ministerial note that establishes the thematic groups; advocating for improvements in the functioning of the various thematic groups, including the AMR thematic group; brainstorming ideas on how best to improve the current decree establishing the national OH platform; and validating each thematic group's 2023 work plan.

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

### ***Activity 3.5.2: Support the GCMN-RAM, ANAES, and DPM in monitoring implementation of AMS practices at 16 health facilities***

MTaPS supported the *Groupe de Coordination Multisectoriel National de la Resistance aux Anti-Microbiens*, *Agence National d'Accreditation et d'Evaluation des etablissements de Sante*, and *Direction de la Pharmacie et du Medicament* in monitoring AMS practices at 16 HFs. Four tools were utilized: the WHO tool for AMS program implementation at the facility level, the antibiotics use monitoring tool, the CQI implementation plan, and a DTC supervision tool. The monitoring exercise aimed at assessing the implementation of DTCs' action plans, evaluating antibiotics prescription indicators within the supported health facilities, assessing the availability of infectious diseases treatment guidelines in the supported HFs, and assessing AMS practices using the WHO tool. All 16 supported HFs were implementing the CQI plan tailored specifically for their facility needs, and all facilities had infectious disease treatment guidelines on hand. The assessment also demonstrated that 57% of surveyed patients can correctly repeat instructions and dosage of their antimicrobial prescriptions, and 62% of MTaPS-supported facilities are compliant with the AWaRe categorization.



DTC members at Yelimane Health Center, Mali, take part in a supervision visit, May 2023. Photo credit: Ousmane Traore, MTaPS

## **RESULT AREA 2: IPC**

### ***Activity 2.1.1: Support the IPC TWG to disseminate the national IPC strategic plan for the human health sector***

MTaPS assisted the *Direction Generale de la Sante et de l'Hygiene Publique* to print and disseminate 500 copies of the national IPC strategic plan. The plan was disseminated to the MOH, Ministry of Environment, Ministry of Animal Resources, Ministry of Agriculture, finance and technical partners, and medical professional associations.

### **Activity 2.5.1: Support the IPC TWG and DGSHP in monitoring implementation of IPC practices at health facilities**

MTaPS supported the DGSHP to organize IPC supervision in 16 supported HFs. This supervision resulted in improvements in IPC practices—88% of facilities showed improved performance in core IPC components and hand washing compliance. Functional IPC committees in all supported facilities have contributed to these improvements. As demonstrated by the IPCAF results, 100% of the HFs have improved IPC practices since baseline. Regarding hand hygiene, facilities are making noticeable improvements except in the case of the Hospital of Dermatology and Hospital of Sikasso, where recent scores were lower than baseline. With regard to core IPC components, nine HFs reached intermediate level and seven are at the advanced level. Data show that supported facilities scored at least 75% on the WHO COVID-19 score card. Further, standardized tools to better monitor IPC were utilized, and CQI plans were implemented in all 16 supported facilities. The CQI plans' implementation average rate is 53%, up from 39% in 2022.

### **Activity 2.5.2: Strengthen capacity of three local training institutions to manage e-Learning on IPC and AMS for both pre- and in-service health care workers**

MTaPS continues to support the FMOS and DGSHP in managing the e-Learning platform on IPC and AMS. The DGSHP and FMOS e-Learning platforms have 368 registered users, including 245 for the IPC standard course, 95 for the COVID-19 IPC course, and 28 for the AMS course. Of the 368 people registered on the e-Learning platforms, 65 have obtained their certificate of course completion, including 49 standard IPC certificates and 16 COVID-19 IPC certificates.

## **QUARTER 3 BEST PRACTICES/LESSONS LEARNED**

Strong partner involvement in technical work can lead to stronger ownership and facilitate political endorsement from the government. The engagement of the DGSHP in the development of the IPC strategic plan enabled the Minister of Health's endorsement.

## **ACTIVITIES AND EVENTS FOR NEXT QUARTER**

<b>Activity and Description</b>	<b>Date</b>
<b>Activity 1.1.1:</b> Provide technical and operational support to the GCMN-RAM and its two sub-committees (IPC and AMS)	July 2023
<b>Activity 2.5.1:</b> Support the IPC TWG and DGSHP in monitoring implementation of IPC practices at health facilities	September 2023
<b>Activity 2.5.2:</b> Strengthen capacity of three local training institutions to manage eLearning on IPC and AMS for both pre- and in-service health care workers	July–September 2023
<b>Activity 3.5.1:</b> Support the DPM to develop and disseminate IEC materials on AMS	July–September 2023
<b>Activity 3.5.2:</b> Support the GCMN-RAM, ANAES, and DPM in monitoring implementation of AMS practices at health facilities	September 2023

**Table 19. Quarter 3, FY23, Activity Progress, Mali—GHSA**

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<b>Activity 1.1.1:</b> Provide technical and operational support to the GCMN-RAM and its two sub-committees (IPC and AMS)	5	5.4	MTaPS supported the GCMN-RAM to hold two meetings: <ul style="list-style-type: none"> <li>▪ The AMR coordination group meeting with a pause and reflect session was held April 26, 2023. Under the leadership of the National Institute of Health, all four sectors of the OH platform participated.</li> <li>▪ The OH thematic groups formalization workshop was held May 15–16, 2023, with participation from the animal health, human health and environmental sectors.</li> </ul>
<b>Activity 2.1.1:</b> Support the IPC TWG to disseminate the national IPC strategic plan for the human health sector	5	5.4	MTaPS supported the distribution and dissemination of 500 copies of the national IPC strategic plan to the OH platform sectors and partners.
<b>Activity 2.5.2:</b> Strengthen capacity of three local training institutions to manage eLearning on IPC and AMS for both pre- and in-service health care workers	5	5.4	MTaPS continued to support the FMOS/FAPH and DGSHP to manage e-Learning on IPC and AMS through the following activities: <ul style="list-style-type: none"> <li>▪ Routinely reminding participants at MTAps-supported meetings and events about the e-Learning courses and sharing the link with them to access the courses</li> <li>▪ Following up with the DGSHP, FMOS, and FAPH for data on enrollment and use of their e-Learning platforms</li> </ul>
<b>Activity 2.1.1:</b> Support the IPC TWG to disseminate the national IPC strategic plan for the human health sector			MTaPS supported the DGSHP to organize IPC supervision in all 16 supported HFs.
<b>Activity 3.5.2:</b> Support the GCMN-RAM, ANAES, and DPM in monitoring implementation of AMS practices at health facilities	5	5.4	MTaPS supported the GCMN-RAM, ANAES, and DPM in monitoring implementation of AMS practices at supported HFs.

## MATERNAL, NEWBORN, AND CHILD HEALTH ACTIVITIES

### OVERVIEW

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

### CUMULATIVE PERFORMANCE TO DATE

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

MTaPS supported two meetings of the CNAMM in FY22. In May and September 2022, MTAps helped the DPM organize two sessions of the National Market Authorization Commission 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 to set up and operationalize an official website.

In February 2023, MTAps supported the DPM to evaluate 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 NEML and 50% of drug managers using the latest edition. Only 6% (21/380) of prescribers have the latest edition, and 52% of those use it for the prescription of drugs.

### QUARTER 3/YEAR 5 ACHIEVEMENTS & RESULTS

#### ***Activity 3.1.6.2: Assist the DPM to set up an operational website***

MTaPS supported the DPM to set up a website to disseminate the directory of registered medicines and medical products or nomenclature, as well as the NEMP, MA processes and procedures, and public information, in a timely manner so that it is available to customs officers and inspectors, medicine manufacturers, and health professionals. The directory provides information on the various issues with substandard or falsified medical products, including MNCH commodities. It also provides information on



proper storage condition requirements for medicines and medical products in general and oxytocin in particular at all levels, including wholesalers.

The DPM, in collaboration with MTaPS, launched the website on June 16, 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.

### QUARTER 3 BEST PRACTICES/LESSONS LEARNED

Before revising the NEML, it is important to assess whether the current NEML is being used, and if not, why, as well as how it is being used. These answers will inform the content of the new NEML. The evaluation of the list made it possible to have a general overview of its use by the care providers so their suggestions for possible the withdrawal or addition of drugs to the list. This information will also be used during the revision of the NEML.

### ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<b>Activity 5.4.6:</b> Support the DPM to build the capacity of health practitioners on infectious disease treatment guidelines and appropriate prescribing <ul style="list-style-type: none"><li>▪ Develop a training module on the infectious disease treatment guidelines</li><li>▪ Conduct training session for health care practitioners</li></ul>	July–September 2023



**Table 20. Quarter 3, FY23, Activity Progress, Mali—MNCH**

Activity	MTaPS Objective(s)	MNCH Result(s)	Activity Progress
<b>Activity: 3.1.6.2:</b> Assist the DPM to set up an operational website (FY4 activity)	3.1	3.1	MTaPS supported the design of the website, which launched in June 2023.
<b>Activity: 5.2.8</b> Support DPM to evaluate the use of medicines within the NEML in health facilities	5.2	5.2	MTaPS supported the DPM to evaluate the use of the NEML in HFs, and the final report is available (Q2).

## **K. MOZAMBIQUE**

### **FIELD SUPPORT ACTIVITIES**

#### **OVERVIEW**

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

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

#### **CUMULATIVE PERFORMANCE TO DATE**

To strengthen pharmaceutical regulatory systems, MTaPS provided support to transform the regulatory function under the National Directorate of Pharmacy (DNF) into the autonomous ANARME, IP, establish a robust regulatory framework, enhance capacity and skills, and contribute to the DNF strategic plan. This transformation empowers ANARME, IP to make independent regulatory decisions, strengthen investigation standards, and safeguard the public from substandard and falsified health products. Over the life of the project, MTaPS trained ANARME, IP in several areas, including Good Review Practices, QMS, and the assessment of bioequivalence studies to create a solid regulatory workforce. MTaPS also supported the development of a new Price Control Regulation that enables ANARME, IP to curb excessive pricing in the pharmaceutical sector, promoting wider access to medicines and health products across the supply chain. To help regulators gain a better understanding of the bottlenecks experienced by applicants when submitting their products for MA, MTaPS supported ANARME, IP in holding a workshop with manufacturers and other stakeholders to discuss and clarify the MA process.

In PY2, the National Bioethics Committee on Health approved the protocol for implementing active safety monitoring of the TLD antiretroviral therapy regimen. ANARME, IP and the national HIV program, with support from MTaPS, trained 292 health care workers from the implementing sites (204 male, 88 female), along with 18 participants from the central level (PV focal persons from ANARME, IP, focal persons from HIV care and treatment, focal person from the TB program, and focal persons from the hospital pharmacy department) on the protocol, SOPs, and proper data collection. Following the

training, 9 of the 10 selected HFs in April 2020 began enrolling into the study cohort both treatment-naïve HIV/TB co-infected patients and patients who transitioned from nevirapine-based regimens to TLD. The 10th facility was used as a COVID-19 treatment center, so it did not enroll patients.

In PY3, further support included patient enrollment and follow-up as well as quarterly on-site and virtual supervision by ANARME, IP and the HIV program to the nine study sites. This supervision served to continuously mentor and support the site HCWs to implement the protocol, identify challenges, develop action plans to address gaps, and undertake corrective actions. In addition, MTaPS, in collaboration with ANARME, IP, generated quarterly progress updates on the number of enrolled patients, number of follow-up visits, AEs reported, findings of supervision visits, strengths and challenges in the implementation of the program, and recommendations for alleviating those challenges. By the end of the study on February 28, 2022, the targeted sample size of 3,000 people living with HIV had successfully been enrolled. MTaPS supported ANARME, IP in data cleaning to improve the quality of the data collected during the patient follow-up visits. Their unique patient records were entered into PViMS. MTaPS helped ANARME, IP organize a virtual review meeting with all site teams to present the progress report, with a focus on enrolled patient follow-up. During Q2 of PY4, MTaPS supported ANARME, IP to physically visit the study sites and offer guidance on closing the active surveillance activity and submitting all study materials (tablets; filled data collection forms A, B, and C; and informed consent forms) to ANARME, IP at the central level for final storage and analysis. MTaPS supported capacity building on causality assessment for nine (5 female, 4 male) ANARME, IP internal staff, which also provided a practical session on using PViMS to conduct causality assessments. Data analysis for the TLD implementation was initiated.

In Mozambique, the use of a once-weekly dose of isoniazid-rifapentine for 12 weeks (3HP) for TPT is being implemented in addition to the continued use of a once-a-day dose of INH for 6 months' preventive treatment. In PY3, MTaPS built upon its ongoing support to ANARME, IP and the HIV program on active TLD safety surveillance to establish a similar safety surveillance system to actively monitor patients using INH and 3HP for TPT. ANARME, IP and the national HIV and TB programs, with support from MTaPS, developed a protocol for TPT active surveillance, data collection forms, standard operating procedures, and training materials that were approved by the National Bioethics Committee on Health, with further approval from the CDC in PY4 Q2 (March 2022). For this new study, five health facilities (four health centers and one hospital) in two provinces (Gaza and Maputo City) were selected as study sites. During PY4, MTaPS also periodically engaged with certain stakeholders, including ANARME, IP, the NTP, USAID, the CDC and its implementing partners—*Centro de Colaboração em Saúde*, the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), and the Aurum Institute—to plan for implementation. MTaPS procured the tablets required for facility-level data collection and management.

In April 2022, a training-of-trainers course was conducted for 10 central-level focal persons (4 female, 6 male) from ANARME, IP and staff from *Centro de Colaboração em Saúde* and EGPAF. In July 2022, MTaPS supported ANARME, IP to train provincial and district focal persons on the TPT protocol, SOP, and data collection forms, followed by cascade training to the health facility HIV, PV, and TB focal persons from the five study sites. Patient enrollment was initiated in August 2022 and extended due to low enrollment, prior to its close by ANARME on March 31, 2023. With the different patient enrollment dates and the protocol requirement that follow-up should be for 6 months, the last patients enrolled will be followed until the end of September 2023. The PViMS tool was updated with TPT data collection

forms. Orientation of the focal health care workers on the usage of PViMS for data collection was conducted in Q1 and Q2, after which the facilities began data entry. Three coordination meetings have been conducted with ANARME, IP, the national HIV program, *Centro de Colaboração em Saúde*, and EGPAF focal persons to plan and undertake two rounds of onsite supervisory visits to the five sites, i.e., Xilembene HF and Mandlakazi HF in Gaza and I de Junho HF, Albasine HF, and Xipamanine HF in Maputo City. Participants in the meetings also discussed implementation status, proposed changes to the study protocol, and supervision visit findings, and also identified gaps and developed mitigations to address them.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

By June 2023, 14 AEs had been reported from over 1,600 follow-up visits that have taken place to date of the 458 patients enrolled in TPT active surveillance across the 5 implementing facilities.

In June, a third supportive supervision exercise undertaken by ANARME, IP, in collaboration with the provincial focal persons and MTaPS, was initiated. This exercise assessed the progress of implementation at the two study sites in Gaza and made recommendations to the provincial focal persons to address the identified gaps. The main challenge noted at the sites was the backlog of data needing entry into PViMS that resulted from previously trained staff being replaced by incoming staff with limited knowledge of how to undertake data entry. That challenge was addressed by MTaPS providing on-the-job training for the new staff during the supervision exercise.

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

#### *Activity 3.1.1: Provide technical assistance to implement an active PV program for safety monitoring of TPT scale-up in Mozambique (activity continuing from FY22)*

A total of 458 patients have been enrolled, nearly doubling the 298 enrolled patients reported in the previous quarter. To date, a cumulative 1,601 follow-up visits have been completed, which represents a four-fold increase from the 367 reported in Q2, with 14 AEs reported in 3 of the study sites. All AEs were confirmed as mild and managed at the facility level (table 21).

**Table 21: Patients enrolled since the start of the TPT active surveillance system and follow-up visits as of June 2023**

Health Facility	Location (district, province)	Month patient enrollment commenced	No. of enrolled patients as of March 31, 2023 (Form A)	No. of patient follow-up visits as of June 2023 (Form B)	No. of reported AEs as of June 2023
Xipamanine	Nilhamankulu, Maputo City	August 2022	63	195	2
Albasine	KaMavota, Maputo City	August 2022	111	217	-
I de Junho	KaMavota, Maputo City	August 2022	91	287	10
Xilembene	Chokwe, Gaza	August 2022	78	349	-
Mandlakazi Rural Hospital	Chokwe, Gaza	August 2022	115	553	2
Total			458	1,601	14

In June, ANARME, IP initiated a third supportive supervision exercise, working with the provincial focal persons and MTaPS. Supervision was first done for the Gaza sites due to a health worker strike in the Maputo City area. Visits to the sites in Maputo City finally started at the end of June after the strike was canceled, and they will be completed in the next quarter.

The supervision visits assessed implementation progress at the sites, enabling the central level team to obtain the number of enrolled patients and follow-up visits and to make recommendations to the provincial focal persons to address identified gaps. The key finding at the sites was the backlog in data entry into PViMS. This challenge was due to high staff turnover, with previously trained staff exiting without providing proper handover to incoming staff who had limited knowledge of the data entry process, and also due to technical issues with the PViMS. The issues were addressed by providing on-the-job training of the new staff and onsite technical support by the visiting teams (such as updating the version of PViMS in use at the sites), as well as the capture and escalation to the system developer of other PViMS concerns. In addition, MTaPS has engaged a short-term consultant to improve the coordination of TPT active surveillance study activities and provide more intensive support to the sites. That study coordination consultant was part of the supervisory team and is working with the data management consultant to ensure correct and complete data capture at the five sites, including into PViMS, in preparation for a final data analysis after the study closes.

MTaPS continued to support ANARME, IP to oversee study implementation and ensure coordination and collaboration among stakeholders. A coordination meeting was held on May 11, 2023, among ANARME, IP and the National TB and HIV programs, with MTaPS technical support. In previous quarters, it was noted that a Ministry of Health (MISAU) circular providing guidance to selected provinces, including those where the five study sites are located, specified the exclusive use of the 3HP regimen as it is a shorter regimen for TPT. Hence, ANARME, IP began considering the implication of this guidance on the TPT study and aligning the protocol with this circular by withdrawal of the INH arm. The INH arm withdrawal means reducing the patient enrollment target, which in turn also allows the target to be reached more easily and quickly, as well as conversion to a cohort event monitoring study.

## **BEST PRACTICES/LESSONS LEARNED**

- Consistent and direct follow-up with the focal persons at the sites and the HF data manager to identify data-related problems at the primary source level and correct them at the site can improve data quality, including timely reporting.
- Starting supervisory visits to the study sites immediately following HCW training and study implementation is crucial so the SOPs can be reinforced in practice. Doing so would minimize errors in implementing the study.
- It is critical for the MOH central level team to work closely with the provincial level team in the on-the-job-training of, and communication with, site staff. This helps to minimize interpretation errors, as we have noted variances in the way the different provincial teams transmit the study data.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<p><b>Y4 Activity 3.1.2/Y5 Activity 3.1.1:</b> Implement an active PV program for safety monitoring of TPT scale-up in Mozambique</p> <ul style="list-style-type: none"> <li>▪ Support the study sites in the capture of patient follow-up data into the TPT active safety monitoring data collection forms and the entry of the forms into PViMS.</li> <li>▪ Support ANARME, IP to conduct the preliminary data analysis and causality assessment.</li> </ul>	July–August 2023
<p><b>Y4 Activity 3.1.1:</b> Provide technical assistance to establish an active surveillance system for newly introduced medicines in HIV and TB programs</p> <ul style="list-style-type: none"> <li>▪ Share the study results report with ANARME, IP for validation and incorporate any feedback prior to completion.</li> </ul>	July–August 2023

**Table 22. Quarter 3, FY23, Activity Progress, Mozambique—FIELD SUPPORT**

Activity	MTaPS Objective(s)	Activity Progress
<p><b>Y4 Activity 3.1.2/Y5 Activity 3.1.1:</b> Implement an active PV program for safety monitoring of TPT scale-up in Mozambique (activity continuing from FY22).</p> <p><b>Activity Description:</b> Working with ANARME, IP, the TB program, IPs, and MTAps global expert University of Washington, continue to support activities to ensure successful implementation and completion of TPT ASM; assist in analysis and interpretation of data; conduct periodic data cleaning and quality checks; generate progress update reports along with lessons learned and recommendations.</p>	5.3	A third round of supervisory and technical support visits started with the two HFs in Gaza (Xilemebene and Mandlakazi). The supervision team assessed progress in implementation and provided onsite technical support and training. Refresher sessions on PViMS use were undertaken for the 2 HF focal points, focusing on data entry. Review of physical forms vs. entry in PViMS was undertaken to identify gaps for the facilities to address.
<p><b>Y4 Activity 3.1.1:</b> Provide technical assistance to establish an active (medicines safety) surveillance system for newly introduced medicines in national HIV and TB programs.</p> <p><b>Activity Description:</b> Working with ANARME, IP, the HIV program, and MTAps global expert University of Washington, continue to support the compilation and validation of the final active surveillance report with recommendations to inform further decisions on the continued safety of the TLD regimen in the population.</p>	5.3	MTaPS is currently collaborating with its global partner to complete data analysis and compile a draft final report.



# GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

## OVERVIEW

The GHSA-related goal of MTaPS in Mozambique is to strengthen technical and managerial capacities within the human and animal health systems to contain the emergence and propagation of AMR. This goal is consistent with USAID’s strategic objective to slow the emergence of resistant microbes and prevent the spread of resistant infections and is also a priority area for the National Action Plan for Health Security (PASS, formerly PNASS). Controlling the global hazard of AMR relies on robust pharmaceutical systems worldwide that address the appropriate use of, and access to, medicines and health technologies, which is the core mission of MTaPS. The MTaPS GHSA strategy is grounded in a system-strengthening approach in three technical areas pivotal to containing AMR: MSC-AMR (JEE 2.0 indicator P.3.1), IPC (JEE 2.0 indicator P.3.3), and AMS (JEE 2.0 indicator P.3.4). Version 3 of the JEE tool was released in June 2022, and MTaPS is aligning activities to this version as much as possible without disrupting the measurement of progress made so far.

## CUMULATIVE PERFORMANCE TO DATE

In Mozambique, the JEE was conducted in 2016. The country received a score of 3 for IPC and a score of 1 for AMS capacities. Mozambique received no baseline score on MSC-AMR because that indicator was not included in the WHO JEE 1.0 tool used at the time, although it was included in the JEE 2.0 released in 2018. By March 2023, MTaPS helped country stakeholders achieve progress in MSC-AMR by supporting 50% of level 2 benchmark actions (with 1 action completed outside MTaPS support in this level), 50% of level 3 benchmark actions (with the remaining 50% of benchmark actions at this level achieved outside MTaPS support), and 25% of level 4 benchmark actions. On IPC, MTaPS supported the IPC team from the DNAM-Department of Nursing (DNAM-DE) to complete 4 out of 5 (80%) benchmark actions for capacity level 2 and 4 out of 6 (67%) benchmark actions for capacity level 3. For AMS, MTaPS supported 2 out of 4 (50%) benchmark actions for capacity level 2; 3 out of 6 (50%) benchmark actions for capacity level 3; and 1 out of 7 benchmark actions (14%) for capacity level 4.

Since PY3, MTaPS has been collaborating with the MISAU, ANARME, IP, and the National Institute of Health (INS), among other stakeholders, to establish a multisectoral coordinating structure for AMR in the country. MTaPS supported the drafting of the TORs for the MCC and its secretariat and for the AMS and IPC TWGs. The AMR MCC now has four TWGs—IPC; AMS; surveillance and research; and communication, education, and awareness—all with TORs. The health ministry appointed a focal point for AMR MCC and for each TWG to lead the secretariat and TWGs, respectively. To date, with MTaPS support, four AMR MCC meetings, two IPC TWG meetings, and two AMS TWG meetings have been held. The MCC secretariat and AMS TWG have held meetings that focused on planning and organizing the 2021 and 2022 WAAW as well as advance planning for the 2023 WAAW. The PY4 IPC TWG meeting discussed the TWG’s performance against its plan of action and adapted guidance on implementing a CQI approach for use in the local context. This guidance will be used to orient HFs on implementation of CQI to improve IPC practices.

In PY2 and PY3, COVID-19 funds from USAID were leveraged for IPC training in all provinces to bolster the IPC response to the pandemic. Seven provincial hospitals (PHs)—Inhambane PH, Tete PH,

Xai-Xai (Gaza) PH, Lichinga PH, Pemba PH, Chimoio PH, and Matola PH— were targeted for focused support in the use of standard tools for monitoring IPC and informing programmatic improvement. MTaPS also supported the central-level IPC program to identify gaps using the WHO IPCAT2 tool and to develop an action plan to address those gaps as well as an IPC situation analysis that informed the development of a national IPC plan with WHO support in PY5. MTaPS also assisted the seven PHs in improving their IPC performance using WHO’s IPCAF tool. In PY4, to strengthen the capacity of provincial IPC teams, MTaPS trained 44 master trainers (21 female, 23 male) on IPC and conducted a repeat IPCAT2. Repeat IPCAF was also done for three selected provincial hospitals (Inhambane PH, Tete PH, and Xai-Xai PH) in PY4 and again in PY5. Based on the IPCAT2 and IPCAF results, MTaPS provided technical support to develop an HAI surveillance manual to address the low performance in the IPC component of HAI surveillance.

MTaPS, in collaboration with the DNAM-Department of Hospital Therapeutics (DNAM-DTH), ANARME, IP, and INS, implemented hospital-level AMS interventions in three of the seven targeted HFs (Inhambane PH, Tete PH, and Xai-Xai PH) that had been trained on AMS in February 2020. In PY4, MTaPS, in collaboration with ANARME, IP and INS, supported the DNAM-DTH in baseline AMS assessment. In consultation with HF staff, the results were used to develop facility AMS action plans. In PY5, MTaPS and DNAM-DTH conducted a repeat AMS assessment at the 3 HFs that showed improvement to an acceptable rating in AMS program implementation. MTaPS also supported ANARME, IP to initiate the process of categorizing antibiotics into the WHO AWaRe classification system, with the aim of inserting the update into the Essential Medicines List and National Medicines Formulary. In addition, MTaPS, in collaboration with ANARME, IP, undertook an assessment via desk review of the country’s AMS policies and regulatory framework for the human health sector. MTaPS supported ANARME, IP in developing a draft regulation for prescription-only sales of key antibiotics, which is pending stakeholder validation, and will help establish a firm foundation for AMS in the country by creating a solid regulatory framework to control the use of antimicrobials. This effort complements the MTaPS field support work plan, which from PY1 to PY3 supported the revision of laws and regulations pertaining to the role of ANARME, IP as the national regulatory authority.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

MTaPS supported DNAM-DE and DNAM-DTH in undertaking joint supportive supervision site visits with assessment of progress in IPC and AMS program implementation to the three focus provincial hospitals. All three MTaPS-supported HFs showed improved performance in AMS core elements and IPC core components, with Inhambane achieving the best results.

### **RESULT AREA I: EFFECTIVE MSC OF AMR**

#### ***Activity 1.1.1: Continue to support the governance and organizational capacity of the AMR MCC, gearing toward sustainability***

On May 10, 2023, MTaPS participated in a technical meeting to review the draft animal health sector AMR communication strategy, which was validated and unanimously approved. In addition, MTaPS supported the organization of an AMR MCC meeting on May 11–12, 2023, in Maputo City that conducted advance planning for the upcoming 2023 WAAW to be held in November 2023. Twenty-four participants (12 female, 12 male) attended. An action plan and its budget to advocate for resources

mobilization were developed, and the MCC secretariat will lead in mobilizing resources for the activities and monitoring the action plan’s implementation. As part of its support to ANARME, IP and DNAM-DTH, MTaPS procured 11 desktops, 5 laptops, 3 black-and-white printers, and 1 color printer. The equipment will enhance the capacity of the MCC secretariat housed at ANARME, IP to manage multisectoral coordination operations and the collection and analysis of facility level antimicrobial use and AMS program implementation data by DNAM-DTH.

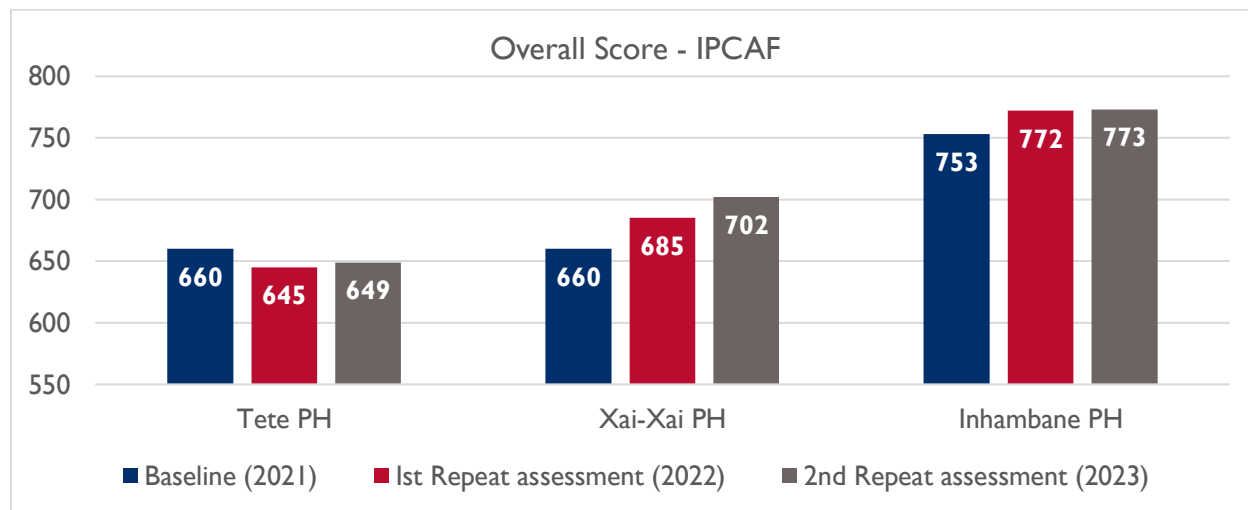
**RESULT AREA 2: IPC**

**Activity 2.2.1: Enhance and sustain governance for IPC**

MTaPS supported a workshop led by DNAM-DE from May 23–26, 2023, where stakeholders (13 female, 10 male) participated to develop and then validate an HAI surveillance manual. DNAM-DE and MTaPS are working to refine the validated document before it is finalized and submitted to MISAU for approval. In June, MTaPS supported DNAM-DE to hold a workshop to validate IPC protocols developed, with MTaPS technical assistance, in PY4. MTaPS joined DNAM-DE and other IPC stakeholders in a WHO-organized workshop in April 2023 to develop a draft national IPC plan based on a situational analysis with recommendations that was developed earlier by MTaPS from IPCAT2 and IPCAF assessments.

**Activity 2.5.1: Continue to support the implementation of prioritized IPC interventions in selected HFs**

MTaPS supported DNAM-DE to conduct repeat IPC assessment site visits to the three MTaPS-supported HFs (Xai-Xai, Inhambane, and Tete) to assess progress in IPC program implementation. The three supported HFs demonstrated improvement in IPC interventions and are rated as advanced level (figure 7).



**Figure 7 IPC assessment results at three facilities, Mozambique**

Scores out of 800. Key to scoring: Inadequate level: 0–200; Basic level: 201–400; Intermediate level: 401–600; Advanced level: 601–800. Note: For Tete, the decline from 660 at baseline to 645 in 2022 was due to a misunderstanding by assessors during the baseline assessment that led them to award points without considering the need to see evidence of results claimed by the facility.

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

### *Activity 3.5.1: Continue to support the design and implementation of AMS interventions in priority health facilities*

MTaPS supported DNAM-DTH and the provincial head of hospital therapeutics in onsite visits to provide technical assistance and repeat facility level AMS assessment in the three MTAps-supported provincial hospitals (Xai-Xai, Inhambane, and Tete). AMS practices have improved in all three facilities to the “acceptable performance” level. Xai-Xai PH moved from 65% at baseline to 85%; while Inhambane progressed from 55% to 78% and Tete from 68% to 83%. The visiting teams also mentored the health facilities’ AMS subcommittees to increase their ability to conduct independent periodic (monthly) AMS self-assessments, the results of which will be reported to the central level. The facility AMS action plans were updated by the visiting teams, which also advocated to the HF administration to budget for AMS activities during the facility’s annual budgeting process.

### BEST PRACTICES/LESSONS LEARNED

- Collaborate closely with counterparts, i.e., ANARME, IP, DNAM-DE, and DNAM-DTH, to ensure that government priorities are aligned with the MTAps work plan to facilitate smooth and timely implementation of activities. Meetings held with these counterparts in March and April contributed to resolving activity prioritization and scheduling challenges with the different departments.

### ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<p><b>Activity 1.1.1:</b> Continue to support the governance and organizational capacity of the AMR MCC, gearing toward sustainability</p> <ul style="list-style-type: none"> <li>Continue support to AMR MCC and its TWGs in multisectoral coordination.</li> </ul>	July-August 2023
<p><b>Activity 2.2.1:</b> Enhance and sustain governance for IPC</p> <ul style="list-style-type: none"> <li>Work with DNAM-DE to finalize the HAI manual and IPC guidelines (protocols) and submit for MISAU approval.</li> <li>Undertake repeat IPCAT2 and update the IPC TWG’s action plan for the year.</li> </ul>	July-August 2023
<p><b>Activity 2.5.1:</b> Continue to support the implementation of prioritized IPC interventions in selected HFs</p> <ul style="list-style-type: none"> <li>Work with DNAM-DE to set up remote monitoring of supported facilities’ IPC committees with the provincial IPC focal person</li> <li>Advocate for IPC TWG, DNAM-DE, and provincial IPC focal persons to leverage support from other implementing partners to continue supporting the facility IPC committees.</li> </ul>	July-August 2023
<p><b>Activity 3.1.1:</b> Continue to strengthen the governance of the AMS program at the national level</p> <ul style="list-style-type: none"> <li>Undertake central level AMS baseline assessment using the WHO AMS toolkit.</li> </ul>	July-August 2023
<p><b>Activity 3.5.1:</b> Continue to support the design and implementation of AMS interventions in priority HFs</p> <ul style="list-style-type: none"> <li>Present the HF AMS assessment results to the wider DNAM-DTH staff and build their capacity in the use of data generated from the AMS tool for decision-making.</li> <li>Remote support to the 3HFs to assess implementation of AMS action plans working with DNAM-DTH.</li> </ul>	July-August 2023

**Table 23. Quarter 3, FY23, Activity Progress, Mozambique—GHSA**

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Continue to support the governance and organizational capacity of the AMR MCC, gearing toward sustainability</p> <p><b>Activity Description:</b> Continue to support the holding of MSC meetings and the functionality of the AMR MCC and its IPC and AMS TWGs. Commemorate the 2022 WAAW through organization of public events and support ANARME, IP and stakeholders in preliminary planning for 2023 WAAW; working jointly with ANARME, IP, FAO, and other animal health stakeholders, support the validation of the AMR communications strategy; procure computers, laptops, and color printers to support the operations of the MCC Secretariat housed at ANARME, IP.</p>	5.4	1.1	<p>MTaPS worked with ANARME, IP, DNAM-DTH, and stakeholders to develop an action plan and budget for advance preparation for the 2023 WAAW. A committee was created to prepare the key messages, organize symposiums, television spots, social media, and educational lectures for health providers.</p> <p>Delivery of laptops and related equipment expected in the first week of August, prior to MTAps transferring ownership to MISAU.</p>
<p><b>Activity 2.2.1:</b> Enhance and sustain governance for IPC</p> <p><b>Activity Description:</b> Support the IPC TWG in organizing routine review meetings; review implementation status of the IPC TWG's action plan; monitor strengthening of the core components of the IPC program using the WHO tools; working with DNAM-DE and stakeholders, develop an HAI surveillance manual; validate the draft IPC guidelines/protocols/procedures document developed in PY4.</p>	5.4	2.2	<p>MTaPS held two planning meetings with IPC TWG to plan upcoming workshops. In May, DNAM-DE and stakeholders (13 female, 10 male) developed and validated the HAI surveillance manual. Draft national IPC plan developed in a WHO-supported workshop with DNAM-DE and provincial representatives in April 2023 based on situation analysis provided by MTAps. Workshop with 24 participants (7 male, 17 female) validated IPC protocols June 20–23, 2023; incorporated 8 new protocols developed by DNAM-DE.</p>
<p><b>Activity 2.5.1:</b> Continue to support the implementation of prioritized IPC interventions in selected HFs</p> <p><b>Activity Description:</b> Provide technical assistance to DNAM-DE and provincial focal persons on selected IPC interventions based on action plans for the three intervention hospitals, including ongoing support on hand-hygiene self-assessment; follow up on the progress of facility IPC action plan implementation; implement CQI through the IPC TWG and provincial focal persons.</p>	5.4	2.5	<p>MTaPS supported IPC site visits to the 3 supported HFs in April 2023, working with DNAM-DE and DNAM-DTH. WHO tools (IPCAF and HHSAF) are used to assess IPC programs and monitor progress on action plans of IPC interventions with a CQI approach. The results show improvement in IPC practices in the 3 HFs from baseline assessment in 2021 to the repeat assessment in 2023. Supported revitalization of facility IPC committees and provided mentorship to their members.</p>
<p><b>Activity 3.1.1:</b> Continue to strengthen the governance of the AMS program at the national level</p> <p><b>Activity Description:</b> Undertake central level AMS assessment and develop an action plan to address identified gaps. Procure computers, laptops, and color printers to support the operations of focal AMS TWG members of DNAM-DTH</p>			<p>No activity during the quarter.</p>

<p><b>Activity 3.5.1:</b> Continue to support the design and implementation of AMS interventions in priority HFs</p> <p><b>Activity Description:</b> In collaboration with DNAM-DTH, ANARME, IP, and AMS TWG, assist the facility AMS committees to conduct self-assessments using the WHO AMS checklist for facility level; identify low performing core components of the facility AMS program; and develop a facility plan of action to improve on those core AMS components.</p>	5.4	3.5	<p>Conducted repeat AMS assessment with DNAM-DTH and DNAM-DE to the 3 MTaPS-supported health facilities using WHO facility level tools April 10–28, 2023. Improved performance at the 3 sites. Provided capacity building to the facility AMS subcommittees, which will be conducting independent periodic (monthly) AMS assessments and reporting results to the central level.</p>
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## L. NEPAL

### FIELD SUPPORT ACTIVITIES

#### OVERVIEW

In Nepal, MTaPS collaborated with the MOHP, the Department of Health Services, and the DDA to strengthen pharmaceutical systems. MTaPS supported policy and legal revisions, implemented best practices, and engaged stakeholders from public and private sectors to enhance the regulation, management, and overall effectiveness of the pharmaceutical sector at the central, district, and municipal levels. The program's evidence-based strategies targeted prioritized problems and used multipronged interventions for sustainable improvements. By operationalizing WHO best practices, MTaPS addressed interconnected challenges in the pharmaceutical sector.

MTaPS made significant progress in several areas to improve the DDA's regulatory capacity. Installation of the new document repository system for regulatory dossier files, and registration materials at the DDA was completed, contributing to improved and more efficient traceability of documents. The DDA planned for its first internal quality audit, which identified areas of noncompliance with the newly established QMS standards and practices. The audit findings will guide the implementation of corrective and preventive actions, ultimately leading toward ISO 9001 certification. The transition from Drug Administration Management Systems (DAMS) to DDA-Medicine Information System (MIS) (also known as the global version of Open Regulatory Information Management System [OpenRIMS]), has progressed to the final stages of implementation with the engagement of a local vendor. By end of Quarter 2 Year 5, 73% of the documentation recommendations linked to ML 1 indicators and 62% of ML 2 indicators have been drafted from MTaPS end and are awaiting approval from the Nepal government.

An MTaPS-led evaluation showed substantial improvement in the quality and quantity of ADE reports submitted to the National PV Center following the PV training on recognizing, reporting, assessing, and transmitting ADE reports to DDA of staff from regional PV centers and public health programs in Quarter 1. IEC materials on PV were prepared and will be rolled out to the regional PV centers of Nepal. Provincial and district coordination and collaboration meetings on the implementation of the Supervision Performance Assessment Recognition Strategy (SPARS) pilot study continued to be regularly conducted resulting in 115 supervisory visits in government health facilities. The SPARS impact assessment study and the SPARS inter-rater reliability study are ongoing. For the private sector, the DDA and stakeholders provided input to finalize training materials for GPP and GSDP capacity building and assessment, and the e-Learning modules are ready to be uploaded to the DDA website for dissemination after branding approval from USAID. These materials could be adopted for the public sector as well. MTaPS published a blog on AMR containment initiatives and contributed to raising Nepal's AMR issues on the international media platform.

#### QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

##### OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED



### ***Activity 1.1.1: Assist DDA in organizational restructuring***

MTaPS, in collaboration with the Asia Bureau, conducted leadership and management training for 40 officials (26 male and 14 female) from the DDA and the National Medicines Laboratory (NML). The 5-day training included sessions on leadership, team building, budgeting, planning, decision making, and document management. This training provided participants with key skills to allow them to better perform their job responsibilities.

### ***Activity 1.2.1: Update the regulations, rules, and guidelines***

MTaPS, in collaboration with the DDA, drafted five regulations and codes necessary for the implementation of the updated Drug and Health Product Bill, which is awaiting approval by the Nepal Law Commission. The regulations include Drug and Health Products Registration Regulation, Inspection and Investigation Regulation, Drug and Health Product Consultative Council and Advisory Committee Regulation, Drug and Health Product Standard Regulation, and Cosmetics Registration. MTAps also collaborated with the DDA to draft an updated pricing regulation based upon the findings of the situational analysis report on price regulation in Nepal conducted in previous quarters. These additional regulations will enhance the regulatory framework of the DDA, ensuring access to and availability of safe and quality health care products for the benefit of the population.

### ***Activity 1.2.2: Revise and update the Nepal NMP***

The national medicines policy guides the effective regulation, procurement, distribution, and use of medicines, ensuring safe, accessible, and quality healthcare for the population. A technical report on the revised NMP was drafted and will be finalized next quarter. There was no progress in the approval process for the NMP and the drafted implementation and monitoring plan.

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

### ***Activity 2.2.1: Strengthening regulatory capacity and maturity***

MTaPS addressed all the remaining 18 DDA Institutional Development Plan recommendations (i.e., ML 1 [7, 27%] and ML 2 [11, 38%]) which are waiting for approval by the Nepal Government's cabinet/MOHP/DDA. The DDA is aiming to reach ML 3 by 2027, as outlined in the Nepal Health Sector Strategic Plan 2022–2030.

### ***Activity 2.2.2: Strengthen regulatory systems for medical products registration***

A robust document repository system can positively impact public service delivery, efficient evaluation of medicines, and timely access to lifesaving treatments. Installation of a new document repository system at the DDA was completed and is functioning well. The benefits of the document repository system increased the efficiency in public service delivery, and the dossier evaluation of 80 product applications submitted to the DDA by various pharmaceutical industries, which were analyzed last year, were included in draft success stories. The dossier evaluations are part of the registration process for these important and lifesaving medicines.

### **Activity 2.2.3: Strengthen regulatory system for medical devices registration**

**MTaPS and the DDA collaborated on drafting a directive and registration guidelines for health technology products (HTP) and a list of priority HTP.**

Development of the DDA-MIS module for HTP notification was completed as a critical step for the initiation of HTP registration. Digitalization of the notification process will improve efficiency of evaluation of HTP thus contributing to access to effective and quality assured medical devices.

### **Activity 2.2.4: Strengthen PV at the national and provincial levels**

PV plays a crucial role in ensuring the safe and effective use of medicines by monitoring, detecting, and preventing ADEs, ultimately protecting the population. MTAps drafted an analysis on the contribution of Quarter 2 Year 5 PV capacity-building activities. The analysis showed an increase in the number of ADE reports submitted to the DDA per month, from 1.5 reports to 7.5 reports in the quarter following the training. Over the same period, data completeness of ADE reports increased by over 40 percentage points (from 36%, to 80%). MTAps shared the report on PV capacity building with USAID, and the PV IEC materials were approved for publication by the DDA. MTAps presented PV activity updates at a USAID family planning subgroup meeting on June 8, 2023. This meeting sparked USAID and its implementing partners to think about the importance of PV reporting for maternal and neonatal child health medicines and family planning products.

### **Activity 2.2.5 and 2.2.6: Strengthen GPP and GSDP**

Compliance with GPP and GSDP is instrumental in ensuring the safety, quality, and appropriate use of medicines throughout the health care system. The Code on Sales and Distribution is under final revision for approval by the new leadership at DDA. MTAps finalized the training materials for GPP and GSDP, including experience-sharing sessions, as part of the multipronged implementation plan of GPP and GSDP. MTAps also led a training session for 10 GSDP assessors, who will use the electronic GSDP inspection tool to conduct GSDP assessments. The IEC materials were finalized by the DDA, and the public service announcements included information for the public through videos on GPP featuring the Director General of the DDA advocating for appropriate use of medicines and good dispensing practices.

### **Activity 2.2.7: Strengthen GHPP**

MTaPS supported the Curative Service Division (CSD) to finalize the capacity-building package for hospital pharmacists on GHPP. The draft hospital pharmacy service directive received feedback during the third TWG meeting and will be finalized after the fourth meeting next quarter. Adherence to the GHPP will ensure that patients receive quality services on the appropriate use of medicines from all hospitals in the country.

### **Activity 2.2.8: Assist DDA in developing a quality management system**

Trained DDA auditors conducted the first internal quality audit at the DDA to assess compliance with the newly established QMS standards. The QMS quality policy was approved by the new Director General of the DDA. A success story and Collaborative Learning and Adapting approach used by MTAps and the DDA to establish the QMS was shared with USAID Nepal through the USAID Learning Lab portal. Document repositories for regulatory documents and files were handed over to DDA.

Implementation of the QMS ensures consistent adherence to quality standards, continuous improvement, and effective regulatory oversight.

The revised guidelines and new checklist for clinical trials were approved by the MOHP, and the first clinical trial inspection was conducted by the DDA in June. The gap analysis of clinical trial regulations in Nepal is under review before finalization next quarter. Clinical trial inspections play a vital role in ensuring compliance with regulations, safeguarding participant rights and safety, and maintaining the integrity and reliability of clinical trial data.



*DDA staff work with QMS consultants to conduct a QMS internal audit, June 22-23, 2023. Photo credit: MTaPS.*

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

#### ***Activity 3.1.1: Implement pharmaceutical management information system, Pharmadex, for registration, inspection, importation and exportation, and PV***

The draft import registration module report is under review before finalization next quarter. The dashboard for key performance indicators was finalized using Google Data Studio. The local vendor contracted to transition the DAMS to the DDA-MIS was oriented and the data migration script is being drafted. The MTaPS team explored potential interoperability between the Risk-Based Inspection, Medicines Risk-Based Surveillance Tool and DDA-MIS and the local vendor is working on it through the use of an application programming interface service. The DDA suggested halting the recruitment of help desk consultants, given the short time frame for implementation. The DDA-MIS implementation will enable comprehensive tracking and performance reporting of medicine registrations, pharmacy and wholesaler activities, inspections for effective regulatory oversight, and ensuring enhanced accountability in the health care system.

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

### **Activity 5.1.1: Strengthen medicines management in government sector health facilities**

By the end of June, about 800 supervisory visits to health facilities in the SPARS pilot study districts have been conducted by the MMS. MTaPS conducted 3 coordination and collaboration meetings in 3 provinces (Bagmati, Madhesh, and Lumbini) with representatives from the CSD, the Provincial Health Directorate, the District Health Office, municipalities, and MMS. The SPARS brochure was printed and distributed to the stakeholders during the provincial meetings. The SPARS job aid was finalized and printed to be distributed to the SPARS-implemented health facilities. MTaPS submitted a technical report on the SPARS baseline study to USAID Nepal. The interrater reliability study was completed in 6 health facilities with 24 assessments. This study assesses the reliability (comparison among the MMS raters) and validity (comparison of SPARS scores of MMS and gold standard raters) of SPARS indicators. In addition to this, this study will identify the challenging indicators among the 25 different indicators spread across 5 domains. MTaPS prepared and shared a case study for the USAID Health Systems Strengthening (HSS) on SPARS, highlighting the multipronged interventions for strengthening medicines management. Strengthening medicines management helps in the promotion of best practices with effective capacity building of health facilities in medicines management.

### **Activity 5.3.1: Improve AMR containment**

MTaPS hired 2 AMR consultants (a journalist and a clinical specialist) and developed a training package based on a pretest assessment that was administered to 114 journalists (63 male, 50 female, and 1 unknown) to evaluate their baseline knowledge of AMR. Through a series of workshops in all 7 provinces, MTaPS trained a total of 405 media personnel (278 male, 127 female) from 7 provinces on AMR. Through the end of June, the trained media personnel published 200 news reports in Nepali and several television and radio programs on AMR-related issues. A technical report on the AMR situational analysis is being drafted and will be finalized next quarter. MTaPS prepared a case for the USAID HSS on



*AMR sensitization workshop for media representatives, Nepal, June 2023.*

*Photo credit: MTaPS.*

“Championing multi-stakeholder engagement for capacity strengthening toward AMR containment in Nepal.”

## **QUARTER 3 BEST PRACTICES/LESSONS LEARNED**

- The collaborative approach used and the capitalizing on the strong interest of the DDA in strengthening their oversight of clinical trial inspections enabled the smooth and rapid approval of the clinical trial guidelines and conducting the first-ever clinical trial inspection in the country based on the approved guidelines.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<p><b>Activity 1.1.1: Assist the DDA in organizational restructuring</b></p> <p>Implement the 21 key job descriptions to DDA staff. Finalize the competency mapping report and ML action plan report.</p>	<p>July–Sept 2023 July–Sept 2023</p>
<p>Activity 1.2.1: Update the regulations, rules, and guidelines</p> <p>Finalize the drafted regulations:</p> <ol style="list-style-type: none"> <li>1. Drug and health products registration regulation</li> <li>2. Inspection investigation regulation</li> <li>3. Drug and health products consultative council and advisory committee regulation</li> <li>4. Drug and health product standard regulation</li> <li>5. Cosmetics registration and codes on cosmetics products</li> <li>6. Drug and health products clinical trial regulation</li> </ol> <p>Draft codes on HTPs and chemical reagents. Organize national-level consultation meeting with stakeholders to finalize the draft pricing regulation.</p>	<p>July–Sept 2023 July–Sept 2023 July–Sept 2023 July–Sept 2023</p>
<p><b>Activity 1.2.2: Revise and update the NMP</b></p> <p>Advocate for approval of the NMP.</p>	<p>July–September 2023</p>
<p><b>Activity 2.2.1: Strengthening regulatory capacity and maturity</b></p> <p>Update the Global Benchmarking Tool assessment and the DDA maturity level action plan (MALAP)</p>	<p>August 2023</p>
<p><b>Activity 2.2.2: Strengthen regulatory systems for medical product registration</b></p> <p>Finalize Pharmadex/DDA-MIS, including User Acceptance Test.</p>	<p>July–Sept 2023</p>
<p><b>Activity 2.2.3: Strengthen the regulatory system for HTP registration</b></p> <p>Finalize draft HTP directive and list and registration standards for selected essential HTPs. Prepare e-Learning material for HTP registration/notification.</p>	<p>July–Sept 2023 July–Sept 2023</p>
<p><b>Activity 2.2.4: Strengthen PV at the national and provincial levels</b></p> <p>Finalize the e-Learning modules on PV. Print the IEC materials on PV. Finalize the technical document on quality of ADE reports.</p>	<p>July–Sept 2023 July–Sept 2023 July–Sept 2023</p>
<p><b>Activity 2.2.5 and 2.2.6: Strengthen GPP and GSDP</b></p> <p>Continue training stakeholders on GPP and GSDP guidelines. Upload the e-Learning course to the DDA website and link to registration.</p>	<p>July–Sept 2023 July–Sept 2023</p>
<p><b>Activity 2.2.7: Strengthen GHPP</b></p> <p>Initiate approval of draft hospital directives and finalize the GHPP guidelines.</p>	<p>July–Sept 2023</p>
<p><b>Activity 2.2.8: Assist the DDA in developing a QMS</b></p> <p>Finalize two reports on internal audit and QMS document management.</p>	<p>July–Sept 2023</p>
<p><b>Activity 3.1.1: Implement pharmaceutical MIS, Pharmadex, for registration, inspection, importation and exportation, and PV</b></p> <p>Finalize the inspection modules and necessary e-Learning modules on DDA-MIS. Finalize reporting and inspection module in DDA-MIS.</p>	<p>July–Sept 2023</p>
<p><b>Activity 5.1.1: Strengthen medicine management in government-sector health facilities</b></p> <p>Support MMS in the implementation of SPARS visits. Finalize SPARS impact assessment, interrater reliability, and cost-effectiveness studies.</p>	<p>July–Sept 2023 July–Sept 2023</p>
<p><b>Activity 5.3.1: Improve AMR containment</b></p> <p>Finalize the AMR situational analysis report.</p>	<p>July–Sept 2023</p>



**Table 24. Quarter 3, FY23, Activity Progress, Nepal—FIELD SUPPORT**

Activity	MTaPS Objective(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Assist the DDA in organizational restructuring.</p> <p><b>Activity Description:</b> Implement selected training.</p>	1.1	MTaPS coordinated with the Nepal Administrative Staff College to train 40 officials from the DDA and the NML on key leadership and management topics.
<p><b>Activity 1.2.1:</b> Update Drug Act, regulations, rules, and guidelines.</p> <p><b>Activity Description:</b> Finalize the Drug Act, Code on Sales and Distribution, and selected and prioritized regulations and guidelines.</p>	1.2	The Drug and Health Product Bill is still awaiting approval from the Nepal Law Commission. In collaboration with the DDA, MTAps drafted five regulations and codes necessary for the implementation of the bill. The Code on Sales and Distribution is under final review by the new DDA leadership. MTAps drafted pharmaceutical product pricing regulations based on the situational analysis report.
<p><b>Activity 1.2.2:</b> Revise and update the NMP.</p> <p><b>Activity Description:</b> Finalize the draft NMP.</p>	1.2	No progress was made this quarter on the approval process for the revised NMP and the implementation and monitoring plan. A technical report on the NMP is under development for finalization next quarter.
<p><b>Activity 2.2.1:</b> Strengthen regulatory capacity and maturity.</p> <p><b>Activity Description:</b> Implement regular ML action plan updates toward increased ML.</p>	2.2	MTaPS completed drafting all ML 1 and ML 2 indicators' institutional development plan recommendations. Approval of the Drug and Health Products bill and the NMP by the Government of Nepal cabinet/MOHP/DDA is required for full implementation of ML 1 and ML 2 indicators institutional development plan recommendations.
<p><b>Activity 2.2.2:</b> Strengthen regulatory systems for medical products.</p> <p><b>Activity Description:</b> Finalize the strategy for product registration, update SOP, and implement revised practices.</p>	2.2	The installation of a new document repository system for dossiers, files, and registration materials at the DDA was completed. MTAps drafted a success story highlighting the increased traceability of documents before and after the implementation. MTAps also prepared a success story on the evaluation of 80 different molecules submitted to the DDA, which was conducted by MTAps from July 2021 to April 2022.
<p><b>Activity 2.2.3:</b> Strengthen regulatory system for medical device registration.</p> <p><b>Activity Description:</b> Organize a stakeholder meeting, develop standard specifications of selected medical devices, and finalize draft registration guidelines in line with the DDA-MIS.</p>	2.2	MTaPS collaborated with the DDA to draft the directive and notification process for HTP. Guidelines and SOP for HTP notification were also jointly developed. A list of priority essential HTP was prepared considering the basic health service package. The DDA-MIS module for HTP registration is in progress with the user acceptance test planned for next quarter.
<p><b>Activity 2.2.4:</b> Strengthen PV at the national and provincial levels.</p> <p><b>Activity Description:</b> Streamline PV reporting and finalize SOP with associated tool to increase the ML.</p>	2.2	MTaPS conducted an analysis of ADR reports sent to the National PV Center before and after the PV capacity-building activities conducted in December 2022, and it drafted the technical report with the results of the analysis. The PV capacity-building report was submitted to USAID. MTAps and the DDA finalized IEC materials for PV.

Activity	MTaPS Objective(s)	Activity Progress
<p><b>Activity 2.2.5:</b> Strengthen GPP.</p> <p><b>Activity Description:</b> Develop GPP e-Learning course and initiate implementation of GPP strategy, including community awareness.</p> <p><b>Activity 2.2.6:</b> Strengthen GSDP.</p> <p><b>Activity Description:</b> Finalize GSDP guidelines, inspection tool, and e-Learning material to train wholesalers.</p>	2.2	The revised codes on sales and distribution are currently under review by the new DDA leadership. MTAps conducted a training session for 10 GSDP assessors. The television public service announcements on GPP featuring videos from DDA officials were completed. The GPP and GSDP e-Learning modules are ready to be uploaded to the DDA website, pending brand approval from USAID.
<p><b>Activity 2.2.7:</b> Strengthen GHPP.</p> <p><b>Activity Description:</b> Update the GHPP directive and guidelines and develop the GHPP capacity-building strategy.</p>	2.2	MTaPS postponed the training of hospital pharmacists as per the request from the CSD. Feedback on the draft hospital pharmacy service directive was received during the third TWG meeting and the directive will be finalized after the fourth TWG meeting in July 2023. A workshop will follow to endorse the directive for MOHP approval.
<p><b>Activity 2.2.8:</b> Assist the DDA in developing a QMS.</p> <p><b>Activity Description:</b> Finalize QMS manual and SOP toward ISO 9001:2015 certification.</p>	2.2	The first internal quality audit was conducted at the DDA in June 2023. MTAps finalized a success story highlighting the progress of the document management system at DDA. A Collaborative Learning and Adapting case study on the development of the QMS was uploaded to the USAID Learning Lab portal. Document repositories were handed over to DDA and the Director General of the DDA approved the quality policy. The MOHP secretary approved clinical trial guidelines and a checklist, leading to the first-ever clinical trial inspection conducted by the DDA.
<p><b>Activity 3.1.1:</b> Implement pharmaceutical management information system Pharmadex for registration, inspection, importation and exportation, and PV.</p> <p><b>Activity Description:</b> Finalize and implement the DDA-MIS registration module.</p>	3.1	MTaPS drafted a technical report on the import registration module. The dashboard for key performance indicators was completed, and a technical report for the indicators is being finalized. A local vendor is currently drafting the data migration script as part of the transition from DAMS to DDA-MIS. The MTAps developer led orientation sessions for the selected local vendor for sustainability purposes.
<p><b>Activity 5.1.1:</b> Strengthen medicine management in government-sector health facilities.</p> <p><b>Activity Description:</b> Implement SPARS in selected districts.</p>	5.1	By the end of June 2023, about 800 supervisory visits were conducted by the MMS. MTAps held coordination meetings in 3 provinces to share SPARS pilot study findings. Facilitators distributed brochures were distributed during the coordination meeting and finalized job aids for printing. MTAps submitted a technical report on the SPARS baseline study to USAID, completed the interrater reliability study, and is preparing its report. MTAps also prepared a case study on SPARS for the USAID HSS.
<p><b>Activity 5.3.1:</b> Improve AMR containment.</p> <p><b>Activity Description:</b> Implement situation analysis and support revision of national plan.</p>	5.3	MTaPS hired two AMR consultants and conducted a virtual pre-testing assessment with 114 journalists representing all 7 provinces to evaluate their baseline knowledge of AMR. The results of the pre-test were used to develop the training package for journalists. A total of 405 journalists from 7 provinces were trained, resulting in the publication of approximately 162 news reports and TV/Radio FM-featured programs in local media outlets. A technical report on the situational analysis is under development and a case study on capacity strengthening through multisectoral engagement toward AMR containment in Nepal was shared for the USAID HSS.



## M. NIGERIA

### GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

#### OVERVIEW

##### PORTFOLIO GOAL

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 program, and use of antimicrobial medicines optimized - that align with the 2015 WHO global action plan on AMR and Nigeria's NAP-AMR that 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 actions. MTAps' interventions support the country in moving to the next JEE level across the three result areas. As of March 2023, MTAps has supported the achievement of 20 (32%) of the 62 WHO benchmark actions—six contributing to MSC/AMR, seven to IPC, and seven to AMS.

In MSC, the country completed all four benchmark actions in capacity level 2 (with support from other partners). MTAps supported the achievement of two of the four actions in capacity level 3, three of the four in capacity level 4, and one of the five in capacity level 5. With MTAps' support, the country is on track to completing 100% of level 4 and 80% of level 5 benchmark actions by the end of FY23 (PY5). Following the review of the 2017–2022 NAP-AMR, the consultant engaged by MTAps is working with the AMR Coordinating Committee and other partners, including WHO, FAO, OIE, and UNEP, to coordinate the development of the new 2023–2028 NAP-AMR for the country. At the subnational level, MTAps supports the state-level AMR TWGs in Kebbi and Enugu states and the corresponding facility programs.

In IPC, MTAps' support is helping to move the country closer to JEE level 3, with MTAps contributing to three (60%) of the five benchmark actions in level 2 and four (67%) of the six actions in level 3. MTAps supported the AMR TWG Secretariat to develop the national IPC strategic plan in FY22, which is a capacity level 3 benchmark action. MTAps' key achievements at the facility level include the establishment of IPC programs in seven supported private and public facilities in Enugu and Kebbi states. Key outcomes include baseline assessments conducted using the WHO IPCAT2 to assess state-level programs and IPCAF/HH tools to assess facility-level programs. Through an in-person, competency-based training approach, the capacity of 59 members (21 male, 38 female) of the seven facility teams was built on 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 training was conducted by the facility teams for 550 staff. MTAps provides ongoing monitoring of these programs remotely and through mentoring visits to the facilities.

In AMS, MTaPS supported the country's AMR TWG Secretariat to implement four benchmark actions in capacity level 2, and three in capacity level 3 with the goal of moving the country's AMS program baseline JEE score of 2 to the next JEE level. With MTaPS' support, the country is on track to achieving 100% completion of level 2 benchmark actions by the end of FY23 and positioning itself for JEE level 3 AMS capacity.

At the state level, AMS programs were established across three health care facilities in Enugu state and four 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 in the facility and guide empirical prescribing of antibiotics at the health care facility level. MTaPS supported the AMU-PPS in six supported facilities. All facilities surveyed reported Access groups of antibiotics in the range of 18%–53%, which is less than the required WHO cut-off of 60%. Feedback on the outcome of the AMU-PPS was provided to facility AMS teams during monitoring and supportive supervisory visits for use in updating their facility AMS plans. This feedback guided facility AMS teams to provide targeted and more effective engagement with prescribers and other health care providers across supported facilities.

MTaPS supported the country's AMR TWG to develop a national One Health AMS plan. This document will provide strategic direction for AMS activity design and implementation across health care levels in both the human and animal health sectors in Nigeria. A critical step in strengthening the AMS program in a country is the development of the WHO AWaRe categorization of antibiotics used in the country to help control the misuse of lifesaving antibiotics. MTaPS supported a meta-analysis of published data on resistance and sensitivity patterns of common microbes to commonly used antibiotics in Nigeria. The outcome of the meta-analysis was used for input during the workshop for the categorization of antibiotics based on WHO AWaRe groupings in April 2023.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

### **RESULT AREA I: EFFECTIVE MSC OF AMR**

#### ***Activity 1.1.1: Support the National AMR Secretariat to develop 2023–2028 National Action Plan (NAP-AMR) with costed implementation plan***

Following the performance review of the 2017–2022 NAP-AMR in Q1 FY23, supported by MTaPS, and its presentation to the AMR Coordinating Committee on November 3, 2022, MTaPS supported the development of the new 2023–2028 NAP-AMR with the engagement of a consultant. MTaPS initiated the development of the new NAP-AMR with a roadmap for the process and presented it to the NAP 2.0 Development Committee for consideration. Following its adoption, the development of the new NAP is being coordinated with other consultants and stakeholders using this roadmap. The outcome from this activity will contribute to the level 3 benchmark action on MSC and is tentatively planned for completion by the first quarter of FY24.

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

MTaPS engaged a consultant to work with members of the national AMR TWG Secretariat to develop publishable scientific papers from key interventions. This was initiated with a review of activities of the national AMR TWG Secretariat to identify key interventions for which four manuscripts on AMS and IPC will be developed. Following the review, two KM products each for AMS and IPC are at advanced stage of development by the consultant based on experiences, lessons learned, and key outcomes of specific interventions, with priority given to those supported by MTAps. The output will contribute to level 2 benchmark actions.

**RESULT AREA 2: IPC**

***Activity 2.1.2: Support the development of national IPC viral hemorrhagic fever (VHF) guidelines for safety of health workers in health facilities***

MTaPS, in collaboration with the national AMR TWG Secretariat, is supporting the review of the first edition of the IPC for viral hemorrhagic fever (VHF) management guidelines. The first draft of the document has been reviewed by the surveillance pillar of the NCDC for appropriateness of surveillance content and is being finalized by the NCDC's management team prior to printing and distribution to health care facilities nationwide.

***Activity 2.1.3: Strengthen HCAI surveillance in human health sector***

In Q3 FY23, MTAps, in collaboration with the NCDC, engaged a consultant to conduct a systematic review and assessment of HCAI types and surveillance capacity in six select facilities in the country. The consultant has developed data extraction tools and commenced extraction of data and is approaching completion of the systematic review. Afterward, a protocol will be developed for surveillance of an HCAI type in the country.

***Activity 2.2.1: Strengthen capacity of health care providers to implement IPC guidelines using multimodal strategies***

MTaPS, in collaboration with the national AMR TWG Secretariat, supported the step-down training of health workers in MTAps-supported facilities in Enugu and Kebbi states. A total of 668 (192 male, 476 female) health workers had their capacity strengthened in using standard precautions, environmental cleaning, hand hygiene, use of PPE, multimodal strategies, continued quality improvement, and national IPC guidelines for implementing sustainable improvement of IPC at the facilities.

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

MTaPS, in collaboration with the national AMR TWG Secretariat, conducted two visits to provide IPC teams with mentoring across three supported facilities in Enugu State between April and June 2023. The mentoring visits provided on-the-job support to facility IPC teams in capacity strengthening, deployment of five validated job aids that detailed standard precautions, WHO's five moments of hand hygiene, injection safety, sharps disposal, and waste segregation. Key outcomes of the visits included enhanced capacity of IPC teams to intervene on core components of IPC and commitment from all three facilities'

management to provide budgetary support for procurement of IPC consumables and related materials for use in the facilities.

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

#### ***Activity 3.1.1: Strengthen institutional and HR capacity to manage AMS program***

MTaPS, in collaboration with the Federal MOH and the AWaRe TWG, supported the categorization of antibiotics based on WHO AWaRe groupings for the country through a workshop April 13–14, 2023. During the workshop, an MTAps consultant presented the results of a meta-analysis of published data on resistance and sensitivity patterns of common microbes to commonly used antibiotics in Nigeria and sensitivity data from sentinel sites, thus initiating discussions on antibiotic molecules to be included in the list. Following a series of group and plenary sessions, a list of antibiotics that includes some new molecules was developed. A comprehensive report of the categorization process, including justification for inclusion of new antibiotics' molecules, is expected to be shared with the chair of the AWaRe TWG in July 2023. This will provide the basis for integrating the resulting AWaRe list into the NEML when its review comes up later this year and disseminating it across supported facilities in Enugu and Kebbi states. This is a critical step toward achieving the level 3 benchmark action related to implementing the AWaRe categorization.

MTaPS supported the National Agency for Food, Drug Administration, and Control (NAFDAC) to train field officers in the southwest zones on GSDP inspection of medicines April 17–19, 2023, following a similar workshop in the north central zone. A facility visit was included where hands-on mentoring and skills were provided to the officers to improve their capacity on GSDP inspection. Adoption of GSDP helps ensure that the quality of antibiotics is maintained throughout the product's life cycle. This will partially contribute to monitoring antibiotic quality, a level 5 benchmark action on AMS.

#### ***Activity 3.5.1: Strengthen the implementation of AMS programs in all MTAps-supported facilities***

MTaPS, in collaboration with the AMR TWG Secretariat, engaged AMS consultants Enugu and Kebbi states to provide more proxy support to facility AMS programs in the seven supported facilities. The consultants are supporting the facility AMS teams to identify additional areas of intervention based on the outcome of the AMU-PPS while using the CQI approach to address identified challenges. Their support will strengthen facility AMS interventions, promote rational antibiotic use, increase ownership by the State MOH, and improve sustainability. The follow-up assessment of AMS core components will be used to measure the progress and impact of this support. All of this will contribute to strengthening stewardship practices across supported facilities, a level 3 benchmark action.

### **BEST PRACTICES/LESSONS LEARNED**

- Sustaining engagement with key national, state, and facility stakeholders is key to joint planning to avoid scheduling conflicts due to competing activities of program partners. This can help ensure that activity implementation moves forward in a timely manner.
- Establishing intermediate governance structures at the state level facilitates decentralization of AMR interventions while ensuring ownership and sustainability at both state and facility AMR programs.

- Using country data during the AWaRe categorization process makes the activity more relatable to the local context and potentially encourages ownership of the outcome by end users at the facility level.
- Coordination with other implementing partners in the health care sector at the state level helps leverage existing support to extend the progress of AMR interventions.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Continued IPC mentoring sessions at MTaPS-supported facilities in Enugu and Kebbi states	July 2023
Continued support for facility IPC step-down training	July 2023
Follow-up assessment of facility AMS core components	July 2023
Joint monitoring visit to supported facilities in Kebbi State	July 2023
Engagement of consultant for HCAI surveillance draft protocol development	July 2023
Transmission of justification for inclusion of new antibiotics to AWaRe TWG chair	July 2023
Follow up AMU-PPS in Kebbi and Enugu states	July 2023
Dissemination of the new AWaRe list across supported facilities in Enugu and Kebbi states	September 2023

**Table 25. Quarter 3, FY23, Activity Progress, Nigeria—GHSA**

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 1:</b> Review the implementation of 2017–2022 NAP-AMR and the development of the new 2023–2028 NAP-AMR, including cost of new plan</p> <p><b>Activity Description:</b> Consultant to be engaged by the AMR Coordinating Committee with MTaPS’ support and in collaboration with other bilateral and multilateral partners</p>	5.4	1.1	The development of the 2023–2028 NAP is ongoing, with MTaPS’ engaged consultant providing the necessary support and coordination for the process. According to the roadmap, this activity will extend into FY24Q1 due to factors related to multiple stakeholder engagement and participation.
<p><b>Activity 2:</b> Continue to strengthen MSC and functionality of AMR TWG and its subcommittees</p> <p><b>Activity Description:</b> Engagement of a consultant who will support the AMR TWG Secretariat to develop KM products from MTaPS interventions and build the capacity of its members</p>	5.4	1.2	The development of four KM products by the MTaPS consultant is at an advanced stage. The draft of the products would be ready for review before the end of Q4 FY23.
<p><b>Activity 3:</b> Capacity strengthening for M&amp;E officers in the AMR TWG</p> <p><b>Activity Description:</b> This activity will support capacity building of M&amp;E officers in the tripartite sectors for effective monitoring of work plan activities in their various sectors</p>	5.4	1.2	This capacity strengthening activity is delayed as it can be undertaken only after the 2023-2028 NAP-AMR is finalized. The training of the M&E officer will be based on the M&E monitoring framework developed for the 2023-2028 NAP AMR. The new completion date for the NAP AMR is Q1 FY 24. Therefore, the activity is tentatively rescheduled for early Q2 FY24 and will be included in the Y6 workplan.
<p><b>Activity 4:</b> Development of AWaRe categorization of antibiotics</p> <p><b>Activity Description:</b> The AWaRe TWG is expected to lead the categorization of essential antibiotics in Nigeria into the AWaRe categories based on local evidence of sensitivity and resistance profile of the antibiotics to disease conditions of public health importance</p>	5.4	3.1	The categorization of antibiotics based on the WHO AWaRe classification for the country was completed, and a comprehensive report of the process is being finalized.
<p><b>Activity 5:</b> NAFDAC zonal GSDP training</p> <p><b>Activity Description:</b> This is a three-day training workshop for NAFDAC field staff in two geopolitical zones of the country on GSDP</p>	5.4	3.1	Capacity building for NAFDAC field staff on GSDP inspection conducted in two zones of the country ended in April 2023 in Ibadan.
<p><b>Activity 6:</b> AMS mentor and resource persons</p> <p><b>Activity Description:</b> This activity will engage two consultants in Enugu and Kebbi states to provide ongoing support to facility AMS teams</p>	5.4	3.5	MTaPS-engaged AMS consultants are providing ongoing mentorship and supportive supervision to facility AMS teams in Enugu and Kebbi states.
<p><b>Activity 7:</b> Assessment of HCAI and development of protocol</p> <p><b>Activity Description:</b> Engage two consultants to conduct assessment on HCAI in the country and develop protocols for implementation</p>	5.4	2.1	Consultant for review has been engaged, and systematic review and assessment is approaching completion.

Activity	MTaPS Objective(s)	GHS Result(s)	Activity Progress
<p><b>Activity 8:</b> Support the development of national IPC viral hemorrhagic fever (VHF) guidelines for safety of health workers in facilities</p> <p><b>Activity Description:</b> This activity will support the development of an IPC manual for VHF for health worker safety and produce copies for dissemination</p>	5.4	2.1	The review of the zero draft of the IPC for VHF manual is complete, and the first draft is being finalized by management prior to printing.
<p><b>Activity 9:</b> Strengthen capacity of health care providers to implement IPC guidelines using multimodal strategies</p> <p><b>Activity Description:</b> This activity will build the capacity of HCWs to implement IPC guidelines using a multimodal approach to achieve sustainable improvement in the system</p>	5.4	2.2	The training on multimodal strategies in seven MTA-PS-supported facilities was completed in Enugu and Kebbi states.
<p><b>Activity 10:</b> IPC facility mentorship</p> <p><b>Activity Description:</b> This activity will support IPC teams in facilities by providing mentoring to team members on the use of the CQI approach</p>	5.4	2.5	The IPC mentorship in three facilities is ongoing, and the three mentoring visits to the three facilities in Enugu State were completed.



## N. PHILIPPINES

### FIELD SUPPORT (TB AND FP) ACTIVITIES

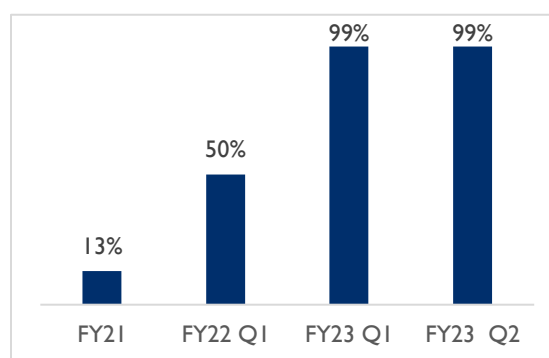
#### OVERVIEW

In the Philippines, MTaPS provides TA and capacity-building support to the DOH to institutionalize integrated and effective procurement and supply chain systems for HIV, TB, FP, and other health program commodities; establish fully functional PV and product registration systems; and improve pharmaceutical services to ensure patient safety and rational use. MTaPS meets these objectives by identifying and addressing supply chain bottlenecks in the regular provision of TB, FP, and HIV services to improve access.

#### CUMULATIVE PERFORMANCE TO DATE

MTaPS supported DOH in developing a 3-year supply chain strategy, facilitated the inclusion of articles into UHC regulation to ensure policy support for supply chain reforms, and developed a supply chain road map for UHC law implementation. MTaPS assessed and developed supply chain workforce needs currently used by the DOH to hire new staff. MTaPS has developed and delivered several supply chain and PV courses and the contents are currently being uploaded to the DOH e-Learning Academy. MTaPS supported the DOH in introducing and rolling out an end-to-end eLMIS to enhance supply chain visibility and efficiency, including for COVID-19 vaccines. To date, a total of 37 warehouses in central, regional, and 2 LGUs have functioning eLMIS. MTaPS is continuously collaborating with other agencies, such as Philippine Business for Social Progress (PBSP), The Global Fund recipient, and the WHO to leverage resources for eLMIS implementation. In total, MTaPS has leveraged 50,104,548 Philippine pesos (~\$910,991) in resources from PBSP and the WHO in support of the eLMIS implementation. MTaPS also enhanced the PVIMS patient safety monitoring system, including interoperability with VigiFlow, and supported the DOH and the Philippine FDA in rolling it out at targeted TB facilities.<sup>8</sup>

Since the start of the PVIMS rollout in PY3 (FY21), MTaPS has been able to reach 197 out of 199 TB facilities (figure 8). To date, 569 AEs have been reported through PVIMS. Additionally, MTaPS supported the DOH in analyzing stock information for key tracer TB, FP, and HIV commodities, starting in PY3 (FY21). Because of the capacity-building activities conducted and tools provided for stock analysis by MTaPS, the DOH has since been independent in processing stock data and oriented selected regions on stocks data analysis.



**Figure 8: Percentage of sentinel facilities (199) trained and using PVIMS for TB medicines safety monitoring**

<sup>8</sup> VigiFlow is an individual case safety report (ICSR) management system for countries that require an electronic PV database for the collection, processing, and sharing of ICSRs for effective data analysis.

MTaPS supported the DOH and the Commission on Population and Development (CPD) in updating and finalizing a warehouse operation manual (WOM) and training of staff from different levels to roll out its use. MTaPS supported the long-term estimations of quantity and budget requirements for TB, HIV, and FP commodities. MTaPS also supported the FDA in updating the national PV policy and developed the PV method guideline to ensure that PV is supported by a comprehensive set of policy provisions with the necessary mandate for implementation. MTaPS facilitated the registration of selected HIV and TB medicines to enter the Philippine market.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

### **OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED**

#### ***Activity 1.1.1: Support the DOH to develop the five-year supply chain strategy***

MTaPS developed a TOR to guide the development of a five-year national supply chain strategy. The TOR, which comprises an iterative process including the review of existing strategy, has been discussed and agreed with the DOH-SCMS. It includes rapid analysis of the previous strategy, government-led consultative workshop, strategy writing, and dissemination and validation of the new strategy. The TOR is also used to engage local and international consultants, who are expected to facilitate the assessment and consultative workshop. The consultative and validation workshop is planned for the next quarter. The strategy is expected to identify key supply chain interventions to ensure continuous availability of life-saving health products.

### **OBJECTIVE 2: INSTITUTIONAL AND HUMAN RESOURCE CAPACITY INCREASED**

#### ***Activity 1.2.1: Capacitate a pool of local technical assistance providers (LTAPS)***

LTAPS is a private-sector engagement strategy to help scale up and sustain pharmaceutical systems-strengthening initiatives. MTaPS conducted an information sharing session on LTAPS for 19 participants (8 male, 11 female) from 11 institutions. Out of the 11 institutions, 6 are interested in providing support services for eLMIS, which is one of the modeled tracks of LTAPS. Furthermore, MTaPS reached out to more than 200 individuals from the national convention of the Philippine Pharmacists Association to identify more institutions and individuals to be part of LTAPS.

#### ***Activity 1.2.2: Outsourcing logistics services to private sector 4PL or best-practice 3PL providers***

MTaPS successfully engaged an international consultant to collaborate with the team to formulate an outsourcing operational policy and develop an engagement TOR and key performance indicators (KPI) for 4PLs. MTaPS gathered initial information on how commonly LGUs are engaging 3PLs and gathered a list of potential 4PLs in the country. When the operational policy, TOR and KPIs are finalized, they will provide a mechanism for government to engage and utilize best-practice 3PLs and 4PLs supporting the public health supply chain.

#### ***Activity 2.1.1: PV and regulatory services***

MTaPS finalized and shared the alpha version of the self-paced e-Learning course with the FDA for feedback. Once finalized, it will be uploaded onto the DOH Academy with the aim of capacitating health workers sustainably in reporting safety of medicines in the country. MTaPS is monitoring and informing key stakeholders on the status of the registration application of Levoplant, a contraceptive implant in the

FDA online registration status tracker website. Registration of Levoplant would increase the choice and availability of contraceptive implants in the Philippines.

### **Activity 2.2.1: IPC and HCWM**

To improve the IPC and HCWM practices for climate risk mitigation in health facilities, the DOH's Health Facility Development Bureau (HFDB) facilitated the training of 144 participants based in DOH-retained hospitals from 3 regions on HCWM. It also trained 77 participants based in government-retained hospitals from 2 regions on IPC using MTaPS-developed materials, and it trained IPC and HCWM qualified trainers. More regions are planning to conduct the training in the coming months without MTaPS support, which indicates sustainability of interventions.

## **OBJECTIVE 3: AVAILABILITY AND USE OF INFORMATION**

### **Activity 1.3.1: electronic Logistics Management Information System (eLMIS)**

MTaPS supported the DOH and CHDs to roll out eLMIS in 2 LGU warehouses, bringing the total number of warehouses implementing the eLMIS to 37. To highlight the milestone of implementing eLMIS in one of the UHC sites, eLMIS was officially launched in Capiz. eLMIS is one of the information systems which the Philippines has identified as necessary to achieve its UHC objectives. More than 160 participants attended the launch headed by the local chief executives of Capiz, the DOH, and CHD 6, as well as USAID officials.

MTaPS updated the eLMIS sustainability and transition plan based on a series of consultations with key stakeholders. The plan outlines the key activities needed in supporting and building the capacity of the DOH to scale up and sustain the eLMIS implementation in the country. In Quarter 3, MTaPS also supported the eLMIS rollout training of 356 participants (112 male, 244 female) from 68 UHC sites. Training the end users on eLMIS is a prerequisite activity to its going live. In Quarter 3, MTaPS also trained 54 participants (24 male, 30 female) from 13 regions in providing eLMIS service/helpdesk support. MTaPS facilitated the completion of the Privacy Impact Assessment document, which is one of the requirements for official acceptance of eLMIS by DOH. In Quarter 3, a total of 30 change (enhancement) requests were incorporated into the eLMIS and demonstrated to the DOH. These enhancements made it easier for end users to operate the eLMIS. The eLMIS "frequently asked questions" document was developed and disseminated to help end users in quickly providing answers to resolve common concerns encountered on the use of the eLMIS.

### **Activity 1.3.2: Stocks Data Analysis**

MTaPS and the DOH-PD co-developed the January–March 2023 Stocks Data Analysis Report for the DOH Executive Committee. MTaPS also analyzed stock data of TB and FP commodities collected from HFs and regional and central warehouses, including CPD FP warehouses. The stock information was used to complete the quantification which generated the 3-year (FY 2024–2026) quantity and budget requirements; these inform the DOH to expedite the procurement and delivery of low-stock commodities and cancel shipment of other commodities which are overstocked. MTaPS also participated in the TB stock data analysis attended by 29 (5 male, 24 female) TB focal persons from CHD IV-A (Calabarzon) and all 5 provinces in Region IV-A. The information presented by MTaPS helped to design collaborative strategies to improve the availability of stock data to make informed decisions for the availability of TB commodities.

### ***Activity 1.3.2: Couple-Years of Protection (CYP)***

This quarter, MTaPS shared the final CYP report for the period of July 2021 to June 2022 with key private and public FP stakeholders. MTaPS also started gathering data from USAID BARMHHealth, DOH-PD, and USAID ReachHealth for the July 2022 to June 2023 CYP analysis. CYP is one of the key metrics used to assess the effectiveness and coverage of FP service delivery.

## **OBJECTIVE 4: PHARMACEUTICAL-SECTOR FINANCING AND RESOURCE ALLOCATION**

### ***Activity 1.4.1: Conduct pilot testing on using a digital platform for PIES***

MTaPS is identifying the legal, operational, and financial requirements for LGUs to engage private pharmacies. MTaPS gathered information from the Eastern Samar LGU and the National Pharmaceutical Foundation, a private entity foundation which provides procurement, delivery, and inventory management services to Eastern Samar LGU. Together with USAID ReachHealth, MTaPS also facilitated the finalization of the system requirement specifications of the digital platform to inform enhancement of the tool and the readiness of the tool for testing.

### ***Activity 2.2.2: HTA and Philippine Essential Medical Device List (PEMDL)***

MTaPS finalized the HTA Methodology Guidelines for Clinical Equipment and Devices outline with the HTA Division and HTA Council. The draft content of the guide is expected to be completed by mid-July 2023. Once finalized and approved, the guide will be used to inform decision making in selecting efficient, equitable, and innovative medical devices. To support the DOH in building the PEMDL, MTaPS coordinated and helped harmonize the medical device initiatives and activities of key DOH bureaus, the SCMS and PD. Furthermore, MTaPS presented the Best Practices and Creation of Technical Specification Bank topic during the series of the end-user workshop on PEMDL. A total of 74 participants (33 male, 41 female) participated in the first workshop on PEMDL. The knowledge shared by MTaPS is essential for the participants to determine how the current version of PEMDL can be further improved.

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

### ***Activity 1.5.1: Support DOH to institutionalize the practice of evidence-based quantification***

MTaPS, in collaboration with the DOH, facilitated a 3-year quantification of FP and first-line adult and children TB commodities. The estimated quantities and budgets will be used for the DOH's application for multiyear contractual authority for TB and FP commodity procurement. The quantification results and related stock status analyses also helped the DOH to expedite procurement of some of the commodities, such as combined oral contraceptives and first-line TB medicines for adult and children, to minimize potential stockouts. The DOH has taken immediate steps to expedite procurement and distribution, while also collaborating with partners in implementing stockout mitigation measures, such as commodity reallocation and redistribution and facilitating immediate FDA quality inspections.

### ***Activity 1.5.2: Supply chain system design considering UHC***

The introduction of UHC law and associated health reforms brought an opportunity to set standards for the health supply chain. MTaPS, in partnership with the DOH, conducted a series of consultative

workshops to define the inventory systems and policies based on types of products, distribution network, and associated budget accountability. MTaPS engaged staff from SCMS, the Disease Prevention and Control Bureau (DPCB), 17 CHDs, 31 LGUs, and a hospital to conduct a survey on product flow modalities, process lead times, and PSCM practices. The result of the survey was presented, and decisions were made to standardize the key parameters to set up inventory holding policies at each level of the supply chain. The workshop was attended by 54 (11 male, 43 female) participants from the different supply chain levels and offices. In the next quarter, MTaPS will work with the DOH to finalize, formalize, and disseminate the agreed-upon inventory systems and policies.

### **Activity 1.5.3: Build the capacity of the CPD to support supply chain management of FP commodities**

Continuous availability of FP commodities at service delivery points contribute to the Philippines Demographic Dividend by reducing fertility rate and mortality. During Quarter 3, MTaPS formally handed over the FP commodity WOM to the CPD, along with the posters of the key WOM process flow charts that will be displayed in the 9 central and regional warehouse and storage facilities. Also, MTaPS trained 58 (21 male, 37 female) CPD central and regional logistics officers on the WOM. The training focused on basic warehouse functions to facilitate efficient warehouse operation, and it is required for obtaining a license to operate from the FDA. The CPD released a memo endorsing this WOM to be applied in all warehouses. As the CPD is set to roll out the eLMIS in their 6 warehouses (1 central, 5 regional warehouse hubs), MTaPS conducted a training of trainers for 22 (4 male, 18 female) logistics officers based in the 6 warehouses. The CPD had 2 (1 male, 1 female) staff participate in the eLMIS service/helpdesk support training.

### **Activity 2.4.1: PViMS**

Standardized and systematic recording, reporting, and analysis are needed to monitor the safety of clients receiving drug-resistant tuberculosis treatment. This quarter, a total of 10 AEs (4 in female patients, 6 in male) were reported through PViMS. Out of these 10 reports, 7 were possible, 1 was probable, 1 was unlikely, and 1 was not assessable. MTaPS supported and co-facilitated the training of newly hired doctors and nurses by PBSP on May 11, 2023. A total of 33 participants (24 female, 9 male) from 19 Programmatic Management of Drug-resistant Tuberculosis facilities and 2 CHDs were trained.

### **Activity 3.2: Gender**

MTaPS completed the gold version of gender e-Learning modules 1 and 2 while still waiting for Health Policy Development and Planning Bureau to address the comments on module 3. Migrating the gender e-Learning course into the DOH Academy for wider reach will help sensitize DOH policy makers in adopting gender-sensitive policies related to pharmaceutical services.

## **BEST PRACTICES/LESSONS LEARNED**

- Partnering with the private sector is a strategic intervention to sustain the gains of MTaPS Program. The private sector is interested in participating in initiatives given the right opportunity. For example, when MTaPS conducted consultative and advocacy meetings with the private sector and presented LTAPS, the concept gained 100% acceptance by the private-sector participants.

- Understanding the legal and policy environment, including the country’s Commission on Audit rules and regulations is fundamental in creating an enabling environment to facilitate the design and implementation of strategic procurement and eLMIS initiatives.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Intensive quantification training for the DOH	August 2023
Phase 3 rollout of eLMIS to more LGUs	July 2023 onward
Presentation of quarterly stock analysis	August 2023
Supply chain strategy development	July–August 2023

**Table 26. Quarter 3, FY23, Activity Progress, Philippines—FIELD SUPPORT**

Activity	MTaPS Objective(s)	Activity Progress
<b>Activity 1.1.1:</b> Support the DOH in reviewing results of the implementation of the three-year PSCM strategy (2019–2022) and developing the three-year PSCM strategy (2023–2026).	1.2; 5.1	MTaPS discussed the high-level timeline of implementation for this activity with the leadership of the DOH Procurement and Supply Management team. MTAps identified a potential consultant who will be facilitating the workshop. Next quarter, MTAps will start with the desk review of existing documents to determine the results of the implementation of 2019–2022 PSCM strategy.
<b>Activity 1.2.1:</b> Capacitate a pool of LTAPS to support institutional capacity building of LGUs for PSCM functions.	2.1, 2.2, 2.3	MTaPS revised the concept note after visiting three UHC implementation sites. MTAps reached out to potential LTAPS to attend the DOH Suppliers’ Expo and demonstrate their service offerings. MTAps conducted orientation activity for potential LTAPS providers.
<b>Activity 1.2.2:</b> Engage the government to develop and disseminate a policy on outsourcing logistics services to private sector 4PL or best practice 3PL providers.	2.2, 2.3	MTaPS also invited potential 4PLs/3PLs who were part of the study to the DOH Suppliers’ Expo and started to map potential 4PL/3PLs partners. Development of the draft operational policy in engaging 4PLs/best practice 3PLs is under way.
<b>Activity 1.3.1:</b> Build capacity of the DOH to operationalize and sustain the implementation of eLMIS in the country.	3.1, 3.2	eLMIS transition and sustainability plan was drafted and presented to government and nongovernment stakeholders. This quarter, 3 more warehouses implemented the eLMIS, including 2 LGUs, bringing the total number of warehouses gone live to 37. Interoperability requirements gathering with DOH’s Procurement Online Management Information System is under way.
<b>Activity 1.3.2:</b> Support the DOH and selected CHDs in developing mechanisms and practices for regular data collection and analysis for programmatic and PSCM decision making.	3.2	MTaPS designed a tool and established a practice of regular stock data collection, analysis, and presentation for key program products. The DOH-PD cascaded the data analysis orientations and tool to the CHDs. The DOH-PD started building the capacity of selected regions on stock data analysis. MTAps disseminated the July 2021–June 2022 CYP analysis report to the DOH and other stakeholders.
<b>Activity 1.4.1:</b> Conduct pilot testing on using a digital platform to integrate public and private providers into local health care providers’ networks for information exchange, cross-referral, and cost reimbursements for medical products and services to support UHC law implementation.	4.1, 3.1	MTaPS and ReachHealth facilitated an engagement workshop with LGUs and service providers on the MyCure tool to gather requirements. User testing and training of the tool is planned for the next quarter.
<b>Activity 1.5.1:</b> Support the DOH to institutionalize the practice of evidence-based quantification of TB and FP commodities to inform procurement, supply planning, and distribution.	5.1	MTaPS completed the draft of the guidelines to harmonize and standardize the process of quantification of health commodities at DOH. MTAps is currently discussing capacity building on quantification for the DOH and CHD with the DOH-DPCB.
<b>Activity 1.5.2:</b> Support PSCM system design, considering UHC reform for individual and population-based commodities at different levels.	5.1	MTaPS facilitated a supply chain system design consultative and learning workshop in coordination with SCMS and the DPCB. It collected data as part of the system design exercise. A consultative workshop was organized to determine the inventory controls and strategies at different levels of the system.
<b>Activity 1.5.3:</b> Build capacity of the CPD to support supply chain management of FP commodities.	5.1	CPD WOM training materials were drafted, and training on WOM and WOM handover was organized in May 2023. The CPD participated and observed the eLMIS rollout in different regional warehouses with the plan to introduce its own central and five regional FP commodity warehouses. MTAps trained the CPD from their regional hubs on eLMIS.



Activity	MTaPS Objective(s)	Activity Progress
<b>Activity 2.1.1:</b> Build capacity of health workers to support PV and regulatory services at national and HF levels.	5.2	The FDA provided clearance on the PV e-Learning contents that will be uploaded to the DOH Academy. MTAps is transforming the PV e-Learning contents to a self-paced e-Learning format for uploading to the DOH Academy.
<b>Activity 2.2.1:</b> Support HFs to improve practices on IPC and HCWM for climate risk mitigation.	5.3	In PY4, MTAps worked with the HFDB to develop training materials on the new standards on IPC and HCWM. MTAps is working with the DOH to monitor the training rollout action plan of the regions. The HFDB funded 12 regions to cascade the training within their region, engaging MTAps-trained IPC and HCWM-qualified trainers. The list of qualified IPC and HCWM trainers whom other implementing partners can engage in implementing IPC and HCWM initiatives was shared to the USAID Philippines by MTAps.
<b>Activity 2.2.2:</b> Strengthen capacity to conduct and use HTAs to support institutionalizing transparent and evidence-based decision making.	4.2, 4.3	MTAps and the DOH HTA Unit, the DOH Medical Device Unit, and the HTA Council agreed on the scope and next steps of developing the HTA methods guide, essential medical device price reference index, and essential medical device price list. MTAps will further discuss the TA needed by DOH-PD on establishing the system.
<b>Activity 2.3.1:</b> Support the DOH in implementing standardized aDSM reporting and practice of causality assessment.	5.3	MTAps is supporting the DOH-PD in implementing standardized aDSM reporting and the practice of causality assessment through PViMS as needed. The PD received 10 ADR reports through the MTAps-supported PViMS.
<b>Activity 3.1:</b> Collaborate with other USAID IPs to build the capacity of UHC implementation sites/LGU on PSCM and PV.	5.1	MTAps is actively taking part in UHC implementation with other USAID IPs, focusing on supply chain system strengthening, PIES, LTAPS, and eLMIS.
<b>Activity 3.2:</b> Support gender equality and women's empowerment in PSS.	1.3, 2.1, 5.2	The alpha version of the gender e-Learning module was submitted to the DOH and gender experts for review. MTAps presented a poster on gender during a US Embassy event on sex and gender equity.

## THE US PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF (PEPFAR) (HIV/AIDS)

### OVERVIEW

In line with MTaPS' global objectives, MTaPS Philippines aims to establish and institutionalize an integrated health supply chain and pharmaceutical management system to ensure sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medicines, vaccines, other health technologies, and pharmaceutical services. Toward this goal, MTaPS Philippines provides appropriate TA and capacity-building support to the DOH to:

- Institutionalize an integrated and effective procurement and supply chain system for TB, FP, and other health program commodities
- Establish a fully functional PV system and improve pharmaceutical services to ensure patient safety and rational use of health commodities

MTaPS Philippines aims to accelerate progress to control the HIV/AIDS epidemic by strengthening the pharmaceutical system to ensure uninterrupted access to and safe use of HIV/AIDS commodities.

### CUMULATIVE PERFORMANCE TO DATE

MTaPS facilitated inclusion of two ARVs, namely, tenofovir 300 mg + lamivudine 300 mg + dolutegravir 50 mg (TLD) fixed dose combination and pre-exposure prophylaxis (PrEP) emtricitabine 200 mg + tenofovir 300 mg fixed dose combination in the Philippines National Formulary (PNF), after supporting successful completion of HTA requirements. MTaPS facilitated the completion of a USAID donation of ARVs for PrEP to the Government of the Philippines. MTaPS coordinated with the Philippines Bureau of Customs and supported coordination of necessary FDA clearances for the arrival of ARVs for PrEP and viral load cartridges donated by USAID. MTaPS supported the DPCB; the Epidemiology Bureau (EB), which is responsible for collection, analysis, and dissemination of HIV related data; and other stakeholders to complete the 3-year (2022–2025) quantification of ARVs for adult first-line drugs and PrEP, HIV test kits, and viral load cartridges. The results of the quantification activity are guiding immediate and future solicitation and allocation of funds and procurement. In addition, MTaPS used the results of the quantification exercise to develop the PSCM support plan for the TLD transition.

### QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

#### OBJECTIVE I: STRENGTHEN PSCM OF HIV/AIDS COMMODITIES

##### ***Activity 1.1: Support the DOH in using appropriate procurement mechanisms for addressing procurement-related bottlenecks for HIV/AIDS commodities***

MTaPS coordinated with the DPCB to organize a training on the public procurement law, notably the implementation of Republic Act 9184. The training will be facilitated by the Government Procurement Policy Board and is scheduled from August 23 to 25, 2023. This training session seeks to improve the capacity of the DOH to operate transparent, effective, and efficient procurement processes required from end-user entities. Furthermore, MTaPS collaborated closely with the DOH and USAID EpiC to assess the country's requirement for viral load cartridges and successfully coordinated the allocation and

distribution of these vital commodities. MTaPS assisted in obtaining essential clearances for the 8,649 kits of HIV-1 Viral Load Assay donation and ensuring regulatory compliances. Next quarter, MTaPS will support the finalization of the allocation of the third tranche of 3,349 kits of HIV-1 Viral Load Assay and facilitate clearance coordination prior to the timely delivery of HIV commodities to the selected facilities. MTaPS is also monitoring government-funded procurement of TLD and informing key stakeholders on the status of the procurement. MTaPS previously supported the DOH to facilitate the inclusion of TLD in the PNF which enabled the DOH to procure TLD using government funds. MTaPS supported the DOH to identify and invite participants to the DOH’s suppliers’ expo which aimed to help end users with how to write better technical specifications based on current market trends.

**Activity 1.2: Support the DOH in strengthening the distribution and inventory management system for HIV/AIDS commodities**

MTaPS provided supportive supervision to HIV sites, which was critical to bolster the skills and knowledge gained during the training on stock data recording, reporting, analysis, and good storage practices. MTaPS also proposed recommendations for improvement in the inventory management of HIV/AIDS commodities.

After the supportive supervision visits, MTaPS held results dissemination meetings for CHD HIV/AIDS Program Managers in the National Capital Region, Calabarzon, and Central Luzon regions to discuss and share the findings on SCM supportive supervision. MTaPS also recommended to CHD HIV/AIDS Program Managers to conduct supportive supervision visits to non-certified clinics and community-based organizations to improve their good dispensing and storage practices. CHDs will reaffirm capacity-building agreements to the health care workers through an issuance. MTaPS is also facilitating the compliance of HIV sites in storing or distributing donated HIV/AIDS commodities in accordance with the DOH, CHD and LGU logistics management and documentation standards.

**BEST PRACTICES/LESSONS LEARNED**

- Mentoring visits and follow-up complement the facilitator-led training in building the capacity of HFs on PSCM technical areas. The supportive supervision and mentorship provided on supply chain and PV to HIV care and treatment facilities helped to bolster the knowledge and skills they gained during the training in executing their inventory management activities.

**ACTIVITIES AND EVENTS FOR NEXT QUARTER**

Activity and Description	Date
Training on Republic Act 9184, also known as the Public Procurement Act and its 2016 revised implementing rules and regulations	August 2023
Quantification exercise for selected HIV/AIDS commodities	August 2023

**Table 27. Quarter 3, FY23, Activity Progress, Philippines—PEPFAR**

Activity	MTaPS Objective(s)	PEPFAR Objective(s)	Activity Progress
<p><b>Activity 1.1:</b> Support the DOH in using appropriate procurement mechanisms for addressing procurement bottlenecks for HIV/AIDS commodities.</p>	5.1	Strengthen PSCM of HIV/AIDS commodities	Supported the DOH in facilitating the Supplier’s Expo to mitigate procurement bottlenecks; also facilitated the clearance and distribution of viral load kits and identified HIV test kit suppliers for DOH market analysis scoping. MTAps is organizing the training of key DOH personnel on national procurement law and regulations. Data collection for the quantification of HIV commodities is under way.
<p><b>Activity 1.2:</b> Support the DOH in strengthening the distribution and inventory management system for HIV/AIDS commodities.</p>	5.1		Facilitated capacity-building workshops on supply chain and PV of HIV commodities. An alignment meeting with USAID EpiC is planned for the supply chain capacity building of health workers in new PEPFAR sites.

## CN220 (HIV/AIDS)

### OVERVIEW

In line with MTaPS' global objectives, MTaPS Philippines aims to establish and institutionalize an integrated health supply chain and pharmaceutical management system to ensure sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medicines, vaccines, other health technologies, and pharmaceutical services. Toward this goal, MTaPS provides TA and capacity building support to the Philippines DOH to:

- Institutionalize an integrated and effective procurement and supply chain system for TB, FP, and other health program commodities
- Establish a fully functional PV system and improve pharmaceutical services to ensure patient safety and rational use of health commodities

For the CN220-funded HIV/AIDS activities, MTaPS Philippines aims to accelerate progress to control the HIV/AIDS epidemic by strengthening the pharmaceutical system to ensure uninterrupted access to and safe use of HIV/AIDS commodities.

### CUMULATIVE PERFORMANCE TO DATE

MTaPS supported the DOH to develop the IPC checklist tool applicable for HFs such as HIV/AIDS outpatient care facilities. Using this IPC checklist tool, MTaPS conducted baseline and post-assessments of the IPC practices in 30 HIV outpatient care facilities. MTaPS presented the IPC baseline assessment results to key stakeholders at the national and regional level.

In collaboration with DOH, MTaPS mapped and standardized the flow of HIV commodities from the DOH Central Office to CHDs to LGUs and finally to HFs. MTaPS also mapped the differentiated service delivery focused on the multi-month drug dispensing practices in selected HIV care sites with emphasis on supply chain analysis. MTaPS trained the PSCM focal persons in all 52 PEPFAR sites on these HIV/AIDS SCM standards. MTaPS also developed a supply chain supportive supervision and monitoring tool which is being used during PEPFAR site visits to improve PSCM practices.

MTaPS assessed the practices of PEPFAR HIV/AIDS outpatient care facilities on PV recording and reporting. MTaPS worked with FDA and DOH to develop an AE reporting standard operating procedure for HFs and train them on AEs reporting. MTaPS continuously provides supportive supervision support to the trained PEPFAR facilities on PV.

MTaPS clarified the process to the market authorization holder and key stakeholders for successfully registering medical devices in the national regulatory authority, including the mechanical ventilator donated by USAID, which was one of the recipients of special approvals during the COVID-19 pandemic. Through this clarification, the market authorization holders (MAH) and key stakeholders were able to identify the bottlenecks in their application that has not progressed for several months.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

### ***Medical device registration: dialogue and mechanical ventilator registration***

MTaPS, in collaboration with the DOH and the FDA, conducted a dialogue that gathered key stakeholders to discuss strategies in strengthening the medical device regulation in the Philippines. The dialogue was attended by 184 participants (in-person and virtual; 55 male, 110 female, 19 unknown) from the government, private, and development sectors. Experts were invited to speak about best practices, lessons learned, and share practical country experiences in strengthening medical device regulation. The participants expressed great appreciation for the event as it served as an avenue for the public and private sectors to discuss regulatory processes, challenges, and plans to ensure greater access to safe, quality-assured, and affordable medical devices. The plans include the FDA's adopting other reliance methods in evaluating medical devices and the DOH's enhancing the PEMDL. The FDA and the DOH are open to public-private sector collaboration to strengthen the regulation of medical devices. Following the dialogue, MTAps organized a virtual learning session to discuss the actual experience in Nepal of regulating medical devices, including the development of a technical specifications bank, attended by 4 (2 male, 2 female) DOH medical device unit officers. This learning session was a response to the DOH's request for knowledge-sharing support on this area.

MTaPS has been monitoring the certificate of product registration (CPR) application of the USAID-donated mechanical ventilators and associated consumables. Due to a lack of compliance with documentation requirements by the MAH applicant, the CPR application was not approved by the FDA. MTAps will continue to coordinate with the MAH to guide them on the registration of the mechanical ventilators and related consumables. If registered, consumables for the mechanical ventilator will be available in the Philippines, and hospitals will be able to continue using the donated mechanical ventilators.

### ***Medical device inventory***

MTaPS worked with the DOH SCMS to incorporate the USAID and the Global Fund–donated mechanical ventilators in the WHO Inventory and Gap Analysis (IGA) online system. The IGA system was developed to help ease the burden of countries in collecting and analyzing equipment inventory data, including mechanical ventilators. The DOH SCMS released a memo instructing all CHDs and provincial health offices (PHO) to encode the donated mechanical ventilators into the IGA system by June 16, 2023. To guide users in encoding the mechanical ventilators into the IGA system, MTAps and the DOH SCMS co-developed and disseminated a Mechanical Ventilators Encoding Guide. A report will be extracted from the IGA system after the deadline to check compliance and monitor the status of the mechanical ventilators and other cold-chain equipment. Through IGA, determining the status of all the donated mechanical ventilators can be streamlined, and therefore issues or concerns can be quickly addressed.

MTaPS with the SCMS, the WHO, and CHD 6 conducted an IGA system user training for all provinces and cities in Region 6. The training was held in 2 batches. Batch 1 was for PHOs and city health offices (CHO) that was attended by 34 participants (10 male, 24 female) while Batch 2 was for the CHOs of Negros Occidental and was attended by 36 participants (12 male, 24 female). MTAps, together with representatives from the DOH and respective CHDs, also visited 2 hospitals, namely, Western Visayas Medical Center and Southern Philippines Medical Center, to check the status of the donated mechanical

ventilators. Through this visit, MTaPS was able to identify discrepancies in the number of units received by the hospitals with the allocation list, and it indicated the lack of a supplier for the procurement of the consumables needed to continuously use the ventilators. These issues were communicated to the donors and to the MAH. Furthermore, MTaPS coordinated and provided supplier information to the hospital visited, which expressed interest in procuring the required consumables for operating the donated mechanical ventilators.

### ***Service delivery of HIV/AIDS commodities***

MTaPS visited 14 health care facilities. During this supportive supervision, a total of 140 (77 male, 63 female) health care providers were mentored on the supply chain management standard practices using a supply chain supportive supervision and monitoring tool. MTaPS also identified outstanding practices, and opportunities for improvement in the standardized Supply Chain Management of HIV/AIDS Commodities. Furthermore, MTaPS worked with USAID to invite key players from the business community to share their thoughts on the possibility of engaging private drug stores in increasing access to PrEP and HIV self-testing kits. These initiatives effectively expand the health care system’s capacity to provide crucial services to people living with HIV, resulting in better health outcomes in the ongoing fight against the HIV/AIDS epidemic. The next steps will be to advocate for CHDs to revisit the identified facilities to provide more support, as well as to finalize and share the SCM guideline with the DOH and partners to improve access to HIV prevention and treatment commodities.

### ***PV of HIV/AIDS commodities***

In support of the DOH and the FDA in monitoring the drug safety of TLD and PrEP through the implementation of targeted spontaneous reporting (TSR) mechanism, MTaPS visited 14 Social Hygiene Clinics in Central Luzon region. A total of 140 (77 male, 63 female) health care providers were mentored on how to report AEs to the FDA. As a result of the site visits and subsequent telephone follow-ups, a total of 14 AEs were reported to the FDA for clients using TLD and PrEP.

## **BEST PRACTICES/LESSONS LEARNED**

- Leveraging resources and aligning to the strategies of government counterparts results in effective implementation of project activities. For example, MTaPS leveraged the existing system to encode and track mechanical ventilators donated by USAID using the IGA introduced by WHO in collaboration with the DOH SCMS.
- Bottlenecks in the registration of products may also be due to the quality of documents submitted to the FDA. It is important that the regulatory officers of the MAH practice due diligence in checking the documents before submission.

## **ACTIVITIES AND EVENTS FOR NEXT QUARTER**

<b>Activity and Description</b>	<b>Date</b>
Visit hospitals to check on the status of the donated mechanical ventilators.	July 2023
Coordinate with the DOH in completing the encoding of mechanical ventilator into the IGA system.	August 2023
Gather the inventory status of the mechanical ventilators’ consumables in hospitals, which will help inform the allocation of the upcoming donation of consumables by USAID.	August 2023
Coordination meetings with CHDs on new ART sites for sustainability of MTaPS initiatives on HIV commodity supply chain and PV.	August 2023



**Table 28. Quarter 3, FY23, Activity Progress, Philippines—CN220**

Activity	MTaPS Objective(s)	CN220 Objective(s)	Activity Progress
Support the Department of Health and HIV Community-Based Organizations in developing and implementing a PSCM action plan for differentiated service delivery, including community dispensing of ARVs to people living with HIV.	1.2, 5.1	Address acute needs driven by COVID-19, mitigate household shocks, and build resilience.	MTaPS drafted the standards on HIV/AIDS product flow. Priority PEPFAR sites are being trained and mentored on these standards. MTAps is visiting PEPFAR sites to mentor them on PSCM best practices.
Support the DOH in the drug safety monitoring of TLD and PrEP through the implementation of TSR mechanism	2.4	Bolster economies and other critical systems under stress due to COVID-19 to prevent backsliding and enable recovery.	MTaPS is supporting the finalization and operationalization of TSR for TLD and PrEP in the country. Telephone follow-ups were conducted to remind the facilities of reporting AEs.

## O. RWANDA

### FIELD SUPPORT ACTIVITIES

#### OVERVIEW

The goal of MTaPS in Rwanda is to provide support in strengthening its pharmaceutical system to ensure sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medical products—including ARVs and MNCH products—along with related pharmaceutical services. As part of its support to Rwanda’s MOH and FDA, MTaPS focuses its technical assistance 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 build its institutional capacity to address key areas of weakness and gaps identified in successive WHO GBT assessments and collaborative QMS assessment conducted by an expert from the Tanzania Medical Devices and Drugs Authority in May 2022.

#### CUMULATIVE PERFORMANCE TO DATE

Over the past five years, MTaPS has continued to provide pharmaceutical systems strengthening support to the MOH and its institutions, including the Rwanda FDA and the RBC (including its MCCH division).

Through MTaPS’ support to the Rwanda FDA, 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) were developed. In PY4 and 5, MTaPS supported two medicines dossier assessment retreats which reduced the backlog of pending dossier applications at the Rwanda FDA. As part of implementation of a QMS at the Rwanda FDA in accordance with ISO 9001:2015 requirements, in May 2021, MTaPS supported the development of a quality manual and corresponding SOPs, and in June 2021, an internal audit training of 27 Rwanda FDA staff (17 male, 10 female). MTaPS has contributed to strengthening 5 pharmaceutical regulatory functions: the national regulatory system; product registration and marketing authorization; licensing establishments; regulatory inspections; and vigilance.

In strengthening the information management system for both active and spontaneous PV, MTaPS supported the Rwanda FDA to adapt the electronic PVIMS 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. The use of PVIMS ensures that medicine safety monitoring reports are quickly received and analyzed by the Authority, which can then provide regulatory feedback to clients, patients, and HFs in a timely manner. From June 2021 to March 2023, 1,539 AEFIs (597 of which were serious AEs) were reported to the Rwanda FDA. Rwanda FDA subsequently reported the 597 serious AEs to WHO and are pending causality assessment by the Rwanda FDA.

MTaPS has been providing technical assistance for implementation of a regulatory management information system to increase efficiency of the Rwanda FDA’s regulatory functions. IRIMS was customized to the Authority’s requirements and deployed on a temporary server at the Rwanda FDA.

During PY5, MTaPS continued to work with Rwanda FDA and the software development consultant to support IRIMS deployment and implementation, including training internal and external users. In addition, MTaPS worked with Rwanda FDA and Rwanda Information Society Authority (RISA) to facilitate final hosting of IRIMS in the country's National Data Center on three configured and deployed IRIMS servers, leveraging on COVID-19 funds from USAID.

In addressing the human resources capacity gap, MTaPS supported training of health care providers in different areas of pharmaceutical management, including 815 Rwanda FDA regulatory personnel trained in medicines evaluation and registration, good manufacturing practices, good review practices, good reliance practices, PV, and QMS. As part of long-term sustainability of capacity building, MTaPS provided technical support to develop online e-learning courses in MER and PV, which are hosted on the Rwanda FDA servers. MTaPS supported the MOH and the Rwanda FDA in disseminating information on the pharmaceutical service accreditation standards and medicines safety to health workers in various forums. To improve pharmaceutical management in HFs via MTCs, MTaPS supported the development of an MTC operational manual, tools and SOPs, and orientation of 313 health care providers (200 male and 113 female).

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, guidelines on regulating medical gases were developed to ensure the availability of quality oxygen for the management of hypoxic newborns and children as well as cases of COVID-19, where medical oxygen is an essential part of treatment. MTaPS supported the RBC in assessing the supply, availability, and use of oxygen, respiratory equipment, and medical devices. MTaPS also supported the MOH in a rapid assessment of the use of medicines for postpartum hemorrhage and eclampsia, and subsequent development of an implementation manual to guide health workers on procedures for correct cold storage and management of oxytocin.

To strengthen PV, MTaPS supported the development of a costed multi-year national PV plan to guide the implementation of medicine safety monitoring activities. Nineteen participants from the National Pharmacovigilance Advisory Committee and Rwanda FDA were trained on PV. To conduct active surveillance of DTG-based ART regimens to determine their safety, MTaPS—working with MOH, RBC, and Rwanda FDA—developed a study protocol that was approved by the Rwanda National Ethics Committee in December 2021. Patient enrollment into the study started in December 2021 and ended in May 2022 with 1,440 patients (1,100 female, 340 male) enrolled across 20 HFs. One-year patient follow-up ended in May 2023 with 1,437 (1,097 female, 340 male) patients having had up to 9 follow-up visits per patient, 3 female patients lost to follow-up, and 9 mild AEs, such as skin rashes and dry cough identified (in 8 female patients, 1 male). MTaPS supported the RBC in conducting a situational analysis of ARV MMD and pack size, which facilitated the roll-out of 6 MMD using a recommended pack size of 90 units. Furthermore, MTaPS supported the RBC to conduct a feasibility study on shifting adherent breastfeeding mothers and new clients on ARVs from monthly dispensing to bi-monthly dispensing, which found that MMD is feasible and satisfies different categories of people living with HIV/AIDS. Implementing MMD will not only reduce workload at the HF level but also improve the quality of HIV care.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

On May 22, 2023, with MTaPS' support, Rwanda FDA held a go-live event that involved a live demonstration of IRIMS and the launch of its online service portal. Also, with MTaPS' support, the integration of iRIMS to the Rwanda Government *iRembo* national payment gateway was fully completed. After 4 weeks of IRIMS implementation there was increased efficiency and transparency in processing applications at Rwanda FDA, with over 1,500 permits issued in 4 weeks since go-live, and significant increase in revenue collection (RWF 352,493,804 (about \$296,974), of which RWF 152,604,311 (about \$128,568) was through *iRembo* payment gateway). During the quarter, MTaPS also supported the orientation of 12 Rwanda FDA personnel on processed food regulations and guidelines and a risk-based inspection plan of food premises, all previously developed/reviewed with MTaPS' TA. The trained food regulators are now able to undertake monitoring of processed food quality and safety through inspections of processed food premises.

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

#### ***Activity 1.1.1: Strengthen the medical products regulatory framework of the Rwanda FDA, including that for medicines used in HIV/AIDS, MNCH, and FPIRH programs***

To strengthen the regulatory framework of processed food products, and improve food safety MTaPS finalized an FY3 activity by supporting the orientation of 12 Rwanda FDA regulators (8 male and 4 female) on a risk-based inspection plan and 4 developed/reviewed regulations and guidelines, namely the regulation governing food hygiene, regulation on food safety surveillance, guidelines on post-marketing surveillance of food products, and guidelines on recall, seizure, and disposal of unfit products. The developed risk-based inspection plan will be used to conduct regulatory inspections on selected food product premises.

### **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***

MTaPS and Rwanda FDA achieved a milestone in IRIMS implementation by reaching the go-live stage and formally starting use of IRIMS in supporting execution of Rwanda FDA core functions. A go-live event that brought together various stakeholders—including clients, USAID, implementing partners, and representatives of the Government of Rwanda's ministries and agencies—was held in May 2023 and provided an opportunity for sensitization of stakeholders on the use of IRIMS through a live demonstration. Over 150 participants attended the event. MTaPS provided post-go-live support to external and internal users. To ensure system transition and sustainability, super-users from various departments were trained in basic system support and troubleshooting. Within four weeks after implementation, over 1,500 permits had been issued using IRIMS and approximately 44% (RWF 152,604,311, about \$128,568) of the RWF 352,493,804 (about \$296,974) revenue collected was secured through the government-owned *iRembo* payment gateway, showing increased efficiency and transparency in processing applications and significant increase in revenue collection at Rwanda FDA. Furthermore, MTaPS supported the development of a data protection and privacy policy to support the

use of Rwanda FDA information management systems, including iRIMS. The document is under final review by Rwanda FDA.

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

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

During this quarter, MTaPS supported Rwanda FDA to review and print 10,000 ADR patient alert cards as well as IEC materials (i.e., 700 posters and 500 flyers). These will be used by the FDA to increase public awareness of the importance of monitoring and reporting AEs to enhance patient safety. MTaPS supported Rwanda FDA in an in-depth review of the draft institutional communication strategy that will guide the Authority in its internal communications to staff and external communications to stakeholders and the public.

### **BEST PRACTICES/LESSONS LEARNED**

- The implementation of a regulatory information management system requires the identification of a project team and clarification of the project objectives, project plan, contractual agreements, and the responsibilities of all parties involved (client, external stakeholders, software development consultant) to ensure a shared understanding and foster teamwork, collaboration, and a sense of ownership among the team members. This in turn enhances project success.
- Identifying risks and defining mitigation measures at an early stage in regulatory information management system implementation is vital as it minimizes the chances of project delays or failure to meet objectives that could have been anticipated and addressed.

### **ACTIVITIES AND EVENTS FOR NEXT QUARTER**

<b>Activity and Description</b>	<b>Date</b>
<p><b>Activity 1.1.1:</b> Strengthen the medical products regulatory framework capacity of the Rwanda FDA in regulating pharmaceuticals, including medicines used in HIV/AIDS, MNCH, and FP/RH programs</p> <ul style="list-style-type: none"> <li>▪ Provide technical assistance to undertake the mid-term evaluation of the Rwanda FDA's Four-Year Strategic Plan (2021-2024)</li> </ul>	July-September 2023
<p><b>Activity 1.1.2:</b> Improve capacity for registration of medical products (essential medicines, vaccines, and medical devices), including those used in HIV/AIDS, MNCH, and FP programs</p> <ul style="list-style-type: none"> <li>▪ Support Rwanda FDA to implement facilitated registration pathways by conducting a medicines dossier assessment to reduce dossier backlog and apply reliance principles for expedited quality evaluations</li> </ul>	July-September 2023
<p><b>Activity 2.1.1:</b> Build capacity on the use and management of IRIMS in automation of medical product regulation processes</p> <ul style="list-style-type: none"> <li>▪ Continue to build capacity of Rwanda FDA staff and external users on effective application usage and implementation support of IRIMS, including training in maintenance</li> <li>▪ Facilitate the creation of a transition plan for IRIMS to the FDA, including capacity transfer, a localization strategy, and the establishment of a service-level agreement/maintenance contract to sustain IRIMS beyond the MTaPS program</li> </ul>	July-September 2023
<p><b>Activity 3.2.2:</b> Continue to strengthen PV and safety monitoring for regulated medicines, including ARVs, through enhancing the existing spontaneous reporting system</p> <ul style="list-style-type: none"> <li>▪ Support updating of PVIMS tool to cater to emerging Rwanda FDA requirements in spontaneous reporting, including updates to the ADR reporting form and active surveillance forms</li> <li>▪ Interface the PVIMS and IRIMS datasets by integrating the relevant common key data elements in reports on a dashboard that reports on selected key performance indicators (KPIs)</li> </ul>	July-September 2023

**Table 29. Quarter 3, FY23, Activity Progress, Rwanda—FIELD SUPPORT**

Activity	MTaPS Objective(s)	Activity Progress
<p><b>FS Activity 1.1.1:</b> Strengthen the medical products regulatory framework capacity of the Rwanda FDA in regulating pharmaceuticals, including medicines used in HIV/AIDS, MNCH, and FP/RH programs</p> <p><b>Activity Description:</b> Provide technical assistance to undertake the mid-term evaluation of Rwanda FDA's four-year strategic plan</p>	1.2	In relation with building an overall strong regulatory framework for the Rwanda FDA, MTAps is providing technical assistance to undertake the mid-term evaluation of the Authority's Four-Year Strategic Plan (2021-2024) by engaging a local management firm, whose selection is being finalized.
<p><b>FS Activity 1.1.2:</b> Improve capacity registration of medical products (essential medicines, vaccines, and medical devices), including those used in HIV/AIDS, MNCH, and FP programs</p> <p><b>Activity Description:</b> Provide technical assistance to Rwanda FDA to conduct an assessment workshop aiming at covering 100 dossier applications in a 2-week session using abridged and reliance methods</p>	1.2	No activity conducted during Q3
<p><b>Activity 2.1.1:</b> Build capacity on the use and management of IRIMS in automation of medical product regulation processes</p> <p><b>Activity Description:</b> Work with the Rwanda FDA and the software development consultant to support the deployment and implementation of IRIMS and train stakeholders and additional staff as users; undertake capacity building of Rwanda FDA staff, including the Authority's information and communications technology staff, as well as external users, on effective application usage and implementation support of IRIMS; support implementation of IRIMS APIs, documentation, and plug-ins to interface with other national systems; develop a memorandum of understanding with RISA and the National Data Center for a reliable hosting environment for IRIMS; provide system and operational manuals</p>	3.1	<p>MTaPS provided progressive support to IRIMS enhancements. Integration of IRIMS to iRembo was completed. On May 22, 2023, Rwanda FDA held a go-live event with live demonstration of IRIMS and launch of its online service portal. MTAps team provided post-go-live support to external and internal users. Super-users from various departments were trained in basic system support and troubleshooting.</p> <p>The unavailability of the two IT staff led to rescheduling the planned IT team training to Q4.</p>
<p><b>Y4 Activity 3.2.1 (a):</b> Support the ongoing implementation of the active surveillance system for DTG-based regimens at the 20 selected hospitals and disseminate findings and recommendations of the study</p> <p><b>Activity Description:</b> Support the ongoing implementation of the active surveillance system for DTG-based regimens at the 20 study sites; disseminate findings and recommendations of the study</p>	5.3	<p>MTaPS made progress on importing existing active surveillance data from the sites from the RBC's Open Data Kit tool into PViMS to enable data analysis.</p> <p>One-year patient follow-up was completed by the end of May 2023 with 1,437 patients having had up to 9 follow-up visits per patient, 3 patients lost to follow-up, and 9 mild AEs (such as skin rashes and dry cough) identified.</p>
<p><b>Y2 Activity 3.1.4:</b> Support management of medicines at the community level</p> <p><b>Activity Description:</b> Support the MOH to develop mini lessons for health center staff to give to the community health workers in their regular meetings at the health centers</p>	5.2	Draft mini lessons were developed and submitted to RBC. RBC is working with MTAps to plan for a stakeholder validation workshop to obtain their input and comments, prior to finalization of the mini lessons.

<p><b>Activity 3.2.2:</b> Continue to strengthen PV and safety monitoring for regulated medicines, including ARVs, by enhancing the existing spontaneous reporting system</p> <p><b>Activity Description:</b> Support updating of PViMS tool to cater to emerging Rwanda FDA requirements in spontaneous reporting, including updates to the ADR reporting form and active surveillance forms; interface the PViMS and IRIMS datasets by integrating the relevant common key data elements in reports on a dashboard that reports on selected KPIs; support a public awareness campaign on AEFI/AE detection and prevention; review and print the PV tools, including the patient alert card and IEC materials used in the HFs; revise the draft communication strategy of the Rwanda FDA for AE awareness and other regulatory functions, with an implementation plan</p>	<p>5.3</p>	<p>A new version of PViMS was deployed at Rwanda FDA with conversion to full open source. This will increase sustainability and make maintenance easier as the full server stack is now aligned with other Rwanda FDA systems.</p> <p>Meetings were held with Rwanda FDA, PViMS, and IRIMS software developers to discuss how to implement interoperability and a plan is being developed. MTaPS has started on PViMS enhancement to align with recommendations of recent WHO GBT assessment.</p>
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## EBOLA RESPONSE ACTIVITIES

### OVERVIEW

The 2004 outbreak of EVD in West Africa was the largest, most severe, and most complex Ebola outbreak in history and required the development of strategies to prevent the spread of the disease to other countries. Most cases occurred in the DRC, Guinea, Sierra Leone, and Liberia. Without an effective early warning system, the virus can spread rapidly within the region, revealing the failures of the disjointed and under-resourced health care system in Africa.

HCAIs are a major public health problem with an impact on morbidity, mortality, and quality of life, and they present a significant economic burden for the health system. However, a sizable percentage of these infections are preventable through effective IPC measures. By preventing the occurrence and spread of infections, IPC thereby reduces the need for antibiotics and other expensive treatment measures.

Lessons learned from outbreak measures undertaken by other countries have enabled Rwanda to think ahead and develop an NSP for the prevention of EVD, a national IPC policy, national IPC guidelines, and other documents through collaboration with public and private stakeholders. This early planning and availing of strategic documents are among the health system strategies put in place to ensure that an early preparedness and response team in the health sector is available to prevent EVD outbreaks and has response tools at the ready in case of an EVD outbreak.

### CUMULATIVE PERFORMANCE TO DATE

MTaPS, in collaboration with the MOH and RBC, worked to ensure that the developed documents on EVD prevention and control underwent expert review, validation, and dissemination to HFs for EVD preparedness. In May 2021, MTAps hired two consultants to work on the development and review of key strategic documents for EVD prevention and control so the MOH can support HFs with the most current and updated NSP for EVD prevention and have a validated and approved national IPC policy in place to ensure a measurable preparedness and response plan. The newly available IPC documents and NSP for EVD were reviewed by experts who provided tangible input to strengthen the documents. MTAps also supported both the MOH and RBC in developing IPC risk communication materials that will be helpful in ensuring that IPC messages are communicated effectively to the population within the context of reducing and containing infections to an acceptable minimum level in the case of an outbreak.

MTaPS provided technical support to the MOH, RBC, and its stakeholders in the review of the national IPC policy, NSP, contingency plan for EVD, and national IPC guideline. The national IPC guideline was completed and approved by the MOH. In addition, MTAps supported the development of the national Ebola IPC guidelines, training materials for EVD, 14 job aids, 15 tools, and 13 SOPs on Ebola IPC, and the Ebola IPC compliance monitoring tool was used to train health care providers. The Ebola IPC compliance monitoring tool was completed and piloted alongside the SOPs and IPC guidelines in both Kibagabaga and Muhima district hospitals as part of validation.

MTaPS procured equipment including 50 remote temperature screening devices (ThermoFlash®), 10 tablets, and 10 modems with 6 months of 3G internet connection to facilitate entry/exit EVD screening

and reporting at the ports of entry, which also will be used during the IPC simulation exercise at the points of entry. MTaPS handed over the procured materials to the RBC on May 5, 2022.

In Q4 of PY4, MTaPS supported the development of the IPC training materials/curriculum and the alignment of the developed documents to MOH requirements, including the EVD-hemorrhagic fever disease national guidelines, IPC training manual, EVD handbook and job aids, and IPC compliance monitoring tool, the latter of which is available for online use. The guidelines and training materials were subsequently used by both the MOH and RBC to train health care and front-line workers, starting with Musanze, as part of EVD preparedness. During PY5, in May 2023, MTaPS supported RBC to train 6,258 health workers on the use of an electronic community-based surveillance system (e-CBS) and its rollout in selected districts to support the timely detection and response at the community level of viral hemorrhagic fevers such as Ebola. The e-CBS tool had been developed with earlier MSH support in 2017-18.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

As part of its emergency preparedness response, Rwanda is conducting enhancement of community-based surveillance of viral hemorrhagic fevers such as EVD for their early detection and containment. In line with this, the RBC developed the e-CBS which is used in cell phones to enable community health workers at the village level to notify administrative entities in a timely manner.

This quarter, to support the rollout of this community-based surveillance system, MTaPS worked with 14 trainers from RBC to first conduct training of 114 trainers of trainers from 7 district hospitals and 57 health centers in 3 high-risk districts of Karongi, Ngororero, and Rusizi. They in turn cascaded the training to 6,144 community HCWs (2,089 male and 4,055 female) who work in the local communities. The HCWs learned how to detect, notify, investigate, and respond to any signs of viral hemorrhagic fevers, and their notification to the administrative authorities will aid in early detection and containment. The rollout of the e-CBS and the training is expected to contribute to enhancing the health care system's capacity to minimize the spread of viral hemorrhagic fevers, public health emergencies of international concern, hence contributing to safer, healthier communities in Rwanda.

## **BEST PRACTICES/LESSONS LEARNED**

- By training a small group of trainers of trainers who then cascade the knowledge to a larger number of community HCWs, existing human resources can be leveraged to ensure that essential skills and knowledge are disseminated rapidly and widely. This was demonstrated in Q3 through the numbers of health care workers reached in a short time period through the TOT and cascade trainings on the community-based surveillance of viral hemorrhagic fever-like conditions.
- Integrating the e-CBS tool into health training and surveillance methods can improve real-time data collection and disease monitoring.

## **ACTIVITIES AND EVENTS FOR NEXT QUARTER**

None. All activities completed.

## **P. 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 aims to achieve this goal by enhancing 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 basing country-specific technical assistance on a sound, evidence-based situational analysis of the strengths and weaknesses of activities at the eight targeted hospitals and of the IPC and AMS national programs. In FY22 and FY23, 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 OHP and its functionality under the aegis of the OH secretariat. MTaPS supported the development of annual and quarterly action plans of the OHP based on the national plan of health security 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 eSPAR. This plan is currently awaiting submission for approval by the OH High Council Steering Committee.

MTaPS collaborated with 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. DQSHH then used the newly updated national IPC supervision checklist to measure the IPC capacity level of HFs. This supervision checklist includes guidance to help supervisors standardize its use in the 14 health regions in Senegal.

MTaPS supported the DQSHH to conduct a first assessment of the national IPC program using the WHO IPCAT2. Information from this assessment was later used to revise the National IPC Policy Document, to develop an IPC-NSP, and to revitalize 13 hospitals' ICCs by helping them implement action plans they had developed during a participatory initial baseline assessment conducted using the WHO IPCAF.

To strengthen governance for AMS, MTaPS provided support to the NCAT to update Senegal's antibiotic policy and national STGs that had been developed in 2010 but never implemented. MTaPS used this opportunity to provide technical orientation to NCAT's four TWGs (the TWGs for antibiotic

therapy policy, antibiotic therapy for community infections of adults and children, antibiotic therapy of HCAs, and antibiotic prophylaxis) on WHO's AWaRe categorization of antibiotics. NCAT has since adopted this categorization.

Finally, MTaPS supported Senegal's Ebola IMS to conduct a workshop to finalize 32 SOPs: 6 SOPs on case management, 8 on IPC, 9 on surveillance, 4 on behavior change communication, 3 on logistics, and 2 on vaccination. The IMS also requested support for the integration of SOPs for psychosocial care, so MTaPS supported the development of three additional SOPs on the psychosocial care of patients, families, and HCWs affected by Ebola. An SOP manual for EVD and other hemorrhagic fever diseases, including all the previously mentioned SOPs, was finalized and validated by the National Committee for Pandemic Management. All of MTaPS' Ebola-related activities were completed by December 31, 2022, and MTaPS handed over printed copies of the validated SOP manual to the EVD IMS on April 11, 2023.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

### **RESULT AREA 1: EFFECTIVE MSC OF AMR**

#### ***Activity 1.1.1: Strengthen the functionality of the AMR TWG by supporting effective coordination through regular meetings***

In preparation for Senegal's next JEE of the IHR planned for July 17-21, 2023, MTaPS was appointed to participate in the core group in charge of a JEE self-assessment organized by the MOH's General Directorate of Public Health on May 16-19, 2023. MTaPS supported data collection for the AMR, IPC, and laboratory subgroups in preparation for the workshop.

MTaPS supported the AMR TWG to organize a workshop on April 7, 2023, to provide training on the third edition of the JEE tool in preparation for the planned development of Senegal's NAP-AMR for 2023-2027. MTaPS also provided technical support to the development and finalization of Senegal's proposal for the World Bank-managed Pandemic Fund.

From May 30 to June 2, MTaPS, in collaboration with the World Animal Health Organization and FAO Emergency Centre for Transboundary Animal Diseases, provided technical and financial support for a workshop to develop the National AMR Action Plan for 2023-2027. Senegal's National AMS Plan, which was previously developed with support from MTaPS, is now integrated into the new NAP-AMR. During the workshop, MTaPS also provided orientation on resources including the GBT, the newly updated JEE 3.0 tool, and the IPC-NSP.

### **RESULT AREA 2: IPC**

#### ***Activity 2.5.4: Support the development, dissemination, and implementation of the IPC-NSP***

On April 27, 2023, MTaPS worked with the General Directorate of Public Health and the DQSHH to organize the technical validation of the IPC-NSP with all IPC stakeholders. From May 2 to 4, 2023, MTaPS participated in a workshop organized by the DQSHH to develop a national IPC work plan. This work plan is the first activity in the validated IPC-NSP.

From June 21 to 23, 2023, MTaPS participated in a workshop to update Senegal’s National IPC Guidelines. Once finalized, the DQSHH will disseminate them nationwide to strengthen IPC practices in all HFs.

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

**Activity 3.1.1: Support the implementation of capacity building interventions to increase compliance with antibiotic STGs**

From May 23 to 27, 2023, MTaPS supported the NCAT to conduct a training of 19 trainers (10 female, 9 male) on Senegal’s approved antibiotic treatment guidelines. NCAT plans to utilize both the newly trained personnel as well as the NCAT master trainers to roll out AMS-related training to HFs nationwide once the NCAT completes its training plan.

**BEST PRACTICES/LESSONS LEARNED**

- It is important to support HFs in developing a certain level of autonomy to prioritize and make decisions regarding the implementation of IPC improvement activities. When facilities are empowered to take action to make IPC improvements, they are more likely to successfully implement their operational plans. So far, out of the three hospitals that MTaPS supported to revitalize their IPC committees, two are autonomously planning and mobilizing resources to implement IPC activities.
- MTaPS counterparts sometimes prioritize the implementation of activities that they have full responsibility in managing and for which they receive direct funding. This means that to effectively engage counterparts in joint activity implementation that is not accompanied by grant funding, MTaPS may need to engage in extra planning and advocacy with the counterparts in the lead up to implementation.

**ACTIVITIES AND EVENTS FOR NEXT QUARTER**

Activity and Description	Date
<p><b>Activity 1.1.1:</b> Strengthen the functionality of the AMR TWG by supporting effective coordination through regular meetings.</p> <p>Under the aegis of the OH secretariat, MTaPS will participate in virtual and in-person meetings to finalize and validate the NAP-AMR 2023-2027.</p>	July–September 2023
<p><b>Activity 2.5.3:</b> Support the revitalization of ICCs at two selected district and regional hospitals</p> <p>MTaPS will continue to support seven hospitals to perform a self-assessment of their IPC capacities using the IPCAF tool in order to improve/consolidate their IPC practices.</p>	July–September 2023
<p><b>Activity 2.5.4:</b> Support the development, dissemination, and implementation of the IPC-NSP</p> <p>MTaPS will support the General Directorate of Public Health and the DQSHH to disseminate the validated IPC-NSP.</p>	July–September 2023
<p><b>Activity 3.1.1:</b> Support the implementation of capacity building interventions to increase compliance with antibiotic STGs</p> <p>MTaPS will support the NCAT to organize a training on Senegal’s antibiotic STGs in eight hospitals.</p>	July–September 2023
<p><b>Activity 1.1.1:</b> Strengthen the functionality of the AMR TWG by supporting effective coordination through regular meetings.</p> <p>Under the aegis of the OH secretariat, MTaPS will participate in virtual and in-person meetings to finalize and validate the NAP-AMR 2023-2027.</p>	July–September 2023

**Table 30. Quarter 3, FY23, Activity Progress, Senegal—GHSA**

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Strengthen the functionality of the AMR TWG by supporting effective coordination through regular meetings</p>	5.4	1.1	<p>MTaPS continued providing technical and financial support to effective coordination through regular meetings under the aegis of the OH secretariat. In collaboration with Breakthrough Action, FAO, WHO, PATH, FAO, and Fleming Fund, MTAps contributed to the development and validation of various national documents:</p> <ul style="list-style-type: none"> <li>▪ Senegal’s annual AMR action plan: this plan will be based on the 2023-2028 NAP-AMR, which will be finalized and approved in the fourth quarter of FY23.</li> <li>▪ e-SPAR report: the WHO shared the finalized updated e-SPAR report on July 11, 2023.</li> </ul>
<p><b>Activity 2.5.2:</b> Provide technical assistance for supportive supervision to increase compliance with the updated IPC guidelines and standards</p>	5.4	2.5	<p>MTaPS provided technical support to update Senegal’s national IPC guidelines. These guidelines will be disseminated during the planned supportive supervision.</p>
<p><b>Activity 2.5.3:</b> Support the revitalization of ICCs at two selected district and regional hospitals</p>	5.4	2.5	<p>MTaPS continued supporting the revitalization process for ICCs at the 13 MTAps-supported HFs through self-assessments with the IPCAF tool, refresher trainings, mentoring, and supportive supervisions.</p>
<p><b>Activity 2.5.4:</b> Support the development, dissemination, and implementation of the IPC-NSP</p>	5.4	2.5	<p>MTaPS supported the development and the technical validation of the IPC-NSP. Following this, MTAps also supported the development of an operational plan for the IPC-NSP. The dissemination of the IPC-NSP is pending the plan’s official approval by Senegal’s Minister of Health.</p>
<p><b>Activity 3.1.1:</b> Support the implementation of capacity building interventions to increase compliance with antibiotic STGs</p>	5.4	3.1	<p>MTaPS supported the NCAT to conduct a training of 19 trainers on Senegal’s approved antibiotic STGs. MTAps will support the rollout of trainings in the 13 targeted hospitals once NCAT completes its national training plan for HFs.</p>

## Q. TANZANIA

### GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

#### OVERVIEW

MTaPS' 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 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 medicines use.

The PY5 implementation plan for GHSA builds on the work done in PY1–PY4. 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. MTAps is advocating for the use of data for CQI of both AMS and IPC interventions and is supporting the development and implementation of surveillance methods for SSIs, whose treatment involves antibiotics and is therefore a key concern with respect to AMR. MTAps is building the capacity of HCWs to implement the IPC-related reporting system (as part of the 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 Q2 PY5, 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). In MSC, MTAps supported the coordination of AMR activities under the AMR MCC, working under the OH approach, and 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 the IPC, AMS, and M&E TWGs, which helped improve the implementation of IPC, AMS, and M&E in Tanzania. MTAps supported the development and the 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 (MOA); Ministry of Livestock and Fisheries (MLF); President's Office Regional Administration and Local Government; and the five TWGs that feed into the MCC (AMR awareness, AMR surveillance, IPC, AMS, and M&E).

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), which contributed to improving the country's performance from the 2016 JEE score of 3. MTAps supported the revision of the national IPC guidelines for health care services



in Tanzania (2018 edition) and their distribution across mainland Tanzania. MTaPS also conducted IPC training for 519 (296 female, 223 male) HCPs. To improve IPC implementation and sustainability, MTaPS Tanzania established and strengthened IPC committees in 10 MTaPS-supported hospitals and conducted clinical mentorship and CQI, which brought about improved WASH and handwashing practices and reduced SSIs and other nosocomial infections. MTaPS developed an IPC e-Learning course that equipped the Center for Distance Education in Morogoro to offer online IPC training to HCPs. Furthermore, MTaPS supported the MOH to review the IPC training curriculum for HCPs and oriented 61 (41 female, 20 male) 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 management information system focal persons on the use of IPC M&E tools and reporting IPC indicators via DHIS2. MTaPS also supported the MOH to develop the HAI surveillance system with reporting through DHIS2. All 10 MTaPS-supported facilities are now conducting HAI surveillance and reporting to the MOH while using the data for facility IPC improvement.

MTaPS' implementation of AMS activities has contributed to improving Tanzania's baseline JEE score from level 1 to level 2 capacity 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). MTaPS supported the MOH, MOA, and MLF in developing the AMS policy guidelines per the OH approach. MTaPS supported the MOH in developing and disseminating the MTC guidelines as well as the STGs and the NEML for Tanzania, which included the AWaRe categorization of antibiotics. MTaPS trained 110 (43 female, 67 male) HCPs from 10 supported facilities on AMS—specifically on ethical prescribing and dispensing of antimicrobials. MTaPS, in collaboration with the MOH, supported HFs in implementing AMS interventions, including reviving MTCs to foster AMS implementation at hospitals. MTaPS also conducted a survey on national AMC in Tanzania for 2017–2022 and 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 new NAP AMR 2023–2028.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

### **RESULT AREA I: EFFECTIVE MSC OF AMR**

#### ***Activity 1.1.1: Review plans and progress through regular meetings of the AMR governance committee***

MTaPS worked with the MCC and MOH to facilitate a multistakeholder workshop May 23 to 24, 2023, to conduct the first country self-evaluation of the WHO IHR JEE in preparation for the coming second external JEE. The assessment showed considerable improvement in AMS and IPC, especially in the human health sector. This activity will aid the country in determining progress in MSC, IPC, and AMS against the JEE and WHO benchmarks for IHR capacities. MTaPS also supported the organization and attended AMS, IPC, and M&E TWG meetings on June 21, 2023, to orient new members on their roles and start planning for implementation of activities based on the new NAP AMR 2023–2028.

## **RESULT AREA 2: IPC**

### ***Activity 2.5.1: Continue to support active surveillance of hospital acquired infections, specifically SSIs***

In collaboration with the MOH, MTaPS conducted onsite IPC mentorship at 10 MTaPS-supported facilities April 17 to May 13, 2023. The aim was to follow up on various IPC interventions at the HFs and mentor HCWs on areas that needed improvement, including hand hygiene, equipment sterilization, appropriate infrastructure, and availability of materials and equipment for IPC as well as standards for reduction of overcrowding in wards. Mentorship on surveillance of SSIs was conducted especially in areas completing SSI surveillance forms, which helped to identify SSI cases, use the data tools, and report into DHIS2. During this visit, a repeat IPCAF assessment was conducted, and data showed improvement in the component of HAI surveillance in 8 of 10 hospitals that previously performed low.

MTaPS conducted an IPC experience sharing meeting for HCWs from 10 MTaPS-supported facilities May 5 to 6, 2023. In addition to sharing experiences, the participants learned best practices and discussed areas for improvement. During the workshop, MOH officials provided feedback to participants on supportive supervision and discussed areas that need improvement across the hospitals.

From February to April 2023, MTaPS provided technical support in the evaluation of the IPC Extension for Community Healthcare Outcomes (ECHO) clinic conducted by the MOH. During the evaluation, HCPs suggested topics for the IPC ECHO session that started May 12, 2023, during which participants receive mentorship on IPC and have been discussing how to mitigate challenges in improving IPC practices at facilities.

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

### ***Activity 3.3.1: Conduct an antimicrobial utilization survey to assess compliance to AMS guidelines in the selected facilities***

MTaPS supported the collection and analysis of AMC data for 2020, 2021, and 2022. The data were submitted to the AMS TWG and MCC on June 22, 2023, for approval before being uploaded to the GLASS platform. The data analysis results will be used to inform policy-level discussions and identification of possible interventions at the national level to address AMU concerns.

### ***Activity 3.5.1: Continue to improve capacity to support AMS practices in 10 supported health facilities (activity continuing from FY22)***

MTaPS, in collaboration with the MOH, continued to support AMS practices at the facility level. May 2 to 4, 2023, the MOH fine-tuned the report of the data quality audit conducted by MTaPS in September and October 2022 and sent the report to the 10 supported facilities for their reference in improving IPC and AMS data quality management.

In addition, from January to April 2023, MTaPS provided technical support for evaluation of the AMS ECHO clinic conducted by the MOH. During the evaluation, HCPs suggested topics for the current AMS ECHO session that started May 26, 2023. The AMS ECHO session provides a forum for the MOH

to mentor the participating HCWs on AMS and enables participants to learn how to improve AMS practices at the facility level and discuss how to mitigate challenges.

## BEST PRACTICES/LESSONS LEARNED

None for this quarter.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<b>Activity 2.2.1:</b> Strengthen the capacity of journalists to advocate for and to increase awareness of IPC for infectious diseases in the community. <ul style="list-style-type: none"><li>Finalize the revision of the IPC communication strategy</li></ul>	July–August 2023
<b>Activity 3.2.1:</b> Support the development of AMS in-service training curriculum and training materials to enhance HR competence in AMS <ul style="list-style-type: none"><li>Finalize AMS training package</li><li>Train AMS teams</li></ul>	July–August 2023

**Table 31. Quarter 3, FY23, Activity Progress, Tanzania—GHSA**

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Review plans and progress through regular meetings of the AMR governance committee</p> <p><b>Activity Description:</b> Support to regular MSC meetings to oversee implementation of NAP-AMR. Support to assessment of progress on JEE/WHO Benchmark actions across IPC, AMS, and MSC.</p>	5.4	1.1	MTaPS supported a JEE self-assessment meeting May 24, 2023. MTaPS worked with the MOH to organize TWG meetings for IPC, AMS, and M&E.
<p><b>Activity 2.2.1:</b> Strengthen the capacity of journalists to advocate for and to increase awareness of IPC for infectious diseases in the community</p> <p><b>Activity Description:</b> Train journalists on IPC. Support the development of the IPC communication strategy.</p>	5.4	2.2	MTaPS provided technical support in the review of the 2017 IPC/AMR communication strategy February 6–10, 2023. The draft strategy has been shared with stakeholders for input/feedback.
<p><b>Activity 2.5.1:</b> Continue to support active surveillance of hospital acquired infections, specifically SSIs (activity continuing from FY22)</p> <p><b>Activity Description:</b> Conduct onsite mentorship on IPC. Mentor HCWs on how to use SSI surveillance guidelines, using existing MOH mentors to cascade mentorship through onsite visits to the 10 supported hospitals. Use the ECHO platform for capacity building of facility IPC teams. Conduct stakeholder forums to discuss IPC performance at the subnational level.</p>	5.4	2.5	<p>MTaPS, in collaboration with the MOH, conducted onsite IPC mentorship to 10 MTAps Tanzania-supported hospitals in April and May 2023 using national SSI tools, including the HAI surveillance guidelines and job aids previously developed with MTAps Tanzania’s support.</p> <p>Repeat facility-level IPC assessment was done to help to assess progress in the HAI surveillance component of the IPCAF.</p>
<p><b>Activity 3.3.1:</b> Conduct an antimicrobial utilization survey to assess compliance to AMS guidelines in the selected facilities</p> <p><b>Activity Description:</b> Collect and analyze AMC data for 2020, 2021, and 2022. Prepare PPS SOPs and perform PPS in two facilities.</p>	5.4	3.1	MTaPS continued to coordinate the cleaning and analysis of AMC data.

## FIELD SUPPORT ACTIVITIES

### OVERVIEW

The goal of MTaPS field support 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 Authority's capability to manage pharmaceutical regulatory systems by improving its marketing authorization and import processes for ARVs as well as enhancing its PV system using targeted interventions to enable evidence-based decision making for patient safety. This will help maintain the TMDA's regulatory capacity maturity level 3, according to the WHO's Global Benchmarking Tool, and provide evidence to elevate the TMDA toward maturity level 4.

### CUMULATIVE PERFORMANCE TO DATE

MTaPS provided technical support to the TMDA to improve efficiency in executing its regulatory functions by increasing the capacity of TMDA medicine assessors with respect to medicine dossier evaluation. The intervention assists to build expertise and a knowledge skillset to ensure the quality, safety, and efficacy of medicines such as ARVs. MTaPS helped train 30 (12 female, 18 male) TMDA medicine assessors to conduct medicine dossier assessments, which will help reduce the processing time for applications for the registration of new medicines by increasing the number of qualified assessors at the Authority. In addition, the assessors trained with support from MTaPS will continue to train new regulatory personnel and ensure sustainable knowledge transfer within the TMDA and Tanzania at large.

With respect to PV, MTaPS helped strengthen the existing passive medicine safety surveillance system for pediatric medicines used in the national HIV program by facilitating the revision of the TOR for the national PV safety advisory committee, known as the Vigilance Technical Committee (VTC), which allowed incorporation of four pediatric experts into the committee. VTC members were trained in PV and now have the capacity to assess ADRs from pediatric population 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 monitoring medicines, including those for chronic diseases such as HIV/AIDS, and monitoring children's susceptibility to ADRs. The TMDA, with support from MTaPS, conducted a 10-day training to build the capacity of TMDA PV personnel to assess PSURs and risk management plans (RMPs), thus increasing the number of competent assessors at the TMDA. The TMDA and MTaPS trained 27 (10 female, 17 male) new TMDA PV personnel, interns, and external assessors on basic methods of assessing PSURs and RMPs for ARVs and other medical products. This support has helped the TMDA improve its monitoring, reviewing, and reporting of safety issues arising from medicines used by the pediatric population.

MTaPS facilitated a process improvement mapping for the registration and importation of ARVs for the public sector, which aimed at identifying barriers and bottlenecks in the supply chain of ARVs and mitigation actions to engage both the TMDA and medicines importers. MTaPS provided technical support to the TMDA to develop tools used for the process mapping, identify key informants to participate in the in-depth interviews, and conduct subsequent qualitative and quantitative data analyses

of survey responses. MTaPS facilitated a stakeholder validation workshop that addressed the findings, challenges, and recommendations for improving the process for registration and importation of ARVs for the public sector. The activity helped to create awareness of bottlenecks and appropriate steps to ensure product quality/safety in registering and importing medicines; increase opportunities to streamline the regulatory environment and guidelines for ARVs and improve efficiency during clearance of imported medicines, including ARVs; and eliminate wastage of products for managing HIV/AIDS and other diseases. The interventions ultimately 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.

## QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS

### ***Activity 1.1.1: Streamline the process of importation and registration of medicines, especially ARVs, according to international standards to assure quality, safety, and efficacy***

With technical support from MTaPS, the TMDA conducted a stakeholder meeting with medicines importers, marketing authorization holders (MAHs), and local manufacturers on May 12, 2023. This contributed to the ongoing streamlining of the process of importation and registration of medicines to ensure quality, safety, and efficacy. Both the TMDA and medicines importers agreed to reduce bottlenecks for process improvement. The participants agreed that the TMDA should differentiate fast track and normal track applications of medicines registration using a different tracking number so that fast-track queries are easily identified and quickly responded to avoid delays that impact on market entry of medicines such as ARVs.



TMDA meeting with medicines importers, marketing authorization holders and local manufacturers aimed at reducing importation and registration bottlenecks, Dar es Salaam, Tanzania, May 12, 2023. Photo credit: Stephano Simba, MTaPS



**Activity 1.1.2: Support the TMDA to deliver its mandate to assure safe, effective, and quality-assured medicines by creating a solid workforce for performing the required regulatory functions**

MTaPS collaborated with the TMDA and trained 22 (5 female, 17 male) assessors on assessing the quality, safety, and efficacy of medicines applications for registration; bioequivalence studies; and active pharmaceutical ingredients, with a focus on ARVs, April 24 to 29, 2023.

MTaPS supported the TMDA to organize a product dossier assessment retreat May 1 to 5, 2023, that evaluated 50 dossiers (12 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 increase expeditious authorization of ARVs and access to quality assured ARVs and other medicines. The knowledge shared and training delivered during the dossier evaluation retreat will help to create a pool of registration experts at the TMDA.



TMDA training for assessors, Morogoro, Tanzania, April 2023. Photo credit: MTAps.

These activities help the TMDA to progress in addressing WHO GBT sub-indicator MA03.01: Adequate competent staff (i.e., education, training, skills, and experience) are assigned to perform marketing authorization and/or registration activities.

**Activity 1.1.3: Enhance the capacity of TMDA clinical trials unit officers to evaluate clinical trial applications and conduct inspection of clinical trial units**

MTaPS provided technical support to the TMDA to train 26 (16 female, 10 male) clinical trial officers on evaluation of clinical trial applications and inspection of clinical trial sites for Good Clinical Practices (GCP) compliance May 1–6, 2023. Participants were trained on the review of preclinical, clinical, and manufacturing data and developing scientific assessment reports following applicable regulations and guidelines that contributed to improving the competency of TMDA assessors in analyzing and writing summary assessments based on clinical trial assessment (CTA) data.

The CTA trainees further trained on inspection of clinical trial sites for GCP compliance for 25 (13 female, 12 male) participants May 8–13, 2023. In addition, the trainees gained practical experience by conducting inspections of two clinical sites located in the Dar es Salaam region: Mwananyamala Regional Referral Hospital and Muhimbili University of Health and Allied Sciences. The intervention contributed to efforts to strengthen clinical trials control in Tanzania and fulfils WHO GBT sub-indicator CT03.01: Enough competent staff (education, training, skills, and experience) are assigned to perform clinical trials oversight activities.



### **Activity 2.1.1: Support capacity building for PV PSUR and RMP implementation by domestic pharmaceutical manufacturers/MAHs and evaluation by the TMDA**

MTaPS provided technical support to the TMDA May 24–27, 2023, to develop training manual and modules on basic PV principles, establish a functioning PV system, and prepare PSUR and RMP documentation. The materials developed will be used to train TMDA junior assessors on PV principles and the submission and evaluation of PSURs and RMPs. This activity contributes to the implementation of WHO GBT sub-indicator VL03.03: Training plan developed, implemented and updated at least once a year for staff in charge of vigilance activities.

### **BEST PRACTICES/LESSONS LEARNED**

- Engaging medicine regulators, MAHs, and importers together is important to uncover and discuss key bottlenecks in registration and importation of medical products. Open discussion among these stakeholders contributes to achieving consensus on the issues and approaches and to developing proper mitigation interventions to address gaps and concerns. This contributes to streamlining the registration and importation process of medicines. During workshop events that brought these stakeholders together in Q3, it was observed that participants were engaging in open discussions and coming to group consensus on bottlenecks and mitigation measures.

### **ACTIVITIES AND EVENTS FOR NEXT QUARTER**

<b>Activity and Description</b>	<b>Date</b>
<b>Activity 2.1.1:</b> Support capacity building for PV PSUR and RMP implementation by domestic pharmaceutical manufacturers/market authorization holders (MAH) and evaluation by the TMDA <ul style="list-style-type: none"><li>▪ Train TMDA staff on inspection of PV systems for MAHs</li><li>▪ Train TMDA junior assessors and qualified persons responsible for PV (QPPVs) on PV principles and on the submission and evaluation of PSURs and RMPs</li><li>▪ Conduct training of MAHs/manufacture staff on PV</li></ul>	July–August 2023
<b>Activity 2.1.2:</b> Provide support for strengthening of PV at referral (PV centers) and at TMDA zonal offices <ul style="list-style-type: none"><li>▪ Conduct advanced PV training for focal persons at TMDA zonal centers and referral PV centers</li><li>▪ Conduct periodic sensitization of HF staff served by TMDA zonal offices and referral PV centers</li><li>▪ Print and distribute PV-related guidelines, safety manual, and reporting forms to HFs</li></ul>	July 2023

**Table 32. Quarter 3, FY23, Activity Progress, Tanzania—FIELD SUPPORT**

Activity	MTaPS Objective(s)	Activity Progress
<p><b>Activity 1.1.1:</b> Streamline the process of importation and registration of medicines, especially ARVs, according to international standards to assure quality, safety, and efficacy</p> <p><b>Activity Description:</b> Support follow-up workshop to facilitate discussions among key stakeholders on status of implementation of recommendations from the PY4 process mapping exercise and resolve obstacles to expedite importation and registration of medicines with a focus on ARVs. Support action plan development.</p>	2.4	Conducted stakeholder meeting with TMDA and medicines importers, MAHs, and local manufacturers to streamline process of importation and registration of medicines.
<p><b>Activity 1.1.2:</b> Support the TMDA to deliver its mandate to assure safe, effective, and quality-assured medicines by creating a solid workforce for performing the required regulatory functions</p> <p><b>Activity Description:</b> Conduct capacity building on assessment of dossiers covering content such as assessing bioequivalence studies. Undertake product dossier review retreats to help clear backlog of pending dossiers for medicines with a focus on ARVs.</p>	2.4	Conducted training on product dossier assessment for 22 junior assessors (5 female, 17 male) in April 2023. Evaluated 50 dossiers in a dossier assessment workshop in May 2023.
<p><b>Activity 1.1.3:</b> Enhance the capacity of TMDA clinical trials unit officers to evaluate clinical trial applications (CTA) and conduct inspection of clinical trial sites</p> <p><b>Activity Description:</b> Conduct training of TMDA clinical trials unit officers on evaluation of CTAs and inspection of clinical trial sites.</p>	2.4	Trained 26 clinical trials officers in evaluation of CTAs and inspection of clinical trial sites for GCP compliance May 1–6, 2023. The practical skills of the trainees improved through physical inspection of two clinical trials sites.
<p><b>Activity 2.1.1:</b> Support capacity building for PV PSUR and RMP implementation by domestic pharmaceutical manufacturers/market authorization holders (MAH) and evaluation by the TMDA</p> <p><b>Activity Description:</b> Development of training materials for establishment of a functioning PV system and hands-on preparation of PSUR and RMP documentation. Training of junior assessors and QPPVs on PV principles and submission and evaluation of PSURs and RMPs.</p>	2.4	Developed training materials for hands-on preparation of PSUR and RMP documentation on PV in May 2023 that will later be used to train junior assessors and QPPVs.

## R. UGANDA

### GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

#### OVERVIEW

In the JEE assessment of 2017, Uganda achieved a developed capacity score of 3 for both IPC and AMS. MTaPS aims to combat the emergence and spread of AMR in Uganda by enhancing the capacity of in-country stakeholders and health care facilities through a health system strengthening approach. This includes implementing Uganda's NAP on AMR and working towards achieving a higher JEE score, which would result in an improvement in the WHO Benchmarks for IHR Capacities. MTaPS Uganda offers direct technical support to the GOU MDAs in three key areas of the GHSA AMR action package: optimizing the use of antimicrobials through AMS, enhancing IPC practices, and strengthening government led MSC for the national AMR program through the NAMRSC of the OHP.

#### CUMULATIVE PERFORMANCE TO DATE

As of March 2023, MTaPS has supported Uganda to improve its JEE-2 score for MSC/AMR by assisting with 50% (2/4) of level 2 capacity actions, 50% (2/4) of level 3 actions, and 50% (2/4) of level 4 actions. MTaPS collaborated with the Uganda OHP TWC to establish the NAMRSC and its TWCs. In addition, MTaPS has acknowledged the contributions of two female leaders and advocates for AMR in Uganda, highlighting their efforts to promote gender equity in leadership roles. The ASO TWC has received support from MTaPS to produce three biannual AMS newsletters and to hold regular meetings.

In IPC, as of March 2023, MTaPS has supported Uganda to improve the JEE-2 score by supporting 100% (5/5) of capacity level 2, 100% (6/6) of level 3, and 40% (2/5) of level 4 WHO IHR benchmark actions. In 2019, MTaPS supported the MOH to conduct the first ever national IPC survey. MTaPS has subsequently applied best practices to implement CQI plans for IPC improvement at supported HFs. As part of capacity building at the HFs, MTaPS has cumulatively conducted 99 mentorship visits in 13 HFs, reaching 2,546 HCWs (56% female, 44% male). To foster the scale up and sustainability of IPC/WASH implementation in the country, MTaPS built the capacity of 5 USAID partners implementing the Regional Health Integration to Enhance Services programs in 5 regions to implement IPC/WASH, with 24 IPC/WASH technical officers trained, who, through district and facility-based activities, transferred the knowledge to 356 district health team members (26% female, 74% male), 277 HFs, and 396 HCWs (57% female, 43% male).

In the area of AMS, as of March 2023, MTaPS has supported Uganda to improve the JEE-2 score by supporting 50% (2/4) of capacity level 2, 33% (2/6) of level 3, and 29% (2/7) of level 4 WHO IHR benchmark actions, thus contributing to sustaining level 3 and progressing towards achieving levels 4 and 5. MTaPS, working with the MOH, has progressively built capacity for AMS in HFs through implementation of AMS CQI plans. MTaPS supported the NDA to develop a web-based application for routinely collecting AMC data, and subsequently developed a manual for national surveillance of AMC at NDA and conducted assessment of national AMC consumption (import data) for 2019-2022. MTaPS

assessed AMS policies, regulatory framework, and the supply chain as well as an assessment of existing systems for monitoring AMU in humans and animals in both public and private sectors in Uganda.

To bridge the gap between human and animal health that was observed at baseline, MTaPS has supported the animal health sector, working with the MAAIF to develop an EVML, guidelines on antibiotic use in various food animals, IEC materials, and AMR awareness messages for use in the animal health sector. Additionally, MTaPS supported MAAIF to develop the national IPC strategy for the agricultural sector. These activities support completion of actions under capacity level 2 on the JEE-2.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

MTaPS, working with Makerere University, supported the ASO-TWC of the NAMRSC to publish the third edition of the multisectoral biannual AMS newsletter. The AMS newsletters are a platform for dissemination of key NAP-AMR activities and information exchange that helps to build human resources capacity through better sharing and use of data for decision-making for AMR, hence supporting progress toward achieving JEE-2 capacity level 3 and the advance towards JEE-2 capacity level 4 for AMR coordination.

During quarter 3, MTaPS supported the MOH and the NAMRSC to designate MTaPS-supported hospitals as COEs for AMS. A COE for AMS is a health care facility that implements best practices in AMS and has emerged as a leader and reference standard to guide AMS practice. Designating hospitals as AMS COEs would result in cost reduction and cost optimization due to reduced expenditure on antimicrobials, shorter hospital stays for patients, reduced incidence of resistant infections and HAIs, as well as provide evidence-based practice that is context-specific and scalable to other and lower-level health care facilities.

MTaPS disseminated the results of its program implementation in the supported HFs with the dissemination exercise aimed at obtaining validation and concurrence of program results as a precursor to closeout.

MTaPS is supporting the NAMRSC of the OHP to review NAP-AMR implementation. Besides helping to establish the status of NAP-AMR implementation in Uganda, the gathered information will help to identify barriers and recommendations for NAP-AMR implementation. It will also support advocacy for the identification of potential sources of sustained funding for the NAP-AMR.

### **RESULT AREA I: EFFECTIVE MSC OF AMR**

***Activity 1.2.1: Collaborate with Makerere University and the AMS TWC to write a biannual AMS newsletter highlighting AMS activities implemented at national and sub-national levels and share the newsletter on the documentation platform (Y4)***

MTaPS collaborated with Makerere University and the ASO-TWC of the NAMRSC to publish the third edition of the biannual AMS newsletter. This publication serves as a crucial platform for sharing information on AMR activities at both national and sub-national levels. The newsletter facilitates information exchange between the three sectors (MSC, IPC, and AMS) and promotes the implementation of the NAP-AMR activities.

**Activity 1.4.1: Work with the NAMRSC to conduct a review of the NAP-AMR (both qualitative and quantitative) to identify barriers to implementing the NAP, make recommendations to overcome the barriers, and advocate for and identify potential sources of sustained funding**

Following data collection from various stakeholders across the country, representing human health, animal health, and environmental health sectors, MTaPS—working with the NAMRSC of the OHP—developed a draft report demonstrating the status of and barriers to NAP-AMR implementation. Additionally, the report details the status of implementation of IHR capacities, actionable recommendations for NAP-AMR implementation, and maps out potential sources of funding for AMR implementation in Uganda. The report is currently undergoing in-country technical review, and subsequent validation has been planned.

**RESULT AREA 2: IPC**

**Activity 2.5.1: Improve the quality of health care services through strengthening IPC at COEs**

During Q2, MTaPS completed assessments for programmatic outcomes and impact in six supported HFs as part of evaluating MTaPS interventions. Table 31 shows the improvement in scores between baseline and endline assessments in IPC and HH capacity, HCW knowledge about HH, compliance to HH by HCWs, and reduction in incidence of HAIs in all supported HFs, demonstrating the effectiveness of MTaPS interventions (table 33).

**Table 33. Baseline and endline scores for IPCAF, HHSAF, HH knowledge, HH compliance, and HAI incidence in six supported HFs**

Hospital	IPCAF (/800)		HHSAF (/500)		HH knowledge		HH compliance		HAI incidence	
	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Gulu RRH	602	642.5	265	350	45%	83%	15%	48%	15%	7%
Kumi	395	602.5	312.5	370	32.5%	74%	17%	55%	6%	3%
Lacor	590	695.5	217.5	410.5	62.5%	84%	18%	53%	18%	1%
Naggalama	552.5	700	217.5	435	42.5%	63%	14%	57%	0%	0%
Kiwoko	342.5	655	252.5	435	41.2%	81%	27%	58%	20%	0%
Kagando	497.5	605.5	162.5	345	46.2%	71%	21%	51%	14%	5%

Abbreviation: RRH – regional referral hospital

Key:

 Basic  Intermediate  Advanced

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

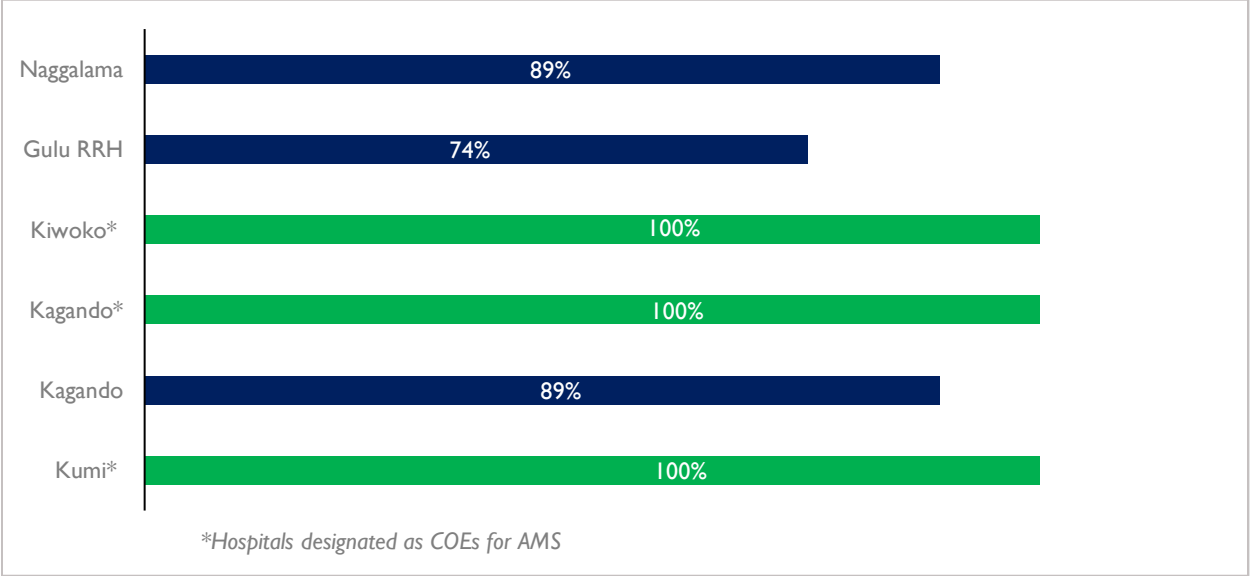
**Activity 3.3.1: Work with the MOH to monitor and evaluate AMS interventions, including AMU data, and publicly report on the results**

MTaPS, working with MOH and ASO-TWC, undertook a qualitative evaluation of AMS interventions in six MTaPS-supported HFs. The results demonstrated perceived benefits of AMS interventions in the

HFs, including strengthening of hospital AMS programs, promotion of AMU, and improved awareness of AMR and AMS among HCWs. Additionally, the results showcased the utilization of AMS implementation methods including CQI approaches, multimodal strategies, and plan-do-study-act approaches. All supported HFs were able to utilize these approaches to implement AMS interventions. The assessment was also able to document various challenges for implementing AMS interventions in HFs, such as lack of acceptance from senior doctors, reluctance from prescribers, lack of time for AMS activities, diagnostic barriers, and poor documentation. The documented key enablers to the success of AMS interventions included passionate and dedicated AMS teams; HF leadership support; support supervision, mentorships, and robust feedback mechanisms; consistent trainings and continuous education activities; goal-oriented intervention design; starting with the end in mind; regular AMS meetings and reporting; and regular AMS monitoring using prescription data.

**Activity 3.5.1: Designate hospitals as COEs in AMS**

MTaPS, working with MOH and NAMRSC, developed and applied a tool for designating HFs as COEs for AMS. The tool allows for assessment of AMS structures and outcomes and the impact of AMS interventions in hospitals—it has 27 mandatory indicators and 10 optional indicators. The HF must meet all the mandatory indicators, including demonstration of outcomes and impact of AMS interventions during the last 6-12 months to be designated as a COE for AMS. The performance of hospitals on mandatory indicators is shown in figure 8. Three hospitals—Kumi Hospital, St. Mary’s Lacor Hospital, and Kiwoko Hospital—scored 100% on all mandatory indicators and these were subsequently designated as COEs for AMS (figure 9).



**Figure 9. Hospital performances on mandatory indicators**

**QUARTER 3 BEST PRACTICES/LESSONS LEARNED**

**Support from the national government paves the way for strong and sustainable measures to combat AMR on the HF level.** In Uganda, the MOH acknowledges the importance of investing in strong IPC and AMS initiatives in HFs. This interest from GOU has opened doors for potential future

collaboration in HFs, as the MOH seeks to establish resilient IPC and AMS programs that complement existing initiatives and pave the way for effective measures against AMR while safeguarding patient well-being.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
<p><b>Activity 1.4.1:</b> Work with the NAMRSC to conduct a review of the NAP-AMR</p> <ul style="list-style-type: none"> <li>▪ Complete draft report</li> <li>▪ Undertake national stakeholder meetings to validate the report</li> <li>▪ Obtain NAMRSC approval for the final report</li> <li>▪ Disseminate the report</li> </ul>	July–August 2023
<p><b>Activity 2.5.1:</b> Improve the quality of health care services through strengthening IPC at COEs</p> <ul style="list-style-type: none"> <li>▪ Write hospital-specific handover reports</li> <li>▪ Submit handover reports to participating hospitals</li> </ul>	August 2023
<p><b>Activity 3.3.1:</b> Work with MOH to monitor and evaluate AMS interventions, including AMU data, and publicly report on the results</p> <ul style="list-style-type: none"> <li>▪ Disseminate findings to NAMRSC structures and MOH</li> </ul>	August 2023
<p><b>Activity 3.5.1:</b> Designate hospitals as COEs in AMS</p> <ul style="list-style-type: none"> <li>▪ Dissemination of results at sub-national and national levels and handover</li> </ul>	August 2023
<p><b>Project close-out activities</b></p> <ul style="list-style-type: none"> <li>▪ Draft and complete handover reports (stakeholder-specific)</li> <li>▪ Hold events to deliver handover reports to stakeholders</li> <li>▪ Complete operational and administrative close-out activities</li> <li>▪ Office closure</li> </ul>	August–September 2023



**Table 34. Quarter 3, FY23, Activity Progress, Uganda—GHSA**

Activity	MTaPS Objective(s)	GHSA Result(s)	Activity Progress
<p><b>Activity 1.4.1:</b> Work with the NAMRSC to conduct a review of the NAP-AMR (both qualitative and quantitative) to identify barriers to implementing the NAP, make recommendations to overcome the barriers, and advocate for and identify potential sources of sustained funding</p> <p><b>Activity Description:</b> Assessment through stakeholder engagement meetings, focus group discussions, and key informant interviews with national and sub-national stakeholders</p>	5.4	1.4	Draft reports are currently undergoing in-country technical review, and subsequent validations have been planned.
<p><b>Activity 2.5.1:</b> Improve the quality of health care services by strengthening IPC at COEs</p> <p><b>Activity Description:</b> Conduct a qualitative assessment (via qualitative focus group discussions) of the COEs' capacity to perform on their own; develop and implement a plan to ensure COE sustainability; and list the remaining gaps in support and hand over to the MOH (or district health authorities)</p>	5.4	2.5	A report evaluating IPC implementation in supported HFs and programmatic outcomes and impact was developed and is currently undergoing editorial review.
<p><b>Activity 3.3.1:</b> Work with the MOH to monitor and evaluate AMS interventions, including AMU data, and publicly report on the results</p> <p><b>Activity Description:</b> Conduct quantitative and qualitative assessments to evaluate AMS interventions and support provided by MTaPS to HFs</p>	5.4	3.3	A report on the qualitative evaluation of AMS interventions in HFs was developed and is currently undergoing editorial review.
<p><b>Activity 3.2.2:</b> Designate hospitals as COEs in AMS</p> <p><b>Activity Description:</b> Assess the COEs, including the collection of qualitative data on antibiotic use and performance to designate HFs as COEs for AMS and handover tool to MOH</p>	5.4	3.2	<p>The tool for designating hospitals as COEs for AMS was developed and validated. It is currently undergoing editorial review.</p> <p>The draft report on the designation of MTaPS-supported hospitals as COEs for AMS is currently undergoing technical review.</p>

## 5. PROGRESS BY REGIONAL BUREAUS

### A. ASIA REGIONAL BUREAU

#### OVERVIEW

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

#### CUMULATIVE PERFORMANCE TO DATE

Under Objective 1, MTaPS developed the roadmap for institutionalizing HTA in LMICs in consultation with global and regional HTA experts, and it held a virtual dissemination workshop with Asia region experts in October 2020.

Based on prior work by Chootipongchaivat et al. (2015), MTaPS created a BSC to assess the status of HTA in China, India, Indonesia, Malaysia, the Philippines, South Korea, Taiwan, Thailand, and Vietnam. The BSC analysis was shared at HTAsiaLink in October 2021. Insights from a literature review and key informant interviews with regional HTA experts were incorporated into a summary addendum to the HTA road map, which was submitted as a journal article and accepted by the *International Journal of Technology Assessment in Health Care (IJTAHC)*. The BSC analysis was also shared as a poster presentation at the International Society for Pharmacoeconomics and Outcomes Research 2021. Another virtual pre-workshop was organized for HTAsiaLink 2021 on October 11, 2021, which engaged over 200 participants from more than 9 Asian countries. In June 2022, MTaPS conducted an online workshop on RWE for Indonesia, in close collaboration with the World Bank, Center for Global Development, and International Decision Support Initiative.

During PY5Q2, MTaPS actively worked on producing an HTA business model canvas, based on the model by Osterwalder, to extract key highlights from the HTA roadmap and convert it into an easy-to-use and apply tool for countries seeking to implement or advance HTA. MTaPS is also exploring the visions, demand, priorities, and combinations of support for an HTA hub in Asia.

Under Objective 2, for the OHT implementation, MTaPS conducted two regional trainings and one in-person training. The training was conducted with participants in Kyrgyzstan, Bangladesh, Nepal, and the Philippines. MTaPS conducted the in-person training in Cox's Bazar, Bangladesh with 14 participants. MTaPS completed the Shasthyo Surokhsha Kormosuchi (SSK) interventions costing and is currently developing the draft report for internal review.

MTaPS completed the dissemination materials development for standardization of pharmaceutical expenditure (PE) tracking in the Asia region. The Indonesian health accounts team adapted the materials to attend the International Health Economics Association (IHEA) Congress in July 2023 to provide an oral presentation. The PE tracking in Bangladesh for commodities expenditure tracking is completed and the report is under review.

Under Objective 3, MTaPS followed up with three key networks—ASEAN, SEARN, and WHO Western Pacific Regional Office—for potential collaboration to strengthen regulatory systems in Asia. Following a mapping exercise to identify existing regulatory gaps, MTaPS implemented technical capacity strengthening trainings on current good manufacturing practice for pharmaceutical manufacturers for active pharmaceutical ingredients and formulations; evaluation of vaccine dossiers for assessors and convergence of technical standards for medical product registration in Bangladesh and Nepal; and training of trainers on evaluation of biologics, including vaccines for and application of good reliance practices for ASEAN member states. MTaPS undertook competency mapping in Nepal, Bangladesh, and the Philippines, focused on the core and functional competencies/skills required for product evaluation (reviewers), safety monitoring (PV), inspection and enforcement (inspectors), and laboratory quality control (analysts). Gaps identified were used to develop capacity building plans for the participating NRAs to strengthen their capacity to effectively regulate medical products.

Under Objective 4, during PY2, MTaPS Philippines supported the DOH of the Philippines to develop an administrative order for the procurement of health products using a framework agreement mechanism. MTaPS further facilitated meetings with the Philippines DOH PS to discuss implementation of activities on strategic procurement of medical products in PY4. In PY5 Q1, MTaPS presented an inception report to USAID-Philippines, and a draft legal analysis report based on initial desk review of documents. Subsequently, DOH PS drafted a pooled procurement policy based on the legal analysis results and submitted it to the Government Procurement Policy Board (GPPB). The policy proposal is pending approval before it can be piloted at DOH-retained hospitals.

COI can take many forms, such as financial relationships between health care providers and the pharmaceutical industry or between public and private decision-makers. In 2021, MTaPS partnered with the WHO to thoroughly review COI policies in southeast Asian countries. This review resulted in a publication highlighting recent experiences in COI management. MTaPS continued its collaboration with WHO to develop the COI manual, a practical guide tailored for public pharmaceutical committees in LMICs. The manual outlines 10 crucial steps for enhancing COI policy, prevention, and management in public pharmaceutical decision-making committees. To help countries implement these recommendations, MTaPS is continuing the collaboration with WHO to develop an e-learning course to be housed by WHO on their open learning platform. Through these efforts, MTaPS aims to assist countries in strengthening the governance of their pharmaceutical systems and ensuring the safe and effective delivery of high-quality medicines.

## **QUARTER 3/YEAR 5 ACHIEVEMENTS AND RESULTS**

### **OBJECTIVE I: STRENGTHEN CAPACITY TO CONDUCT AND USE HTAs TO SUPPORT INSTITUTIONALIZATION OF TRANSPARENT AND EVIDENCE-BASED DECISION-MAKING IN ASIAN COUNTRIES**

#### ***Activity 1.1.1: Exploring and supporting the development of an HTA hub or collaborative institution in the Asia region***

MTaPS sent the draft report summarizing the findings from the e-survey and the interviews to the editorial team for finalization in April 2023, which will be ready for USAID submission in Q4. In April 2023, MTaPS also met with the secretariat of HTAsiaLink, Health Intervention and Technology

Assessment Program, to discuss the findings of the report and activities for collaboration. MTaPS agreed to support HTAsiaLink on regional HTA capacity building and improving the political climate around HTA. MTaPS will also provide technical support to ASEAN harmonization efforts as needed. MTaPS began drafting a manuscript from this report in Q3 and is planning to submit it to IJTAHC.

***Activity 1.1.2: Develop and disseminate HTA strategic briefs on lessons learned for HTA advancement in the region***

MTaPS submitted a revised version of the HTA business model canvas to USAID on June 29, 2023.

**OBJECTIVE 2: STRENGTHEN CAPACITY TO DEFINE AND COST EVIDENCE-BASED PHARMACEUTICAL COVERAGE AND PROMOTE TRANSPARENCY IN PHARMACEUTICAL PRICING TO IMPROVE VALUE IN PURCHASING IN ASIAN REGIONAL COUNTRIES**

***Activity 2.1.1: Build capacities related to the use of the OHT to cost pharmaceutical benefits packages***

During Q3, MTaPS conducted an in-person training in Cox's Bazar with 14 participants. Following the training, MTaPS hired two consultants to organize the benefits package intervention and collect country policy documents, including the treatment guideline. The consultants also organized each intervention's treatment protocols and shared the data with MTaPS to be incorporated into the OHT. As a result of the overall OHT implementation in Bangladesh, the data incorporation in the OHT is completed and the preliminary results and first draft of the short report will be generated by the end of July 2023.

***Activity 2.2.1: Develop materials for standardization of PE tracking in the Asia region***

The developed PE training material was used during the PE tracking training in Indonesia in May 2023. Besides, the training resource was adapted and used during a brief sensitization session for 16 participants from the Bangladesh HEU and other stakeholders in May 2023.

Finally, the Indonesian health accounts team has adapted the training material to be presented during the July 2023 IHEA Congress in South Africa.

***Activity 2.2.2: Strengthen capacity for PE tracking in Bangladesh***

During Q3, MTaPS completed Bangladesh MNCH PE tracking and submitted the report to the management team for review. MTaPS also developed a standard process guideline for PE tracking in Bangladesh. The guideline is currently under formatting with the editorial team.

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

MTaPS participated in a drafting meeting on May 15 and June 21, 2023, in collaboration with the WHO Southeast Asia Regulatory Office and SEARN and engaged a consultant to develop a regional capacity building strategy for SEARN member states.

MTaPS continued to engage with USAID mission and DAV to plan for the implementation of the competency mapping exercise in Vietnam aimed at improving the regulatory workforce at DAV. The discussions are still ongoing to agree on the implementation framework and timeline. Additionally, MTaPS supported the implementation of training plans for DDA Nepal, including a training on leadership

and management training, fostering team spirit for managerial excellence, communication and decision-making, and financial management at Nepal Administrative Staff College attended by senior level managers, including the director general. A total of 40 personnel (26 male, 14 female) were trained.

In preparation for the next quarter, MTaPS continued to plan for a webinar to disseminate strategies and lessons learned for effective medicines registration harmonization in the Asia region scheduled for July 12-13. MTaPS also continued to work on and finalize the development of a regional guidance document on capacity development and risk communication plan.

#### **OBJECTIVE 4: PHARMACEUTICAL SECTOR GOVERNANCE IN ASIAN COUNTRIES STRENGTHENED**

##### ***Activity 4.1.1: An assessment and analysis of the procurement policy, laws, associated rules and regulations, and other legal provisions that affect the introduction of strategic procurement interventions in the Philippines***

Throughout the quarter, MTaPS continued trying to engage the major government partner, DOH-PS, for this activity. Due to countrywide vaccination campaigns and other priorities, the director of the DOH-PS—who is the decision-maker on this activity—was unable to meet with the MTaPS team. However, he has promised to meet with the MTaPS team in early July to discuss the status of the activity and proposed activities to be carried out in the remaining program year. MTaPS has drafted a proposed list of activities and shared with DOH-PS considering the changes in priorities explained above.

##### ***Activity 4.1.1: Conflict of interest e-learning course***

Working alongside WHO, MTaPS continued to finalize the alpha version of the e-learning modules which will provide practical guidance on preventing and managing COIs within the public pharmaceutical system in LMICs. These modules are adapted from the manual titled "Managing conflicts of interest: A how-to guide for public pharmaceutical sector committees in low- and middle-income countries" and are designed to be user-friendly and interactive. The target audience for these e-learning modules is decision-makers and other stakeholders in the public pharmaceutical sector. The modules cover various topics such as identifying and managing COI, implementing policies to prevent and manage COI, and other related areas.

#### **BEST PRACTICES/LESSONS LEARNED**

- As the remaining lifetime of the project shortens, it may negatively impact stakeholders' willingness to participate in pending project activities. As MTaPS approached its end date, some stakeholders were not willing to commit to planned activities as they were concerned that MTaPS did not have enough time to carry out follow-up activities.

#### **ACTIVITIES AND EVENTS FOR NEXT QUARTER**

<b>Activity and Description</b>	<b>Date</b>
<b>PY5 Activity 1.1.1:</b> Finalize the report of findings on the development of an HTA hub or collaborative institution in the Asia region	July 2023
<b>PY5 Activity 1.1.1:</b> MTaPS to draft and submit one manuscript to the IJTAHC in Q4	September 2023
<b>PY5 Activity 1.1.1:</b> Present the Asia HTA hub at the 2023 IHEA Congress	July 2023

Activity and Description	Date
<b>PY5 Activity 1.2.1:</b> Monthly meetings with the Philippines MOH to strengthen capacity to conduct and use HTAs to support institutionalizing transparent and evidence-based decision-making	July–September 2023
<b>Activity 2.1.1:</b> Build capacities on the use of OHT to cost pharmaceutical benefit packages	August 2023
<b>Activity 2.2.1:</b> Develop materials for standardization of PE tracking in the Asia region; incorporate lessons from Indonesia and Bangladesh once exercises are complete	August 2023
<b>Activity 2.2.2:</b> Strengthen capacity for PE tracking in Bangladesh; complete data mapping and conduct training for HEU stakeholders	August 2023
<b>PY3 Activity 3.2.1:</b> Enhance pharmaceutical regulatory expertise among the region’s workforce in product registration and PV	July–August 2023
<b>PY4 Activity 3.1.2:</b> Create models for adoption of global standards to support development of regulatory IMS for electronic transmission of information in Asia	July–September 2023
<b>PY4 Activity 3.2.2:</b> Develop and continuously review regional training plans for NMRA staff to build their technical capacity on key aspects of registration and regulatory inspections	July–August 2023
<b>PY4 Activity 3.3.1:</b> Support the development of a risk communication plan	July–August 2023
<b>PY5 Activity 3.1.1:</b> Develop capacity building plans and support implementation for the countries in which competency mapping exercise was conducted and develop a regional capacity building strategy for SEARN	July–September 2023
<b>PY5 Activity 3.2.1:</b> Apply streamlined methodology for identification of competency gaps in Vietnam	July–September 2023
<b>PY5 Activity 3.3.1:</b> Disseminate strategies and lessons learned for effective medicines registration harmonization in Asia region	July–September 2023
<b>Activity 4.1.1:</b> Finalize the e-learning course based on the how-to manual on COI and pilot the e-learning modules	July–August 2023
<p><b>Activity 4.1.1:</b> Conduct an assessment and analysis of the procurement policy, laws, associated rules and regulations, and other legal provisions that affect the introduction of strategic procurement interventions in one Asian country (the Philippines):</p> <ul style="list-style-type: none"> <li>▪ Share and validate results from the legal analysis and proposed options with stakeholders</li> <li>▪ Develop a technical advisory that can be used as an advocacy document to drive appropriate piloting and successful implementation of strategic procurement initiatives</li> <li>▪ Develop a generic plan for pilot testing of the policy on PPM which will include generating evidence for selection of health products, hospitals, and LGUs</li> </ul>	July–September 2023

**Table 35. Quarter 3, FY23, Activity Progress, Asia Regional Bureau**

Activity	MTaPS Objective(s)	Activity Progress
<b>PY5 Activity 1.1.1:</b> Continue to explore and support the development of an HTA hub or collaborative institution in the Asia region	5.1	Report of findings is being finalized; it will be ready for submission to USAID early Q4
<b>PY3 Activity 1.1.2:</b> Develop and disseminate HTA strategic briefs on lessons learned for HTA advancement in the region (from previous year's performance)	5.1	MTaPS actively worked in producing an HTA business model canvas that summarized key highlights from the HTA Roadmap document to be used as a tool for countries seeking to implement or advance HTA. A first draft of the canvas was submitted in December 2022. After a first round of reviews and feedback by USAID in early January, the MTA PS HTA team worked on improving the tool by adding a set of instructions as an accompanying guideline for users who will use the tool. A final version of the canvas was submitted in Q2.
<b>PY5 Activity 1.2.1:</b> Support cross-country learning exchange and in-person technical assistance on HTA in Asia region	5.1	Preliminary discussions are being held with the Philippines about a potential multi-country activity later this year.
<b>Activity 2.1.1:</b> Build capacities on the use of OHT to cost pharmaceutical benefit packages	1.1, 2.3, 4.1, 5.3	MTaPS will finalize the SSK costing process and submit a draft report by the end of July.
<b>Activity 2.2.1:</b> Develop materials for standardization of PE tracking in the Asia region	1.1, 2.3, 4.1, 5.3	MTaPS will review any remaining comment on the dissemination materials.
<b>Activity 2.2.2:</b> Strengthen capacity for PE tracking in Bangladesh	1.1, 2.3, 4.1, 5.3	MTaPS will review any remaining comment on the dissemination materials.
<b>Activity 3.1.2:</b> (Year 4) Create models for adoption of global standards to support development of regulatory IMS for electronic transmission of information in Asia	2.4.3	Approval received from pharmaceutical products working group and concept note reshared for concurrence to USAID
<b>Activity 3.2.2:</b> (Year 4) Develop and continuously review regional training plans for NMRA staff to build their technical capacity on key aspects of registration	2.4.3	Draft guidance document is being developed for countries to refer to while addressing the gaps identified in the competency mapping exercise
<b>Activity 3.3.1:</b> (Year 4) Support the development of a risk communication plan	2.4.3	Draft for the risk communication plan is under development
<b>Activity 3.1.1:</b> (Year 5) Develop capacity building plans and support implementation for the countries in which competency mapping exercise was conducted and develop a regional capacity building strategy for SEARN	2.4.3	Draft plans in place for validation by DGDA and FDA Philippines; consultant hired to develop a regional capacity building strategy for SEARN
<b>Activity 3.2.1:</b> (Year 5) Apply streamlined methodology for identification of competency gaps in Vietnam	2.4.3	Ongoing discussions with DAV on the activity implementation
<b>Activity 3.3.1:</b> (Year 5) Disseminate strategies and lessons learned for effective medicines registration harmonization in Asia region	2.4.3	Ongoing planning of regional conference and drafting of manuscript on lessons learned through the years; webinar planned for July 12-13, 2023



Activity	MTaPS Objective(s)	Activity Progress
<b>Activity 4.1.1.</b> Support implementation and dissemination of the how-to manual on COI	4.1.1.b	At present, MTAps is in the process of developing e-learning modules on managing COI. The development work has progressed well, and the WHO team has approved the alpha version of the course. We are currently waiting feedback from a subset of participants who are trialing the alpha version.
<b>Activity 4.1.1:</b> (Year 4) Conduct an assessment and analysis of the procurement policy, laws, associated rules and regulations, and other legal provisions that affect the introduction of strategic procurement interventions in one Asian country (the Philippines)	5	MTaPS is engaging the GPPB and DOH-PS to determine the way forward based on the initial analyses done on the legal landscape for pooled procurements. There is misalignment between what the initial plan and agreement was and what is being proposed by GPPB. MTAps will continue to engage the major stakeholders to discuss and agree on what can realistically be done considering the remaining time of the FY.

## 6. PROGRESS IN ACHIEVING CONTRACT DELIVERABLES

**Table 36. Quarter 3 Year 5 Progress in Achieving Contract Deliverables**

<b>Contractual Deliverable</b>	<b>Due Date</b>	<b>Submission Date</b>	<b>Comments</b>
Quarterly Performance Report	4/30/23	4/27/23	
Subcontracting Report (eSRS)	4/30/23	4/28/23	
Reporting of Foreign Taxes	4/16/23	4/14/23	
Closeout Plan	5/31/23	5/30/23	

## 7. PROGRAM SPOTLIGHT

EXPANDING COVID-19 VACCINATION SAFELY, EFFECTIVELY, AND EFFICIENTLY IN KENYA

STRENGTHENING PHARMACOVIGILANCE TO IMPROVE PRODUCT SAFETY SURVEILLANCE AND REPORTING IN KENYA

RWANDA BENCHMARKS USE OF ANTIBIOTICS TO CURB ANTIMICROBIAL RESISTANCE

TOWARD A FINANCIALLY SUSTAINABLE FOOD AND DRUGS AUTHORITY IN RWANDA



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

### SUCCESS STORY

**COVID-19 vaccines are novel, and unique requirements must be adhered to in their handling and administration to ensure patient safety. Capacitating health care workers with the requisite skills and knowledge is vital to ensuring vaccine safety and effectiveness. Equally critical is accurate, timely, and complete public health epidemiological data, especially for COVID-19. MTaPS supported Kenya in strengthening both areas to ensure safe, effective, and efficient COVID-19 vaccine rollout in the country.**

#### About USAID MTaPS

The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018-2024) enables low- and middle-income countries to strengthen their pharmaceutical systems, which is pivotal to better health outcomes and higher-performing health systems. The program is implemented by a consortium of global and local partners, led by Management Sciences for Health (MSH), a global health nonprofit.

[www.mtapsprogram.org](http://www.mtapsprogram.org)

Contact: [msh@mtaps.org](mailto:msh@mtaps.org)

### Expanding COVID-19 Vaccination Safely, Effectively, and Efficiently in Kenya

In March 2021, when COVID-19 vaccination was introduced in Kenya, health care workers needed to be trained on the features of the multiple vaccines to ensure their effective administration. It was also critical to ensure patient safety, track the vaccine uptake and epidemiology trends, and manage vaccine stock for the success of the immunization campaign—all of which demand proper reporting and data accuracy.

To address these needs, the US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program assisted the Ministry of Health on multiple fronts of vaccine deployment: policy, planning, and coordination; supply chain logistics management; pharmacovigilance to monitor adverse events following immunization (AEFI); and capacity building of human resources.

#### Capacity Building

MTaPS, in collaboration with the National Vaccines and Immunization Program and other implementing partners, developed training materials for COVID-19 vaccine deployment on topics such as cold storage, transportation, administration, safety surveillance, and data management and reporting. The program trained 101 master trainers who cascaded the knowledge down to the county and sub-county levels, and eventually to the health facilities, reaching a total of 1,323 health professionals in all 10 MTaPS-supported counties. In addition, USAID MTaPS trained 1,355 health care workers on spontaneous reporting of AEFI with COVID-19 vaccines and investigation of serious AEFI.

#### Improving Data Quality and Reporting on Vaccine Stock and Safety

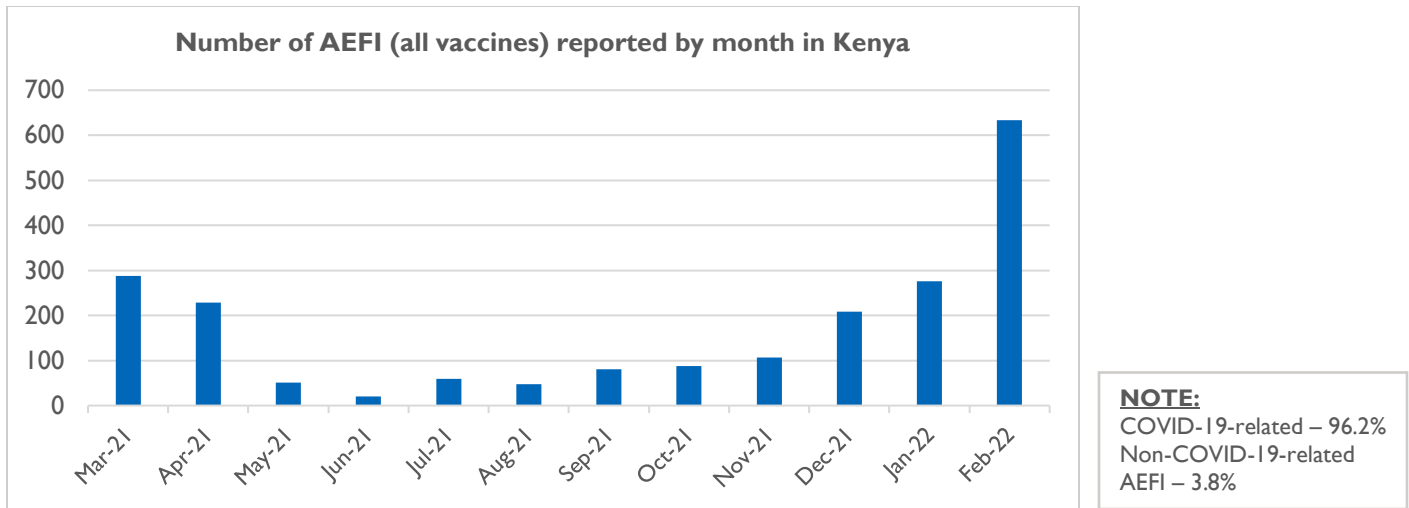
To address the COVID-19 vaccine data quality concerns at the facility level (e.g., missing stock data, high wastage of vaccines, and low levels of AEFI reporting), USAID MTaPS worked with the Sub-County Expanded Program on Immunization logisticians and the sub-county health records and information officers to ensure all the COVID-19 vaccinating facilities within their sub-counties could access the national reporting system to enter vaccination data directly. Additionally, USAID MTaPS supported the focus counties to review the data and conduct focused support supervision on COVID-19 vaccines administration and data entry at health facilities, printing and distributing vaccines ledger books to improve documentation of vaccine inventory management.

## Support for Development of National and County Level COVID-19 Vaccines Micro Plans

During vaccine introduction, planning was carried out centrally for deploying COVID-19 vaccines to the counties. USAID MTaPS supported the national COVID-19 vaccines procurement and logistics subcommittee to develop and roll out a standardized micro plan template in the country's 47 counties, enabling decentralized planning for vaccine rollout. Partners were able to further cascade these micro plans to the health facilities.

## Results

The number of adults fully vaccinated for COVID-19 in the 10 MTaPS focus counties increased from 460,807 (4.59% of the target population above 18 years) on September 2, 2021, to 4,058,653 (40.5% of the target population above 18 years) on August 31, 2022—an almost 9-fold increase.



## Next Steps

USAID MTaPS' technical assistance provided a platform for sustained roll out and support of COVID-19 vaccines both in the focus counties and nationally. Collaboration efforts with master trainers and partners have ensured reach beyond MTaPS' operational scope. As the country works toward marking all the facilities offering routine immunization as COVID-19 vaccination centers, lessons learned from MTaPS' work will inform the scaling up efforts to address gaps. Ongoing facility level mentorship and support supervision, AEFI reporting, awareness building, and targeting health workers and the public will continue to strengthen new and existing interventions as new information emerges on COVID-19 vaccines.



## SUCCESS STORY

**Policies, procedures, and systems must be in place to support pharmacovigilance—the activities relating to the detection, assessment, understanding, and evaluation of adverse effects or any other health product-related problem toward improving patient safety. In Kenya, the USAID MTaPS program supported the strengthening of pharmacovigilance by improving active and passive surveillance and supporting the development of a consumer-led mobile app, enabling end-users nationally to report on adverse events following immunization in real-time.**

### **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

### Strengthening Pharmacovigilance to Improve Product Safety Surveillance and Reporting in Kenya

#### Background

Safety surveillance following the market authorization of health products and technologies (HPTs), along with ongoing quality and effectiveness monitoring and reporting, are an integral part of the health care system.

However, Kenya in the past has experienced irregular and infrequent reporting of adverse events following immunization (AEFIs) to the national pharmacovigilance system maintained by the Pharmacy and Poisons Board (PPB). Limited access to reporting tools by health care professionals and members of the public alike, a tendency to misplace manual reporting forms before the data they contain is uploaded to the web-based Pharmacovigilance Electronic Reporting System (PvERS), and inadequate knowledge on the use of that system were all major factors contributing to the challenges.

To improve patient safety, policies, procedures, and systems need to be in place to support pharmacovigilance—activities relating to the detection, assessment, understanding, and evaluation of adverse effects or other HPT-related problems. Moreover, HPTs must be handled in compliance with applicable laws and regulations. The US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program is collaborating with the PPB to strengthen pharmacovigilance systems and improve safety surveillance and the reporting of health product-related problems, including AEFIs. Vaccine safety monitoring enables the early detection, investigation, and analysis of AEFIs, as well as adverse events of special interest.

#### Development of mPvERS

In 2021, Kenya upgraded PvERS—which was developed with support from a USAID-funded predecessor program, the Systems for Improved Access to Pharmaceuticals and Services—to include the reporting of AEFIs, medication errors, transfusion reactions, and medical device incidents.

MTaPS in 2022 supported PPB in developing a mobile Pharmacovigilance Electronic Reporting System (mPvERS), which interlinks with PvERS and allows for the real-time transmission of pharmacovigilance reports from handheld mobile devices, thereby enabling even users from remote parts of the country to easily access the system.

The PPB, with MTaPS support, trained health care workers on using mPvERS to send the safety reports and designed, printed, and disseminated brochures and posters targeting health care workers and members of the public with information on how to use the app.

#### The benefits of mPvERS include:

- Members of the public can easily report adverse effects or suspected poor-quality health products and technologies, at their convenience.
- Filing electronically saves paper and thus is environmentally friendly.
- The app is available in both Android and IOS platforms.
- The app can be used in resource-constrained areas.
- Users receive instant feedback on the status of their submissions.
- Real time visual reports show trends, such as the number of AEFIs reported related to COVID-19 vaccines.



*A health care worker interacting with the mPvERS application on 6th September 2022. Photo credit: Barbara Jepkorir*

### Complementary Surveillance Activities

In addition to mPvERS, MTaPS supported the PPB and the National Vaccines and Immunization Program in the design and implementation of passive (routine information gathered from health facilities and members of the public) and active (collection of case-study information as a continuous pre-organized process) surveillance. The focus was on improving safety surveillance of AEFIs in relation to the COVID-19 vaccine.

### An Integrated Pharmacovigilance System

The reports received from the national pharmacovigilance system will feed into the National Regulatory Authority and inform policy changes aimed at improving patient safety, including through a review of treatment guidelines and various regulatory actions and interventions in the country.





# SUCCESS STORY

## Rwanda Benchmarks Use of Antibiotics to Curb Antimicrobial Resistance

**Antimicrobial resistance is a growing health crisis that is fueled by the misuse and overuse of antibiotics. In Rwanda, health care providers have been relying on an outdated list of essential medicines, and there is no framework in place on which antibiotics to use for treatments. In a first, the country has adopted the WHO-recommended categorization of antibiotics to moderate their use.**

### **About USAID MTaPS**

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PHOTO CREDIT: USAID MTAPS RWANDA

*A health care provider dispenses medicines at a health center*

Resistance to antibiotics is an increasingly concerning health issue in Rwanda. Studies conducted at Rwanda university teaching hospitals<sup>i</sup> found a high prevalence of antimicrobial resistance (AMR) in some of the antibiotics commonly used to treat infectious diseases, threatening the successful treatment of patients. A major contributor to AMR is the overuse and misuse of antibiotics by clinicians.<sup>ii</sup>

Rwanda's national essential medicines list (NEML) for adults and children, which guides the use of medicines, was last updated in 2015 and did not reflect the most recent World Health Organization (WHO) guidance. In collaboration with the US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program, the Rwandan Ministry of Health (MOH) revised the NEML, incorporating WHO's Access, Watch, and Reserve (AWaRe) antibiotic classification—a tool that supports antibiotic stewardship efforts. This significant step aims to optimize the use of antimicrobials and preserve their efficacy in treating diseases.

## Adopting AWaRe: A Strategy to Combat AMR

Rwanda developed its first national action plan on AMR using the One Health approach, which focuses on multisectoral efforts and is globally recognized as vital to fighting AMR. As part of the approach to optimize the use of antibiotics, MTaPS partnered with WHO to assist the MOH in updating the NEML to align with the AWaRe categorization and standard treatment guidelines for prevailing health conditions. The overall goal of AWaRe is to monitor and reduce or increase the use of different classes of antibiotics as appropriate.

### Categorization Methodology

MTaPS assisted with data collection on the local epidemiology of infectious diseases and conducted an extensive desk review of regional and international literature on infectious disease profiles in Rwanda. The resulting list was supplemented with key informant interviews and a workshop with national infectious diseases experts to build consensus. As a final step, MTaPS facilitated peer-review consultations with long-serving national health care providers to review and validate the final list as the first Rwanda AWaRe classification of antibiotics.

### Way Forward

The revised 2021 NEML, which will guide prescribing going forward, includes 42 antibiotics. Adopting the AWaRe classification as part of its national AMR action plan is helping Rwanda benchmark the use of antibiotics in the country—a strategy that promotes more responsible prescribing and rational use of antibiotics and is key to curbing AMR and improving patient safety.

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*“The AWaRe classification is an opportunity for the health sector to set targets for measuring and reporting progress on antibiotic use. The overall goal is to increase the use of access group antibiotics where availability is low, while at the same time reducing the use of watch group and reserve group antibiotics that are at higher risk of antimicrobial resistance”*

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—Dr. Corneille Ntihakose, Head of Department, Clinical Services, MOH

The classification also guides clinicians on which antibiotics to use for specific syndromes, improving therapeutic results in patients and overall patient safety and contributing to controlling AMR.

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<sup>i</sup> Kurz MS, Bayingana C, Ndoli JM, Sendegeya A, Durst A, Pfüller R, et al. Intense pre-admission carriage and further acquisition of ESBL-producing Enterobacteriaceae among patients and their caregivers in a tertiary hospital in Rwanda. *Trop Med Int Health*. 2017 Feb;22(2):210-220. Available at: <https://pubmed.ncbi.nlm.nih.gov/27935649/>

<sup>ii</sup> Sutherland T, Mpirimbanyi C, Nziyomaze E, Niyomugabo JP, Niyonsenga Z, et al. (2019) Widespread antimicrobial resistance among bacterial infections in a Rwandan referral hospital. *PLOS ONE* 14(8). Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0221121>



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

### SUCCESS STORY

**Eliminating poor-quality medicines found in low- and middle-income countries requires an independent, well-functioning national medicines regulatory authority that can effectively regulate medical products on the market. An action-oriented business plan charts a course for Rwanda's Food and Drugs Authority that will strengthen its financial management, enhance accountability, and move it toward greater financial sustainability.**

#### **About USAID MTaPS**

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### Toward a Financially Sustainable Food and Drugs Authority in Rwanda



PHOTO CREDIT: USAID MTaPS

*A pharmacist stocking the shelves with medicines*

Fake and substandard medicines are a major challenge in low- and middle-income countries, with [Africa alone accounting for 42% of global cases](#). An independent, well-functioning national medicines regulatory authority is critical for ensuring the efficacy, safety, and quality of medical products on the market. Rwanda established its Food and Drugs Authority (FDA) with a regulatory mandate in 2018. To effectively carry out its key functions, the FDA must be adequately self-reliant financially as per the World Health Organization [Global Benchmarking Tool \(GBT\)](#). A GBT assessment of the Rwanda FDA identified, among other gaps, its reliance on the government, grants, donations, and other sources for funding.

In Rwanda's bid to reach advanced GBT maturity level (level 3) so its FDA can be a stable, world-class regulatory authority, the USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program and its partner, Pharmaceutical Systems Africa (PSA), supported the FDA to develop a business plan that will strengthen its financial management, enhance accountability, and eventually reduce its dependency on government and donor funding.

#### **Developing a Business Plan for a Financially Sustainable FDA**

Beginning in 2021, MTaPS, PSA, and the Rwanda FDA undertook a desk review of policies, plans, and other documents; conducted management and stakeholder interviews; and assessed current systems and processes to inform the development of the business plan. Further, the Rwanda FDA's key regulatory functions were benchmarked against similar and advanced

regulatory authorities, such as those of Ghana, Singapore, and Tanzania.

The Rwanda FDA Business Plan for Financial Sustainability 2021–2025 was presented at a stakeholder validation workshop in May 2022, after which a revised plan incorporating stakeholder feedback was officially adopted by the Authority.



FDA staff and stakeholders at the Rwanda FDA business plan validation meeting, May 2022. Photo credit: MTaPS Rwanda

The plan documents the Rwanda FDA’s financial situation, provides a gap analysis, and outlines a financial strategy over five years for the FDA to become financially sound while relying to a small degree on subsidies from the government and partner support. The plan identifies recommendations anchored to five objectives—aligning the organization with its goals, digitizing services and operations, increasing revenue, improving the quality management system, and introducing a customer-oriented culture.

For revenue, the plan recommends restructuring the current fee and introducing pre-application screening fees and separate registration and laboratory fees.

An accompanying set of financial projections in the plan indicates that the Rwanda FDA will significantly decrease its financial dependence over the next five years.

## Conclusion

The Rwanda FDA Business Plan will go a long way toward ensuring the FDA’s financial sustainability while reducing its dependency on government and donor funding so it

can better serve the Rwandan population. The plan is a crucial part of MTaPS’ support to sustainably strengthen the FDA’s regulatory functions so that all medical products on the market are quality assured, safe, and efficacious.

*“I wish to take this opportunity to express my gratitude towards the USAID MTaPS Program for its financial and technical support during the entire process of developing this business plan. I’m also grateful to all our stakeholders who have been involved in one way or another during the development and validation process.”*

– Dr. Emile Bienvenu, Director General, Rwanda Food and Drugs Authority

**The roadmap developed with MTaPS’ assistance will significantly decrease Rwanda FDA’s financial dependence over the next five years, putting it on course for greater independent functioning essential for effective regulation of medical products.**



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## 8. MONITORING, EVALUATION, RESEARCH, & LEARNING

### A. MONITORING & EVALUATION

#### QUARTER 3 PROGRESS

The MTaPS HO MERL team, in collaboration with each MTaPS country/portfolio team, adapted the MEL plans to any changes in work plans approved by the Mission and the COR. In PY5 Quarter 3, the HO M&E team developed an endline report presenting progress made by MTaPS through monitoring data trends across countries and portfolios from project baseline till PY5 Quarter 2. The HO M&E team and countries engaged in endline planning, which mainly involved discussing the relevance of data collection on any baseline-endline indicators at the end of the project. The HO M&E team also conducted data review and reflection meetings with MTaPS objective leads to discuss the data trends emerging through PY5 Quarter 2 and how this evidence can be used to answer key questions around MTaPS' contribution to the field of PSS. The HO M&E team will continue to have these data review and reflection meetings with technical leads to integrate meaningful monitoring evidence in the end-of-project report. MTaPS HO and country M&E teams engaged in project closeout planning. With the MTaPS extension announced, M&E specific closeout conversations are continuing, with a priority on the countries that are closing in September 2023.

#### DEVRESULTS DATA AND DASHBOARDS

DevResults continued to be used as the data aggregation and management system. The historical data in DevResults was used for endline analysis and data review and reflection meetings with Objective Leads. Power BI dashboards continued to be used for performance monitoring data visualizations. In all country-specific meetings with the country M&E staff and technical staff, the HO M&E team has emphasized the use of Power BI dashboards for understanding the progress of a country/portfolio toward its targets and eventually toward the project's objectives and sub-objectives. The country teams have been asked to actively use these dashboards to make inferences about the progress of the program and pause and reflect when needed.

#### COVID-19 IN-COUNTRY ACTIVITY REPORTS

Nigeria, Cameroon, Philippines, Madagascar, Kenya, Tanzania, Côte d'Ivoire, Rwanda, and Bangladesh reported COVID activities—monitoring data. Senegal and Mozambique completed their planned COVID activities at the end of PY5 Quarter 2. COVID indicators across MTaPS continue to assess progress under the following result areas:

1. Cold Chain and Supply Logistics
2. Human Resources for Health
3. Service Delivery
4. Pharmacovigilance and Safety Monitoring
5. Laboratory Systems
6. Infection Prevention and Control

7. Case Management
8. Coordination and Operations

### **DATA QUALITY ASSURANCE (DQA)**

High-quality data continued to be a focus of the M&E teams at the HO and country levels. The teams consistently referred to the Data Quality Assurance Standard Operating Procedure (SOP) to ensure timely, accurate, and complete data is submitted. The country-specific Data Quality Assurance Action Plans, with recommendations for sustaining and improving data quality, have been referred to regularly by the countries. With the MTaPS extension announced, these data quality recommendations have taken priority again in Home Office–Field Office monthly discussions. A data submission training was organized in PY5 Quarter 3 for the country M&E points of contact with key data quality recommendations highlighted for PY5 Quarter 3 reporting.

### **ACTIVITIES & EVENTS FOR NEXT QUARTER**

<b>Activity &amp; Description</b>	<b>Date</b>
M&E closeout coordination with countries closing in September, 2023	June 2023–September 19, 2023
Year 6 work plan template development (with M&E section)	July, 2023
Year 6 work plan finalization with identification of indicators and setting targets for each country/portfolio	July 2023–September, 2023
Organizing DevResults for quarterly, semiannual, and annual data entries in PY5 Q4	August 2023–September, 2023
Updating SOPs to add specific closeout information for all MTaPS countries and portfolios	September 2023 onwards

## B. KNOWLEDGE MANAGEMENT AND LEARNING

### QUARTER 3 PROGRESS

#### MTaPS PSS IN PRACTICE KNOWLEDGE EXCHANGE

During Quarter 3, MTaPS held seven knowledge exchanges to share experiential knowledge and lessons learned from implementation. These knowledge exchanges were phased out June 2023 to focus on external dissemination activities.

***Ensuring Quality and Appropriate Use of Medical Oxygen.*** On April 4, 2023, Jean Mirimo, Senior Technical Advisor, MTaPS Rwanda; Kate Kikule, Principal Technical Advisor, RSS; and Jane Briggs, Senior Principal Technical Advisor, MNCH, presented on the need for ensuring quality and appropriate use of oxygen and shared technical resources that can be used to support regulation of oxygen.

***WHO AWaRe Antibiotics Categorization in Tanzania.*** On April 11, 2023, Dr. Talhiya Yaya, Senior Technical Advisor, MTaPS Tanzania, presented on MTaPS' approach to and lessons learned from introducing the WHO AWaRe antibiotics categorization in Tanzania.

***Improving Infection Prevention and Control: The Ethiopia Experience.*** On April 18, 2023, Tewodros Fantahun, Senior Technical Advisor, presented on MTaPS' efforts to strengthen IPC governance at the national level and improve IPC practice at supported health facilities, lessons learned from implementation, and recommendations for sustaining MTaPS' IPC interventions.

***Pharmaceutical Expenditure Tracking in Indonesia.*** On April 19, 2023, Andre Zida, Principal Health Financing Advisor, Results for Development (R4D), and Yunita, University of Indonesia, Center for Health Economics and Policy Studies, presented on the methodology, implementation, and results of pharmaceutical expenditure tracking in Indonesia.

***Minimum Common Standards for Regulatory Information Management Systems in Low- and Middle-Income Countries.*** On April 25, 2023, Kate Kikule, Principal Technical Advisor, and Deane Putzier, Senior Principal Technical Advisor, presented on MTaPS' efforts to identify minimum common standards for regulatory information management systems and promote their adoption and use by national regulatory authorities.

***Strengthening Antimicrobial Stewardship: MTaPS Ethiopia Experience.*** On May 2, 2023, Getachew Alemkere, Senior Technical Advisor, MTaPS Ethiopia, presented on MTaPS' efforts to strengthen AMS in Ethiopia through improved governance, capacity, and practice.

***Strengthening Antimicrobial Stewardship in Uganda.*** On May 3, 2023, John Paul Waswa, Acting Country Project Director and Senior Technical Advisor, MTaPS Uganda, presented on MTaPS' efforts to strengthen AMS in Uganda through continuous quality improvement.

#### TECHNICAL DOCUMENTATION

During Quarter 3, MTaPS developed 25 products to answer learning questions:



**Asia Bureau: Using the OneHealth Tool to Allocate Pharmaceutical Budgets.** MTaPS drafted a technical approach brief on strategies and information that policymakers need to consider for using the OHT to appropriately allocate budgets for pharmaceuticals. This product answers the following learning question: What strategies and information are required for policy makers in the MOH, using the OHT, to appropriately allocate budgets for pharmaceuticals?

**Asia Bureau: Strengthening Medical Products Registration in the Asia Region.** MTaPS drafted 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 product answers the following learning question: How will medical products registration contribute to the improvement of overall RSS?

**Strengthening Use of Data for Decision Making in Bangladesh.** MTaPS drafted a technical highlight 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 product answers 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 Capacity for AMS & IPC Practices in Bangladesh.** MTaPS drafted a technical brief on supporting AMS and IPC governance structures at the national and subnational levels, conducting facility-level IPC assessments, and building capacity for improved IPC and AMS practices. This product answers the following learning question: What are the primary barriers and enablers for building institutional capacity in both AMS and IPC and how can these barriers and enablers be best institutionalized in the Bangladeshi context?

**Improving Tuberculosis Data Collection and Use in Bangladesh.** MTaPS revised 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 product answers the following learning question: What are the critical success factors in the implementation and use of e-TB Manager in Bangladesh?

**Building Multisectoral Coordination to Combat Antimicrobial Resistance in Burkina Faso.** MTaPS drafted a technical highlight on the use of the One Health platform as a mechanism for partner collaboration—an essential approach to strengthening global health security. This product answers the following learning question: What are the key factors enabling or hindering MSC on AMR at the national level and how can MSC efforts be sustained?

**Strengthening Multisectoral Coordination to Contain Antimicrobial Resistance in Cameroon.** MTaPS drafted a technical highlight on lessons learned from using the One Health platform to improve MSC and ensure updating of Cameroon's national action plan for AMR. This product answers the following learning question: What are the critical lessons learned in the strengthening of MSC bodies on AMR?

**Improving Functionality of DTCs in Support of AMS in Côte d'Ivoire.** MTaPS drafted a technical brief on establishing DTCs and building their AMS capacity, resulting in an increased number of

functional DTCs with improved AMS assessment scores. This product answers the following learning question: How has the functionality of DTCs improved with MTaPS-supported interventions?

***Strengthening Antimicrobial Stewardship for Combating AMR in Ethiopia.*** MTaPS drafted a technical brief summarizing efforts for addressing AMR by optimizing the use of antimicrobial medicines through improved AMS and overcoming barriers to building institutional capacity for AMS. This product answers the following learning question: What are the primary barriers to building institutional capacity in AMS and how can these barriers be overcome in the Ethiopian context?

***Strengthening Multisectoral Coordination for Combating AMR in Ethiopia.*** MTaPS drafted a technical brief on strengthening governance structures for effective coordination of AMR containment in Ethiopia. This product answers the following learning question: What are the critical drivers for sustainable improvements in MSC on AMR?

***Mapping Pharmaceutical Expenditure Data Sources in Indonesia.*** MTaPS drafted a technical brief describing the program's efforts to identify sources of pharmaceutical expenditure data and build the capacity of Indonesia's HA team to track, collect, and analyze pharmaceutical expenditure data. This product answers the following learning question: What are the key policy questions related to pharmaceutical expenditure in Indonesia and what are the necessary adaptations to the general pharmaceutical expenditure tracking guidelines for the Indonesian context?

***Strengthening the Health Care Priority Setting Process in Indonesia.*** MTaPS drafted a technical brief on the program's role in improving HTA in Indonesia, including improving the topic identification, selection, and prioritization process for better evaluation of health technologies and interventions. This product answers the following learning questions: What are the current processes and institutional structures for decision making/priority setting in Indonesia? What are the key policy/regulatory priorities for the primary stakeholders? How can these be aligned to streamline HTA processes?

***Rational Use of Antimicrobials in Jordan.*** MTaPS drafted a technical highlight on its efforts to develop localized protocols for rational use of antimicrobials through collaboration with the MOH in Jordan. This product answers 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 drafted a technical brief on its efforts to support the institutionalization of FAs for public procurement of pharmaceuticals. This product answers the following learning question: What factors contribute to sustaining improvements in governance in pharmaceutical systems?

***Strengthening Multisectoral Coordination to Contain Antimicrobial Resistance (AMR) in Kenya.*** MTaPS drafted a technical brief summarizing program support to the Government of Kenya for strengthening MSC to address the rising threat of AMR in the country. This product answers the following learning question: What are the factors enabling or hindering MSC on AMR at the national and MTaPS-focus-county levels and how can MSC be sustained?

***Strengthening IPC and AMS Governance to Contain AMR in Kenya.*** MTaPS drafted a technical brief describing assistance to the Government of Kenya to establish IPC and AMR committees at the

national, county, and health facility levels as effective and sustainable governance structures for AMR containment. This product answers the following learning question: What are some of the incentives and enablers for the effective and sustainable functioning of IPC and MTC/AMS committees?

***Strengthening Multisectoral Coordination (MSC) on Antimicrobial Resistance (AMR) at the National Level in Mali.*** MTaPS drafted a technical brief on supporting the national MSC committee and its IPC and AMS TWGs through activities aimed at strengthening MSC for AMR containment. This product answers the following learning question: What are the key factors enabling or hindering MSC on AMR at the national level?

***Helping Hospitals Prioritize IPC Interventions for AMR Containment in Mozambique.*** MTaPS drafted a technical brief describing efforts to improve IPC at the national and health facility levels by using WHO tools for systematic assessment, programming, prioritization, and monitoring of IPC activities. This product answers the following learning question: How have IPCAF health assessments helped prioritize key IPC activities?

***Strengthening Multisectoral Coordination for Containing Antimicrobial Resistance in Nigeria.*** MTaPS drafted a technical brief describing program support to the Government of Nigeria to strengthen governance and capacity in the country for effective MSC for AMR containment. This product answers the following learning question: What are the critical drivers for improving MSC on AMR?

***Strengthening Infection Prevention and Control in Nigeria.*** MTaPS drafted a technical brief on efforts to strengthen governance and capacity for IPC at the national, state, and health facility levels in Nigeria. This product answers the following learning question: What are the minimum critical elements of IPC programs that are required to achieve successful and sustainable IPC improvements based on the experience working in the MTaPS-supported health care facilities?

***Implementing a Quality Management System (QMS) for the Rwanda Food and Drugs Authority (RFDA).*** MTaPS drafted a brief summarizing program support to the RFDA in strengthening the quality of its regulatory services through implementation of a QMS. This product answers the following learning question: What is the effect of the QMS implementation on the quality of the RFDA's regulatory services?

***Introducing PViMS for Spontaneous Reporting of Adverse Drug Effects in Rwanda.*** MTaPS drafted a technical brief highlighting the program's support to Rwanda in introducing the web-based PViMS for spontaneous reporting of AEs and AEFIs related to the Ebola vaccine and other vaccines and medicines. This product answers the following learning question: What are the key facilitators and barriers of routine use of PViMS for spontaneous reporting?

***Adherence to IPC Standards in MTaPS-Supported Health Facilities in Senegal.*** MTaPS drafted a technical brief 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 product answers the following learning question: What is the level of adherence to IPC standards in MTaPS-supported facilities?

**Improving Infection Prevention and Control in Tanzania.** MTaPS drafted a technical brief on its efforts to assess and strengthen IPC governance, build institutional capacity to manage IPC, make IPC-related information available for use in decision making, and improve IPC practices and services. This product answers the following learning question: What factors contribute to an effective and sustainable national IPC program in Tanzania?

**Introducing the WHO AWaRe Antibiotics Categorization in Tanzania.** MTaPS drafted a technical brief on efforts to introduce and implement the WHO-recommended AWaRe categorization of antibiotics to achieve more rational antibiotic use in Tanzania's health facilities. This product answers the following learning question: What factors facilitate adherence to AWaRe antibiotics categorization guidelines in health facilities?

During Quarter 3, MTaPS developed nine additional knowledge products:

**Asia Bureau: Managing Conflicts of Interest in Public Pharmaceutical Committees.** MTaPS drafted a technical highlight on developing a manual for managing COI in public pharmaceutical agencies for stronger pharmaceutical management in LMICs.

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

**The Electronic Asset Management System (eAMS) in Bangladesh.** MTaPS updated a technical highlight on development of a centralized, web-based eAMS to strengthen the process of cost-effectively deploying, operating, maintaining, upgrading, and disposing of assets.

**Improving COVID-19 Vaccination Rates in Low-Performing Districts in Côte d'Ivoire.** MTaPS drafted a technical brief on the use of microplanning as a tool to improve immunization coverage at the local level.

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

**Strengthening Pharmacovigilance for Improved Patient Safety in Mozambique.** MTaPS drafted a technical brief on monitoring AEs in patients newly placed on a TLD regimen to improve the process of care and treatment outcomes for people with HIV/AIDS.

**Implementing Antimicrobial Stewardship at a Teaching Hospital in Nigeria.** MTaPS drafted a technical highlight on its approach to strengthen AMS at the facility level through improving governance structures and capacity building of health care workers, which resulted in stronger AMS practices at Enugu State University Teaching Hospital.

**Introducing an eLMIS for Supply Chain Decision Making in the Philippines.** MTaPS drafted a technical highlight on the development and implementation of an eLMIS for addressing PSCM challenges in the Philippines.

**Facilitating Peer-to-Peer Learning: Practical Exchange of Knowledge, Skills, and Best Practices toward Antimicrobial Resistance Containment in Uganda.** MTaPS finalized a technical highlight on the program’s logistical and technical support for peer-to-peer learning among health care workers to strengthen their capacity to address AMR containment.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Project Year 6 Work Planning	July–September 2023
Completion of Project Year 5 Technical Documentation	July–September 2023
Asia Bureau Webinar: Strengthening Pharmaceutical Regulatory Systems in the Asia Region	July 12–13, 2023
Webinar: PSS in Action – The MTaPS Experience	July 31, 2023
MTaPS Webinar Series	July–September 2023

## C. RESEARCH

### QUARTER 3 PROGRESS

This quarter, MTaPS published three peer-reviewed manuscripts. The Uganda team published a paper in *BMJ Open Quality* reporting on their successful AMS interventions. The paper is entitled *Development and evaluation of a continuous quality improvement programme for antimicrobial stewardship in six hospitals in Uganda* and as of July 7, 2023, had been downloaded 614 times. The GHSA team published a paper on four promising practices for strengthening national AMR containment based on the program's experience using the JEE tool and WHO Benchmarks for International Health Regulations Capacities. The paper, entitled *Moving from Assessments to Implementation: Promising Practices for Strengthening Multisectoral Antimicrobial Resistance Containment Capacity*, was published in *One Health Outlook* and as of July 7, 2023, had been accessed 1,640 times on the journal's website.

Additionally, MTaPS and its partner Boston University School of Public Health (BUSPH) published a paper entitled *Contracting retail pharmacies as a source of essential medicines for public sector clients in low- and middle-income countries: a scoping review of key considerations, challenges, and opportunities* in the *Journal of Pharmaceutical of Pharmaceutical Policy and Practice*. As of June 12, 2023, the article had been accessed 1,208 times on the journal's website. MTaPS also had its manuscript, entitled *Institutionalizing health technology assessment in Ethiopia: seizing the window of opportunity*, accepted for publication in the *International Journal of Technology Assessment in Health Care*. The paper outlines a problem-driven policy analysis into formulation, adoption, and implementation of HTA and an evidence-informed priority setting approach in Ethiopia.

The program continues with its implementation of several research studies:

- Under the CSL portfolio, MTaPS is conducting an impact evaluation of a client, stock, and workflow management application on unmet family planning needs at the last mile in Luapula Province, Zambia. MTaPS is equipping community-based distributors with tablets configured with the application. This quarter, the team completed the intervention launch. Community-based distributors are now using the application to register clients and deliver services, and the team has started post-intervention monitoring, completing the first supervisory visit in June.
- Also under the CSL portfolio, MTaPS continued with its study on disability inclusion in the health supply chain workforce in LMICs. The team completed a global self-administered survey to gather stakeholders' perception of disability inclusion in health supply chains in their local context. The findings will supplement those of a completed landscape analysis and ultimately inform recommendations for USAID and its partners in advising governments on interventions for enhancing inclusive employment practices in health supply chains.
- Under the Cross Bureau portfolio, MTaPS is in the final stages of its three-country case study of the mandate, function, and structure of national pharmaceutical services units. It shared a draft of the report with national stakeholders for feedback, which it has used to revise the paper.
- MTaPS is also working with BUSPH on a study of results of the program's IPC efforts and the extent to which they have contributed to the prevention of COVID-19 and other pandemic prepared measures in selected countries. This quarter, the team constructed a database comprising

programmatic IPC data, disseminated a self-administered survey to selected national stakeholders, and completed data cleaning and preliminary data analysis.

With respect to conference participation, MTaPS conducted a PSS Skills Building workshop at SAPICS 2023, where the team engaged 30 supply chain managers and other health systems stakeholders. The workshop, which was well received (table 35), introduced participants to the concept of PSS and how supply chains fit in the context of pharmaceuticals systems. Special focus was given to regulatory systems strengthening, governance, supply chain management, and AMR containment. MTaPS also participated in a panel on market shaping for health care product access, which MSH organized in partnership with UNITAID and other global stakeholders.



Andrew Brown, MTaPS, presenting at the PSS skills building workshop at the SAPICS Conference, June 2023. Photo Credit: Tamara Hafner, MTaPS.

The MNCH team participated in the International Maternal Newborn Health Conference and presented on the registration of MNCH medicines, highlighting the results from the seven-country mapping of product registration of MNCH medicines previously conducted and the ongoing work to strengthen registration processes.

## ACTIVITIES AND EVENTS FOR NEXT QUARTER

Activity and Description	Date
Prepare and submit abstracts to the global Health Supply Chain Summit (scheduled for November 14–16, 2023, in Nairobi, Kenya)	July 2023
Next steps for the research studies are included in the respective activity descriptions under their portfolio sections of the report.	July–September 2023



## 9. ANNEXES

### ANNEX I. MTAPS INDICATORS

Annex Table I. 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	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 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					
	Bangladesh		No	Yes	Yes	Yes					
	Burkina Faso		No	No	Yes	No					
	Cameroon		No	No	No	No					
	Côte d'Ivoire		No	No	No	No					
	DRC		No	Yes	Yes	Yes					
	Ethiopia		No	No	No	Yes					
	Kenya		No	No	No	No					
	Mali		No	No	No	No					
	Mozambique		No	No	No	No					
	Nigeria		No	No	No	No					
	Senegal		No	Yes	Yes	Yes					
Tanzania	No	Yes	Yes	Yes							
GH-IO 2	Has the country implemented WHO AWARe categories (yes/no)?	Annually	1/12	3/12	8/12	7/12					
	Bangladesh		Yes	Yes	Yes	Yes					
	Burkina Faso		No	No	Yes	Yes					
	Cameroon		No	No	No	No					
	Côte d'Ivoire		No	No	No	No					
	DRC		No	Yes	Yes	Yes					
	Ethiopia		No	No	Yes	Yes					
	Kenya		No	No	Yes	Yes					
	Mali		No	No	Yes	No					
	Mozambique		No	No	No	No					
	Nigeria		No	No	No	No					
	Senegal		No	No	Yes	Yes					

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	<i>Tanzania</i>		No	Yes	Yes	Yes					
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					
IO.4	Has the country's regulatory system increased its score since the last WHO global regulatory benchmarking assessment in at least one regulatory function (yes/no)?	Annually	0	N/A	N/A	N/A					
	<i>Nepal</i>		Yes	Yes	Yes	N/A					
MNCH 17 <sup>9</sup>	# of countries participating in the dissemination of the regulation guidelines for medical devices	Annually	0	0	0	N/A					
MNCH 18 <sup>10</sup>	# of MNCH medical devices included in the guidelines	Annually	N/A	N/A	0	N/A					
MNCH 19	# 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					
MNCH 4	# of oxygen manufacturers committed to addressing weaknesses identified	Annually	0	0	0	N/A					
MNCH 6	# of countries using the RMNCH forecasting supplement	Annually	0	N/A	5	8					
MNCH 9	# of best practices identified and documented on elements of pharmaceutical	Annually	0	3	N/A	N/A					

<sup>9</sup> This is an ongoing activity from Year 3 work plan and data will be available end of Year 5.

<sup>10</sup> This is an ongoing activity from Year 3 work plan and data will be available end of Year 5.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	management in social accountability MNCH interventions from the literature										
MNCH 10	# of MTaPS-supported NMRA's implementing improved registration practices relevant for MNCH medical products	Semiannually	0	1	N/A	1	0 <sup>11</sup>				
MNCH 11	# of countries supported to develop and implement action plans for regional harmonization efforts relevant for MNCH medical products	Semiannually	N/A	0	N/A		0 <sup>12</sup>				
MNCH 12	# of quality-assured MNCH products registered in selected country	Semiannually	0	N/A	N/A	123	N/A				
MNCH 13	# of countries supported to implement decentralized procurement systems	Semiannually	0	1	N/A	1	N/A				
MNCH 21	# of quantification guidance documents developed	Annually	0	0	0	5					
MNCH 22	# of countries in selected region implementing regulation of medical devices	Semiannually	0	N/A	N/A	N/A	0 <sup>13</sup>				
MNCH 23	# of countries participating in the joint assessment of MNCH medical devices	Annually	N/A	N/A	N/A	N/A	N/A				
MNCH 24	# of countries participating in the meetings to disseminate the call-to-action paper to improve use of	Annually	N/A	N/A	N/A	N/A	N/A				

<sup>11</sup> This is the number of countries participating/engaged in regional registration activity from the Year 4 work plan. Data are expected to become available by end of PY5 Quarter 4.

<sup>12</sup> This is the number of countries participating/engaged in regional registration activity from Year 4 work plan. Data are expected to become available by the end PY5 Quarter 4.

<sup>13</sup> This activity planned in Year 4 is ongoing and data will be available by the end of PY5 Quarter 4.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	amoxicillin and gentamicin										
MNCH 25	# of countries receiving MTaPS support to include non-malaria commodities in their GF proposals	Annually	N/A	N/A	N/A	N/A		N/A			
MNCH 26	# of countries participating in the dissemination of the oxygen quality assurance resource document	Annually	N/A	N/A	N/A	N/A		N/A			
MT 1.1.1	# of entities that have clarified roles and responsibilities in pharmaceutical systems and made information publicly available with MTaPS support	Annually	0	3	11	6					
	<i>Bangladesh</i>		0	2	1	2					
	<i>DRC</i>		N/A	N/A	N/A	N/A					
	<i>Indonesia</i>		0	N/A	2	N/A					
	<i>Jordan</i>		0	0	0	3					
	<i>Nepal</i>		0	0	0	N/A					
	<i>Rwanda</i>		0	1	4	1					
	<i>IGAD</i>		0	0	4	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					
	<i>DRC MNCH</i>		0	0	29	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)					
	<i>IGAD</i>		0	N/A	100% (2/2)	N/A					
	<i>Mali</i>		0	N/A	N/A	0% (0/1)					

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
MT 1.2.1	# of pharmaceutical sector–related policy, legislation, regulation, or operational documents developed or updated with technical assistance from MTaPS	Annually	0	30	28	20					
	<i>Asia Bureau</i>		0	0	1	4					
	<i>Bangladesh</i>		0	2	2	5					
	<i>Burkina Faso PV</i>		0	1	0	N/A					
	<i>Cross Bureau</i>		0	N/A	N/A	1					
	<i>Global MNCH</i>		0	1	0	N/A					
	<i>Indonesia</i>		0	N/A	0	N/A					
	<i>Jordan</i>		0	0	0	0					
	<i>Mali MNCH</i>		0	N/A	N/A	1					
	<i>Mozambique</i>		0	1	2	N/A					
	<i>Nepal</i>		0	N/A	3	6					
	<i>Philippines</i>		0	0	3	1					
	<i>Rwanda</i>		0	26	17	0					
	<i>Tanzania PEPFAR</i>		0	N/A	2	2					
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					
PP 1.2.1	# of health workers who received in-service training using non-traditional platforms on PSS, PSCM, or PV with MTaPS support	Quarterly	0	0	N/A	1,872	1,048	Data not available <sup>14</sup>	Data not available <sup>6</sup>		
MT 1.2.2	# of pharmaceutical regulatory enforcement mechanisms established or strengthened with MTaPS support	Semiannually	0	0	5	8			1		
	<i>Burkina Faso</i>		0	N/A	N/A	N/A			0		
	<i>Global MNCH</i>		0	N/A	0	N/A			0		
	<i>Mozambique</i>		0	0	2	N/A			N/A		
	<i>Rwanda</i>		0	0	2	8			1		

<sup>14</sup> Indicator data are collected through government sources that were not available at the time of data collection.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	<i>Tanzania PEPFAR</i>		0	N/A	1	N/A	N/A				
MT 1.2.3	% of established pharmaceutical regulatory enforcement mechanisms that are functional	Semiannually	50%	42% (11/26)	88% (15/17)	75% (3/4)	100% (1/1)				
	<i>Bangladesh</i>		50%	100% (2/2)	100% (8/8)	100% (2/2)	100% (1/1)				
	<i>Mozambique</i>		0%	22% (2/9)	67% (2/3)	N/A	N/A				
	<i>Rwanda</i>		0%	83% (5/6)	83% (5/6)	75% (6/8)	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					
	<i>Jordan</i>		0	0	0	0					
	<i>DRC MNCH</i>		0	0	1	1					
PP 1.3.1	% of USG-supported facilities using MTaPS-supported eLMIS	Quarterly	0	N/A	N/A	Data not reported	37% (12/32)	Data not available <sup>15</sup>	100% (37/37)		
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					
	<i>Jordan</i>		0	0	0	0					
MT 2.1.2	# of MTaPS-supported health professional training curricula developed or revised to address pharmaceutical management topics	Annually	0	5	2	7					
	<i>Asia Bureau</i>		0	N/A	1	2					

<sup>15</sup> Indicator data are collected through government sources that were not available at the time of data collection.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result		
	Bangladesh		0	4	0	1										
	IGAD		0	1	1	N/A										
	Jordan		0	N/A	N/A	4										
MT 2.2.2	# of persons trained in pharmaceutical management with MTaPS support	Quarterly	0	1,827	12,480	9,862	2,180		1,628		2,009					
	Asia Bureau		0	N/A	101	413	Female	19	Female	9	Female	19	Female			
							Male	6	Male	6	Male	37	Male			
							Unknown	80	Unknown	0	Unknown	0	Unknown			
							<b>Total</b>	105	<b>Total</b>	15	<b>Total</b>	56	<b>Total</b>			
	Bangladesh		0	1,678	2,856	3,013	Female	256	Female	60	Female	301	Female			
							Male	67	Male	456	Male	0	Male			
							Unknown	0	Unknown	0	Unknown	61	Unknown			
							<b>Total</b>	323	<b>Total</b>	516	<b>Total</b>	362	<b>Total</b>			
	Burkina Faso		0	N/A	N/A	N/A	Female	10	Female	10	Female	N/A	Female			
							Male	22	Male	22	Male					
							Unknown	0	Unknown	0	Unknown					
							<b>Total</b>	32	<b>Total</b>	32	<b>Total</b>					
	Cross Bureau		0	N/A	N/A	124	Female	0	Female	54	Female	0	Female			
							Male	0	Male	106	Male	0	Male			
							Unknown	0	Unknown	411	Unknown	1,260	Unknown			
							<b>Total</b>	0	<b>Total</b>	571	<b>Total</b>	1,260	<b>Total</b>			
	DRC MNCH		0	N/A	373	192	Female	3	Female	N/A	Female	27	Female			
							Male	8	Male		128	Male				
							Unknown	0	Unknown		0	Unknown				
							<b>Total</b>	11	<b>Total</b>		<b>Total</b>	155	<b>Total</b>			
	DRC Supply Chain		N/A	N/A	N/A	0	Female	N/A	Female	N/A	Female	N/A	Female			
							Male		Male		Male					
							Unknown		Unknown		Unknown					
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>			
	IGAD		0	N/A	843	23	Female	N/A	Female	N/A	Female	N/A	Female			
							Male		Male		Male					
							Unknown		Unknown		Unknown					
						<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>				
Indonesia	0	N/A	0	251	Female	14	Female	0	Female	37	Female					
					Male	3	Male	3	Male	18	Male					
					Unknown	0	Unknown	0	Unknown	0	Unknown					
						<b>Total</b>	17	<b>Total</b>	3	<b>Total</b>	55	<b>Total</b>				
Jordan	0	N/A	N/A	50	Female	213	Female	96	Female	60	Female					
					Male	160	Male	70	Male	61	Male					



Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result
							Unknown	0	Unknown	0	Unknown	0	Unknown	
							<b>Total</b>	373	<b>Total</b>	166	<b>Total</b>	121	<b>Total</b>	
	Mali MNCH	0	N/A	N/A	8	Female	N/A	Female	4	Female	0	Female		
						Male		8	Male	0	Male			
						Unknown		0	Unknown	0	Unknown			
						<b>Total</b>		12	<b>Total</b>	0	<b>Total</b>			
	Mozambique	0	105	21	125	Female	N/A	Female	N/A	Female	N/A	Female		
						Male		Male		Male				
						Unknown		Unknown		Unknown				
						<b>Total</b>		<b>Total</b>		<b>Total</b>				
	Nepal	0	N/A	38	121	Female	N/A	Female	N/A	Female	N/A	Female		
						Male		Male		Male				
						Unknown		Unknown		Unknown				
						<b>Total</b>		<b>Total</b>		<b>Total</b>				
	Philippines	0	N/A	7,615	5,191	Female	748	Female	Data not available <sup>16</sup>	Female	Data not available <sup>8</sup>	Female		
						Male	300	Male		Male				
						Unknown	0	Unknown		Unknown				
						<b>Total</b>	1,048	<b>Total</b>		<b>Total</b>				
	Rwanda	0	44	603	246	Female	113	Female	113	Female	0	Female		
						Male	190	Male	200	Male	0	Male		
						Unknown	0	Unknown	0	Unknown	0	Unknown		
						<b>Total</b>	303	<b>Total</b>	313	<b>Total</b>	0	<b>Total</b>		
	Rwanda PEPFAR	0	N/A	N/A	78	Female	N/A	Female	N/A	Female	N/A	Female		
						Male		Male		Male				
						Unknown		Unknown		Unknown				
						<b>Total</b>		<b>Total</b>		<b>Total</b>				
	Tanzania PEPFAR	N/A	N/A	30	27	Female	N/A	Female	N/A	Female	N/A	Female		
Male						Male		Male						
Unknown						Unknown		Unknown						
<b>Total</b>						<b>Total</b>		<b>Total</b>						
MT 2.2.3	# of in-person or e-Learning courses developed with MTaPS assistance	Annually	0	1	11	11								
	Asia Bureau		0	N/A	3	2								
	Bangladesh		0	0	0	N/A								
	Cross Bureau		0	1	1	2								
	IGAD		N/A	N/A	0	N/A								
	Mozambique		0	0	1	1								
	Philippines		0	0	4	6								
	Rwanda		0	0	2	N/A								

<sup>16</sup> Indicator data are collected through government sources that were not available at the time of data collection.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result		
MT 2.2.4	# of people successfully completing MTaPS-developed e-Learning courses	Quarterly	0	65	6,917	4,227	1,180		528		2,032					
	Asia Bureau		0	0	52	0	Female	N/A	Female	N/A	Female	N/A	Female			
			Male			Male			Male							
			Unknown			Unknown			Unknown							
	Bangladesh FS		0	0	0	0	Female	0	Female	8	Female	295	Female			
			Male			Male	109	Male	496	Male	496	Male				
			Unknown			Unknown	0	Unknown	11	Unknown	11	Unknown				
	Bangladesh GHSA		0	N/A	N/A	N/A	Female	N/A	Female	N/A	Female	N/A	Female			
			Male			Male			Male							
			Unknown			Unknown			Unknown							
	Côte d'Ivoire		0	N/A	N/A	N/A	Female	N/A	Female	N/A	Female	N/A	Female			
			Male			Male			Male							
			Unknown			Unknown			Unknown							
	Cross Bureau		0	6	8	208	Female	0	Female	0	Female	0	Female			
			Male			Male	0	Male	0	Male	0	Male				
			Unknown			Unknown	418	Unknown	411	Unknown	1,230	Unknown				
	Mozambique		0	65	0	0	Female	N/A	Female	N/A	Female	N/A	Female			
			Male			Male			Male							
			Unknown			Unknown			Unknown							
	Philippines		0	0	6,857	3,892	Female	547	Female	Data not available <sup>17</sup>	Female	N/A	Female			
			Male			Male	215	Male								
			Unknown			Unknown	0	Unknown								
	Rwanda		0	0	0	127	Female	N/A	Female	N/A	Female	N/A	Female			
			Male			Male			Male							
			Unknown			Unknown			Unknown							
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>			
	MT 2.4.1		# of days reduced for product registration in countries with MTaPS-supported national	Annually	0	0	180	0								

<sup>17</sup> Indicator data are collected through government sources that were not available at the time of data collection.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	medicines registration authority <i>Mali MNCH</i>		0	N/A	N/A	0					
MT 2.4.2	# of premises inspected by MTaPS-supported NMRAs	Annually	0	N/A	N/A	3,751					
	<i>Nepal</i>		0	N/A	N/A	3,751					
MT 2.4.3	# of regional harmonization initiatives with participation by MTaPS-supported NMRAs	Annually	0	0	3	10					
	<i>Asia Bureau</i>		0	N/A	1	10					
	<i>I/GAD</i>		0	N/A	2	N/A					
	<i>Mozambique</i>		0	0	0	N/A					
MT 2.4.4	# of countries that have conducted an assessment at any level of the regulatory system	Annually	Yes	Yes	Yes	Yes					
	<i>Nepal</i>		Yes	Yes	Yes	Yes					
MT 2.4.5	# of medicines with current valid registration	Annually	0	N/A	N/A	60					
	<i>Mali MNCH</i>		0	N/A	N/A	60					
NP 1	% of USG-assisted organizations with improved performance	Annually	0	0%	0%	0% (0/1)					
NP 2	# of wholesalers inspected according to the new Good Distribution Practices inspection guidelines	Annually	0	0	0	22					
NP 3	# of public- and private-sector pharmacies inspected according to the new Good Pharmacy Practices inspection guidelines	Annually	0	0	12	N/A					
NP 4	# of innovations supported through USG assistance	Annually	0	0	2	4					
NP 5	% of surveyed medicines labeled in compliance with labeling requirements	Annually	8.7%	N/A	8.7%	0%					

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
NP 6	% of private-sector pharmacies surveyed dispensing prescription medicines without prescription	Annually	25%	N/A	25%	N/A					
NP 8	# of monitoring visits in which the GON participates	Annually	0	N/A	2	6					
PP 1.5.1	# of TB and FP commodities for which a quantification process is completed with MTaPS support	Annually	0	0	0	6					
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					
PP 2.2.1	# of TB and FP products registered in the Philippines with MTaPS support	Annually	0	0	0	9					
PP 3.2	# of synergized approaches for supply chain management, human resources for health, and engagements with private sector and local government units	Annually	0	2	5	1					
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)					
DRC 3	# of HFs that are implementing the post-training action plan	Annually	0	0	0	50					
DRC 5	# of DPS and/or IPS using the updated directory of registered medicines	Semiannually	0	0	0	8	4				
MT 3.1.1	# and % MTaPS-supported HFs that	Semiannually	90%	92% (4,303/4,690)	99% (2,006/2,016)	100% (20/20)	N/A				

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result		
	have newly implemented or improved PMIS to document specific components of the pharmaceutical system for analysis and reporting with MTaPS support												
	Bangladesh		90%	92% (4,293/4,680)	100% (2,006/2,006)	N/A	N/A						
	Rwanda Field Support		0%	100% (10/10)	0% (0/10)	N/A	N/A						
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	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)	66% (5,137/7,716)						
	Bangladesh		61% (61/100)	88% (3,875/4,396)	77% (4,734/6,173)	72% (4,418/6,106)	66% (5,132/7,711)						
	Mozambique		0%	64% (9/14)	85% (1412/ 1652)	64% (9/14)	100% (5/5)						
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	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							
	Bangladesh		0	Yes	Yes	Yes							
	Mozambique		0	No	No	No							
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)	77% (5,114/6,678)		75% (5,209/6,930)		67% (4,829/6,926)		
	Bangladesh		74.3% (84/115)	92% (4,293/4,680)	77% (4,488/5,826)	74% (4,830/6,500)	Hospitals	65% (211/325)	Hospitals	63% (206/325)	Hospitals	53% (173/325)	Hospitals
							Other	77% (4,791/6,176)	Other	76% (4,729/6,176)	Other	69% (4,265/6,176)	Other
							<b>Total</b>	77% (5,002/6,501)	<b>Total</b>	76% (4,935/6,501)	<b>Total</b>	68% (4,438/6,501)	<b>Total</b>
	DRC MNCH		42% (74/177)	Data not reported	56% (100/177)	74% (132/177)	Hospitals	100% (10/10)	Hospitals	85% (12/14)	Hospitals	100% (10/10)	Hospitals
					Health centers	79% (122/155)	Health centers	63% (262/415)	Health centers	92% (371/405)	Health centers		

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result
							Other	83% (10/12)	Other	0% (0/0)	Other	100% (10/10)		
							Total	80% (142/177)	Total	64% (274/429)	Total	92% (391/425)	Total	
MT 3.3.2	# of PSS technical documents authored by MTaPS	Semiannually	0	14	39	56	18							
	Asia Bureau		0	N/A	N/A	0	1							
	CSL		0	N/A	1	10	0							
	Cross Bureau		10	13	10	11	7							
	Indonesia		0	N/A	0	7	4							
	Jordan		0	N/A	N/A	2	N/A							
	Global MNCH		0	1	1	9	4							
	Mozambique		0	N/A	N/A	N/A	0							
	Rwanda		0	N/A	27	17	2							
MT 3.3.3	# of activities to engage with stakeholders to advance the PSS global learning agenda	Quarterly	0	4	12	64	28		8		15			
	Asia Bureau		0	N/A	N/A	1	1		1		1			
	CSL <sup>18</sup>		0	N/A	0	16	N/A		N/A		N/A			
	Cross Bureau		0	11	12	31	19		2		9			
	Indonesia		0	N/A	0	16	8		5		5			
	Mozambique		0	N/A	N/A	N/A	N/A		0		0			
PP 3.1	# of joint success stories produced	Annually	0	2	3	2								
PP 3.4	# of gender assessments, analyses, studies, or research conducted by MTaPS on PSCM and PV	Annually	0	0	1	1								
DRC 6	% of MTaPS-supported HFs that used data to inform medicine use, patient safety, quality of pharmaceutical services, and/or pharmacy benefits	Semiannually	0	N/A	100%	100% (50/50)	N/A							
MNCH 13	# of countries supported to implement	Semiannually	0	N/A	N/A	N/A	N/A							

<sup>18</sup> CSL portfolio is currently implementing the remaining Year 4 activities. Activity corresponding to indicator MT 3.3.3 was completed before this reporting period.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	decentralized procurement systems										
MNCH 19	# of tailored tools developed for prequalification of suppliers, tender invitation, and conduct of restricted tenders for prequalified suppliers	Annually	0	0	N/A	N/A					
MNCH 15	# of oxygen manufacturers committed to addressing weaknesses identified	Annually	N/A	N/A	0	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					
	<i>Indonesia</i>		0	N/A	N/A	N/A					
	<i>DRC Supply Chain</i>		0	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					
	<i>Bangladesh</i>		0	1	N/A	N/A					
MT 4.2.2	Has the country established a national-level, multi-stakeholder platform for evidence-based PBP decision making (yes/no)?	Annually	0	N/A	0	N/A					
	<i>Indonesia</i>		0	N/A	0	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		1			
	<i>Bangladesh</i>		0	2	0	0		N/A			
	<i>Indonesia</i>		N/A	N/A	N/A	2		1			
MT 4.3.1	Has the country increased domestic funding budgeted for or spent on high-priority diseases or conditions (yes/no)?	Annually	N/A	N/A	No	Data not reported					



Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	<i>Indonesia</i>		N/A	N/A	No						
MT 4.3.2	Has the country reviewed public-sector pharmaceutical financing in the last fiscal year (yes/no)?	Annually	N/A	N/A	Yes	Yes					
	<i>Indonesia</i>		N/A	N/A	Yes	Yes					
MT 4.3.3	Does the country have system(s) to track pharmaceutical expenditures (yes/no)?	Annually	N/A	N/A	N/A	No					
	<i>Indonesia</i>		N/A	N/A	N/A	No					
MT 4.3.4	Has the country reduced the value of product losses (due to expired medicines or damage or theft) per value of commodities received (yes/no)?	Annually	N/A	N/A	0	N/A					
	<i>Indonesia</i>		N/A	N/A	0						
PP 1.4.1	# of private-sector outlets providing FP or TB commodities through a referral and reimbursement scheme	Annually	N/A	N/A	5	0					
MT 5.1.1	% of SDPs with stockout of FP, TB, and HIV-AIDS tracer commodities	Quarterly	40.5%	45% (5,896/13,114)	31% (5,661/18,258)	37% (15,398/40,738)	33% (4,517/13,682)	Data not available <sup>19</sup>	Data not available <sup>20</sup>		
	<i>Philippines</i>		40.5%	45% (5,896/13,114)	31% (5,661/18,258)	37% (15,398/40,738)	33% (4,517/13,682)	Data not available	Data not available		
	First-line TB meds (4 FDC)		40.5%	52% (929/1,784)	21% (358/1,705)	23% (1,085/4,703)	19% (291/1,541)	Data not available	Data not available		
	TB pediatric med (4 FDC)		90.6%	97% (506/519)	49% (694/1,418)	53% (1,966/3,706)	44% (522/1,189)	Data not available	Data not available		
	TB preventive treatment (for children)		63.8%	77% (582/753)	81% (967/1,189)	86% (1,663/1,940)	N/A	Data not available	Data not available		
	TB second-line drug (levofloxacin 500 mg)		N/A	64% (127/199)	10% (18/186)	3.5% (7/198)	3% (6/182)	Data not available	Data not available		
	TB second-line drug (moxifloxacin 400 mg)		N/A	50% (100/199)	7% (12/168)	N/A	N/A	Data not available	Data not available		
	TB second-line drug (linezolid 600 mg)		N/A	47% (95/199)	5% (9/184)	9% (17/198)	4% (7/182)	Data not available	Data not available		

<sup>19</sup> Indicator data are collected through government sources that were not available at the time of data collection.

<sup>20</sup> Indicator data are collected through government sources that were not available at the time of data collection.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	TB second-line drug (bedaquiline)		N/A	47% (95/199)	8% (14/183)	4.5% (9/198)	7% (13/182)	Data not available	Data not available		
	GeneXpert cartridges		N/A	3% (13/395)	14% (46/338)	30% (367/1,207)	95% (694/728)	Data not available <sup>21</sup>	Data not available <sup>22</sup>		
	FP injectable		30.2%	27% (466/1703)	22% (500/2,237)	28% (1,420/5,017)	29% (495/1,714)	Data not available	Data not available		
	FP implant		52.7%	69% (796/1150)	42% (784/1,879)	50% (2,022/4,208)	44% (572/1,292)	Data not available	Data not available		
	FP oral COC		25.6%	24% (418/1716)	14% (318/2,273)	34% (1,734/5,062)	35% (602/1,734)	Data not available	Data not available		
	FP oral POP		69.3%	52% (715/1374)	24% (540/2,229)	22% (1,101/5,053)	20% (350/1,738)	Data not available	Data not available		
	IUD		36.7%	37% (466/1264)	41% (836/2,022)	43% (1,892/4,369)	39% (567/1,458)	Data not available	Data not available		
	Male condom		38.9%	36% (592/1661)	25% (568/2,249)	20% (1,036/5,059)	23% (398/1,742)	Data not available	Data not available		
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)	.06% (17/30,402)				
	Bangladesh						.06% (17/30,402)				
MT 5.1.1 (MNCH)	Stockout rates of tracer medicines in MTaPS-supported HFs (MNCH)	Semiannually	0%	N/A	N/A	N/A	32% (15,571/48,530)				
	Bangladesh						32% (15,571/48,530)				
MT 5.1.2	% of tracer products stocked according to plan	Semiannually	0%	N/A	28% (52/186)	28% (25/88)	100% (22/22)				
	Bangladesh				0% (0/7)	50% (3/6)	N/A				
					92% (12/13)	50% (3/6)	N/A				
					14% (1/7)	0	N/A				
					0% (0/7)	0	N/A				
	DRC MNCH				37% (14/38)	56% (11/19)	Stocked according to plan	100% (22/22)			
					42% (16/38)	26% (5/19)	Overstocked	0% (0/22)			
					18%	16%	Understocked	0% (0/22)			

<sup>21</sup> Indicator data are collected through government sources that were not available at the time of data collection.

<sup>22</sup> Indicator data are collected through government sources that were not available at the time of data collection.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
					(7/38) 53% (2/38)	(3/19) 0% (0/19)		Stocked out 0% (0/22)			
MT 5.1.2 (FP)	% of tracer products stocked according to plan (FP)	Semiannually	0%	N/A	N/A	50% (12/14)	33% (6/18)				
	Bangladesh		0%	N/A	N/A	50% (12/14)	33% (6/18)				
MT 5.1.2 (TB)	% of tracer products stocked according to plan (TB)	Semiannually	0%	N/A	N/A	N/A	N/A				
	Bangladesh		0%	N/A	N/A	N/A	N/A				
						N/A	N/A				
						N/A	N/A				
MT 5.1.3	% of initially MTaPS-supported supply chain functions carried out by national entities that are done without external TA	Semiannually	0%	Data not reported	100% (3/3)	100% (3/3)	100% (3/3)				
	Bangladesh		0%	Data not reported	100% (3/3)	100% (3/3)	100% (3/3)				
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				
	Rwanda		0%	0%	0% (0/100)	0%	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				
	Rwanda		0%	N/A	N/A	100% (20/20)	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)				
	Rwanda		0%	N/A	N/A		Hospitals	100% (10/10)			

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result
						100% (20/20)	Health centers 100% (10/10) Pharmacies 0% (0/0) Other 0% (0/0) Total 100% (20/20)							
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)	83% (75/90)		71% (64/90)		74% (67/90)			
	Bangladesh		31% (31/100)	3% (3/100)	56% (28/50)	58% (38/65)	Pharmacies 77% (50/65)	Pharmacies 60% (39/65)	Pharmacies 65% (42/65)	Pharmacies				
			<b>Total</b>	<b>77%</b> (50/65)	<b>Total</b> 60% (39/65)	<b>Total</b> 65% (42/65)								
	Burkina Faso PV		0%	N/A	N/A	N/A	Health centers N/A	Health centers N/A	Health centers N/A	Health centers				
			<b>Total</b>	<b>N/A</b>	<b>Total</b> N/A	<b>Total</b> N/A								
	IGAD		0%	Data not reported	24% (10/41)	6.5% (8/123)	Hospitals N/A	Hospitals N/A	Hospitals N/A	Hospitals				
							Health centers N/A	Health centers N/A	Health centers N/A	Health centers				
							Pharmacies N/A	Pharmacies N/A	Pharmacies N/A	Pharmacies				
							<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>				
	Rwanda		0% (0/10)	0% (0/10)	50% (5/10)	N/A	Hospitals 100% (10/10)	Hospitals 100% (10/10)	Hospitals 100% (10/10)	Hospitals				
							Health centers 100% (10/10)	Health centers 100% (10/10)	Health centers 100% (10/10)	Health centers				
							<b>Total</b> 100% (20/20)	<b>Total</b> 100% (20/20)	<b>Total</b> 100% (20/20)	<b>Total</b>				
	Rwanda PEPFAR		0%	N/A	N/A	100% (20/20)	Hospitals N/A	Hospitals N/A	Hospitals N/A	Hospitals				
							Health centers N/A	Health centers N/A	Health centers N/A	Health centers				
							<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>				
	Mozambique		0%	N/A	100%	100% (14/14)	Hospitals 100% (1/1)	Hospitals 100% (1/1)	Hospitals 100% (1/1)	Hospitals	100% (1/1)	Hospitals		
							Health centers 100% (4/4)	Health centers 100% (4/4)	Health centers 100% (4/4)	Health centers	100% (4/4)	Health centers		
							<b>Total</b> 100% (5/5)	<b>Total</b> 100% (5/5)	<b>Total</b> 100% (5/5)	<b>Total</b>				
MT 5.3.2	% of ADEs reported to the NMRA and reviewed by the NMRA	Semiannually		22% (95/440)	53% (7,419/13,881)	16% (3,801/22,758)	52% (1,069/2,052)							
	IGAD		0% (0/0)	N/A	100% (1,104/1,104)	N/A	N/A							
	Bangladesh		68% (68/100)	22%	77% (449/ 586)	90% (852/945)	75% (385/513)							
	Burkina Faso		0	N/A	N/A	N/A	N/A							
	Mozambique		60%	N/A	56% (1,237/2,213)	12.19% (1,223/10,035)	N/A							

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	Mozambique PEPFAR		0	0	23% (1,563/6,635)	12.19% (1,223/10,035)	N/A				
	Rwanda		N/A	73% (274/374)	55% (102/186)	29% (503/1,746)	44% (684/1,539)				
	Tanzania PEPFAR		N/A	N/A	2,641/	N/A	N/A				
NP-MT 5.3.2	# of ADEs reported in Nepal	Annually	194	29	43	6					
MT 5.3.4	# of medical product regulatory actions carried out by the NMRA for reasons of drug safety during the reporting period <i>Nepal</i>	Annually	0	N/A	N/A	15					
			0	N/A	N/A	15					
MT 5.4.1	% of MTaPS-supported HFs that have documented evidence of improvement in antimicrobial medicine prescription and/or use <i>Jordan</i>	Annually	0	N/A	N/A	0% (0/3)					
			0	N/A	N/A						
MT 5.4.2	% of MTaPS-supported HFs implementing locally identified and prioritized core elements of IPC activities <i>Mozambique</i>	Semiannually	0%	100%	100% (7/7)	100% (7/7)	N/A				
			0%	100%	100% (7/7)	100% (7/7)	N/A				
MT 5.4.3	# of AMR-related in-country meetings or activities conducted with multisectoral participation <i>Jordan</i>	Quarterly	0	N/A	N/A	4	N/A	N/A	N/A		
			0	N/A	N/A	4	N/A	N/A	N/A		
ML 1	# of marketing authorization commission meetings supported by MTaPS <i>Mali MNCH</i>	Quarterly	0	0	0	1	N/A	N/A	N/A		
			0	0	0	1	N/A	N/A	N/A		
ML 2	# of quarterly meetings to orient key stakeholders on using directory of registered medical products <i>Mali MNCH</i>	Quarterly	0	0	0	1	N/A	N/A	N/A		
			0	0	0	1	N/A	N/A	N/A		
EVD 1	# of policies, legislation, regulations, operational documents,	Quarterly	0	0	0	3	N/A	N/A	N/A		

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result				
	or guidelines for EVD management developed or updated with TA from MTaPS														
	Mali		0	0	0	0									
	Rwanda		0	0	0	1									
	Senegal		0	0	0	0									
	Uganda		0	0	0	2									
	# of entities implementing EVD guidelines with MTaPS support		0	0	0	66	N/A								
EVD 2	Côte d'Ivoire	Quarterly	0	0	0	N/A	ETU	N/A	ETU	N/A	ETU	N/A	ETU		
							Non-ETU		Non-ETU		Non-ETU				
							POE		POE		POE				
							<b>Total</b>		<b>Total</b>		<b>Total</b>				
	Mali		0	0	0	7	ETU	N/A	ETU	N/A	ETU	N/A	ETU		
							Non-ETU		Non-ETU		Non-ETU				
							POE		POE		POE				
							<b>Total</b>		<b>Total</b>		<b>Total</b>				
	Rwanda		0	0	0	0	ETU	N/A	ETU	N/A	ETU	N/A	ETU		
							Non-ETU		Non-ETU		Non-ETU				
							POE		POE		POE				
							<b>Total</b>		<b>Total</b>		<b>Total</b>				
	Senegal		0	0	0	0	ETU	N/A	ETU	N/A	ETU	N/A	ETU		
							Non-ETU		Non-ETU		Non-ETU				
							POE		POE		POE				
							<b>Total</b>		<b>Total</b>		<b>Total</b>				
	Uganda		0	0	0	59	ETU	N/A	ETU	N/A	ETU	N/A	ETU		
							Non-ETU		Non-ETU		Non-ETU				
							POE		POE		POE				
							<b>Total</b>		<b>Total</b>		<b>Total</b>				
			# of persons who received EVD training with MTaPS support		0	0	0	924	N/A						
	EVD 3		Côte d'Ivoire	Quarterly	0	0	0	N/A	Female	N/A	Female	N/A	Female	N/A	Female
									Male		Male		Male		
									Unknown		Unknown		Unknown		
<b>Total</b>		<b>Total</b>							<b>Total</b>						
Mali		0	0		0	0	Female	N/A	Female	N/A	Female	N/A	Female		
							Male		Male		Male				
							Unknown		Unknown		Unknown				
							<b>Total</b>		<b>Total</b>		<b>Total</b>				
Rwanda		0	0		0	32	Female	N/A	Female	N/A	Female	N/A	Female		
							Male		Male		Male				
							Unknown		Unknown		Unknown				
							<b>Total</b>		<b>Total</b>		<b>Total</b>				

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result						
	Senegal		0	0	0	0	Female		Female		Female		Female							
	Male							Male		Male		Male								
	Uganda		0	0	0	892	Unknown		Unknown		Unknown		Unknown							
	<b>Total</b>							<b>Total</b>		<b>Total</b>		<b>Total</b>								
			0	0	0	7	N/A													
EVD 4	# of MTaPS-supported entities in compliance with EVD IPC guidelines	Quarterly	0	0	0	7	N/A													
	Côte d'Ivoire						ETU		ETU		ETU		ETU							
							Non-ETU		Non-ETU		Non-ETU		Non-ETU							
							POE		POE		POE		POE							
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>							
	Mali						ETU		ETU		ETU		ETU							
							Non-ETU		Non-ETU		Non-ETU		Non-ETU							
							POE		POE		POE		POE							
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>							
	Rwanda						ETU		ETU		ETU		ETU							
							Non-ETU		Non-ETU		Non-ETU		Non-ETU							
							POE		POE		POE		POE							
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>							
	Senegal						ETU		ETU		ETU		ETU							
							Non-ETU		Non-ETU		Non-ETU		Non-ETU							
							POE		POE		POE		POE							
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>							
	PP 2.3.1						% of sentinel facilities using PViMS	Quarterly	0	0	20%	70% (564/801)	99% (197/199)		99% (197/199)		100% (197/197)			
							Philippines						99% (197/199)		99% (197/199)		100% (197/197)			
	PH-P 1						# of products completed HTA process with MTaPS support Philippines	Annually	0	N/A	N/A	1								
PH- P 2	# of HIV/AIDS commodities that complete the quantification process with MTaPS support Philippines	Annually	0	N/A	N/A	9														
JO 1	# of National Vaccine Procurement Modernization Committee (NVPiMC)	Quarterly	0	N/A	N/A	3	1	0	N/A											



Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result
	meetings with MTaPS support <i>Jordan</i>						1		0		N/A			
JO 4	# of awareness-raising activities on AMR and rational use of antibiotics conducted <i>Jordan</i>	Quarterly	0	N/A	N/A	4	8		22		0			
	0		N/A	N/A	4	8		22		0				
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	1,125		1,575		0			
	<i>Jordan</i>		0	N/A	N/A	0	Female	568	Female	849	Female	0	Female	
							Male	557	Male	726	Male	0	Male	
							Unknown	0	Unknown	0	Unknown	0	Unknown	
						<b>Total</b>	1,125	<b>Total</b>	1,575	<b>Total</b>	0	<b>Total</b>		
JO 6	# of awareness-raising activities to promote vaccine safety messages and reporting of ADRs conducted at the community level <i>Jordan</i>	Quarterly	0	N/A	N/A	0	N/A		N/A		N/A			
	0		N/A	N/A	0	N/A		N/A		N/A				
JO 7	# of COVID-19 vaccine safety surveillance reports produced with MTaPS support <i>Jordan</i>	Quarterly	0	N/A	N/A	3	N/A		N/A		N/A			
	0		N/A	N/A	3	N/A		N/A		N/A				
MSC I	# of AMR-related in-country meetings or activities conducted with multisectoral participation	Quarterly	0	122	170	188	45		32		41			
	<i>Bangladesh</i>		0	3	2	9	3		1		2			
	<i>Burkina Faso</i>		0	2	2	4	1		3		3			
	<i>Senegal</i>		0	2	5	8	2		3		4			
	<i>Cameroon</i>		0	5	7	4	0		2		2			
	<i>Côte d'Ivoire</i>		0	35	67	76	11		8		8			
	<i>DRC</i>		0	6	20	8	2		1		2			
	<i>Ethiopia</i>		0	1	N/A	5	3		1		4			
	<i>Jordan</i>		0	0	2	N/A	N/A		N/A		N/A			
	<i>Kenya</i>		0	38	26	24	8		4		3			
	<i>Mali</i>		0	16	6	13	3		2		2			

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	<i>Mozambique</i>		0	0	13	12	3	3	3		
	<i>Nigeria</i>		0	N/A	6	10	4	0	5		
	<i>Tanzania</i>		0	4	2	8	1	1	4		
	<i>Uganda</i>		0	9	7	7	4	2	1		
	# and % of female participants in meetings or other events organized by the multisectoral body on AMR			39% (842/2,135)	42% (346/825)	32% (779/2,458)	36% (531/1,694)				
	<i>Bangladesh</i>		29% (24/84)	29% (24/84)	29% (12/41)	20% (60/300)	20% (15/75)				
	<i>Burkina Faso</i>		18% (3/17)	22% (6/27)	33% (10/10)	29% (5/17)	32% (39/123)				
	<i>Cameroon</i>		50% (2/4)	39% (39/101)	52% (32/62)	27% (38/138)	57% (29/51)				
	<i>Côte d'Ivoire</i>		38% (21/55)	38% (42/110)	43% (70/163)	39% (151/382)	37% (118/319)				
	<i>DRC</i>		34%	36% (76/212)	32% (30/93)	35% (54/154)	41% (30/73)				
	<i>Ethiopia</i>	Semiannually	22%	17% (16/93)	N/A	22% (71/321)	10% (31/304)				
	<i>Jordan</i>		45% (5/11)	Data not reported	45% (5/11)	N/A	N/A				
	<i>Kenya</i>		66% (562/1270)	44% (105/207)	51% (101/226)	45% (123/270)	45% (123/270)				
	<i>Mali</i>		15% (20/124)	16% (22/109)	20% (82/394)	21% (74/287)	26% (74/287)				
	<i>Mozambique</i>		48% (11/23)	N/A	40% (4/10)	40% (36/92)	39% (30/77)				
	<i>Nigeria</i>		Data not reported	N/A	41% (17/41)	46% (44/95)	50% (5/10)				
	<i>Senegal</i>		58% (54/93)	58% (54/93)	34% (11/32)	39% (70/181)	38% (13/34)				
	<i>Tanzania</i>		14% (3/21)	14% (3/21)	0% (0/0)	22% (14/63)	28% (6/21)				
	<i>Uganda</i>		Data not reported	N/A	61% (28/46)	43% (44/102)	36% (18/50)				
	# of policies, legislation, regulations, and operational documents related to NAP-AMR implementation developed or updated with MTaPS support		0	17	13	12					
	<i>Bangladesh</i>	Annually	0	0	2	1					

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result	
	Burkina Faso		0	0	1	1						
	Cameroon		0	1	1	0						
	Côte d'Ivoire		0	0	0	1						
	DRC		0	3	0	0						
	Kenya		0	3	3	1						
	Mali		0	8	N/A	1						
	Mozambique		0	N/A	2	N/A						
	Nigeria		0	N/A	0	1						
	Senegal		0	1	2	3						
	Tanzania		0	1	2	1						
	Uganda		0	0	0	2						
MSC 4	# of multisectoral bodies that have developed a national monitoring framework with MTaPS support	Annually	0	1	1	8						
	Bangladesh		0	0	0	N/A						
	Burkina Faso		0	0	0	0						
	Cameroon		0	0	0	1						
	Côte d'Ivoire		0	0	0	1						
	DRC		0	0	0	1						
	Kenya		0	1	1	1						
	Mali		0	0	N/A	N/A						
	Mozambique		0	0	0	0						
	Nigeria		0	N/A	0	1						
	Senegal		0	0	1	2						
	Tanzania		0	0	0	1						
	Uganda		0	0	0	0						
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	40	41	159			
	Bangladesh		Female	0	0	0	N/A	N/A	N/A	N/A	N/A	
			Male									
			Unknown									
	Burkina Faso		Female	0	0	80	0	0	0	0	0	
			Male									
			Unknown									
	Cameroon		Female	0	0	20	N/A	N/A	N/A	N/A	N/A	
			Male									
			Unknown									

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result	
	Côte d'Ivoire	Annually	0	134	0	N/A	Female	N/A	Female	N/A	Female	N/A	Female		
							Male		Male		Male		Male		
							Unknown		Unknown		Unknown		Unknown		
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>		
	DRC		0	0	463	0	0	Female	N/A	Female	N/A	Female	N/A	Female	
								Male		Male		Male		Male	
								Unknown		Unknown		Unknown		Unknown	
								<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>	
	Ethiopia		0	150	N/A	22	Female	0	Female	5	Female	31	Female		
							Male	0	Male	25	Male	83	Male		
							Unknown	0	Unknown	0	Unknown	0	Unknown		
							<b>Total</b>	0	<b>Total</b>	30	<b>Total</b>	114	<b>Total</b>		
	Kenya		0	N/A	N/A	22	Female	0	Female	0	Female	0	Female		
							Male	0	Male	0	Male	0	Male		
							Unknown	0	Unknown	0	Unknown	0	Unknown		
							<b>Total</b>	0	<b>Total</b>	0	<b>Total</b>	0	<b>Total</b>		
	Mali		0	30	2	0	Female	N/A	Female	N/A	Female	N/A	Female		
							Male		Male		Male		Male		
							Unknown		Unknown		Unknown		Unknown		
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>		
	Mozambique		0	0	45	67	Female	6	Female	7	Female	24	Female		
							Male	5	Male	4	Male	21	Male		
							Unknown	0	Unknown	0	Unknown	0	Unknown		
							<b>Total</b>	11	<b>Total</b>	11	<b>Total</b>	45	<b>Total</b>		
	Nigeria		0	N/A	0	25	Female	3	Female	0	Female	0	Female		
							Male	26	Male	0	Male	0	Male		
							Unknown	0	Unknown	0	Unknown	0	Unknown		
							<b>Total</b>	29	<b>Total</b>	0	<b>Total</b>	0	<b>Total</b>		
	Senegal		0	0	0	0	Female	N/A	Female	N/A	Female	N/A	Female		
							Male		Male		Male		Male		
							Unknown		Unknown		Unknown		Unknown		
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>		
	Tanzania		0	0	0	N/A	Female	N/A	Female	N/A	Female	N/A	Female		
							Male		Male		Male		Male		
							Unknown		Unknown		Unknown		Unknown		
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>		
Uganda	0	0	45	101	Female	N/A	Female	N/A	Female	N/A	Female				
					Male		Male		Male		Male				
					Unknown		Unknown		Unknown		Unknown				
					<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>				
MSC 6	# of e-Learning courses or m-mentoring platforms related to AMR developed or	Annually	0	2	25	26									

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	adapted with MTaPS support										
	Bangladesh		0	0	0	0					
	Burkina Faso		0	0	1	0					
	Cameroon		0	0	20	20					
	Côte d'Ivoire		0	1	2	6					
	DRC		0	0	0	N/A					
	Kenya		0	0	0	0					
	Mali		0	1	2	N/A					
	Mozambique		0	N/A	0	N/A					
	Nigeria		0	N/A	0	N/A					
	Senegal		0	0	0	0					
	Tanzania		0	0	0	N/A					
	Uganda		0	0	0	0					
MSC 7	# of data collection and analysis mechanisms for tracking AMR-related indicators developed or strengthened with MTaPS support	Annually	0	0	2	5					
	Bangladesh		0	0	0	N/A					
	Burkina Faso		0	0	0	0					
	Cameroon		0	0	0	1					
	Côte d'Ivoire		0	0	0	0					
	DRC		0	0	1	0					
	Kenya		0	0	0	1					
	Mozambique		0	N/A	1	2					
	Nigeria		0	N/A	0	0					
	Senegal		0	0	0	0					
	Tanzania		0	0	0	1					
	Uganda		0	0	0	0					
IP 1	# of updated policies, legislation, regulations, or operational documents for improving IPC	Annually	0	9	3	7					
	Bangladesh		0	0	0	N/A					
	Burkina Faso		0	0	0	N/A					
	Cameroon		0	0	1	1					
	Côte d'Ivoire		0	7	0	0					
	DRC		0	0	0	N/A					
	Kenya		0	0	3	2					
	Mali		0	1	N/A	1					
	Mozambique		0	N/A	1	N/A					
	Nigeria		0	N/A	1	1					
	Senegal		0	0	0	1					

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result		
	Tanzania		0	1	0	1										
	Uganda		0	0	0	1										
IP 2	# of persons trained in IPC with MTaPS support	Quarterly	0	1,199	7,477	3,886	577		465		1,745					
	Bangladesh		0	0	95	264	Female	N/A	Female	N/A	Female	N/A	Female	N/A	Female	
							Male		Male		Male		Male			
							Unknown		Unknown		Unknown		Unknown			
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>			
	Cameroon		0	86	88	N/A	Female	N/A	Female	N/A	Female	N/A	Female	N/A	Female	
							Male		Male		Male		Male			
							Unknown		Unknown		Unknown		Unknown			
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>			
	Côte d'Ivoire		0	0	131	158	Female	N/A	Female	N/A	Female	N/A	Female	N/A	Female	
							Male		Male		Male		Male			
							Unknown		Unknown		Unknown		Unknown			
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>			
	DRC		0	0	94	N/A	Female	N/A	Female	N/A	Female	N/A	Female	N/A	Female	
							Male		Male		Male		Male			
							Unknown		Unknown		Unknown		Unknown			
							<b>Total</b>		<b>Total</b>		<b>Total</b>		<b>Total</b>			
	Ethiopia		0	0	N/A	28	Female	33	Female	70	Female	51	Female		Female	
							Male	39	Male	69	Male	117	Male		Male	
							Unknown	0	Unknown	0	Unknown	0	Unknown		Unknown	
							<b>Total</b>	<b>72</b>	<b>Total</b>	<b>139</b>	<b>Total</b>	<b>168</b>	<b>Total</b>	<b>Total</b>		
	Kenya		0	642	5,230	742	Female	52	Female	96	Female	370	Female		Female	
							Male	33	Male	71	Male	171	Male		Male	
							Unknown	0	Unknown	0	Unknown	0	Unknown		Unknown	
							<b>Total</b>	<b>85</b>	<b>Total</b>	<b>167</b>	<b>Total</b>	<b>541</b>	<b>Total</b>	<b>Total</b>		
	Mali		0	N/A	21	29	Female	N/A	Female	5	Female	6	Female		Female	
							Male		12	Male	15	Male		Male		
							Unknown		0	Unknown	0	Unknown	0	Unknown		Unknown
							<b>Total</b>		<b>17</b>	<b>Total</b>	<b>17</b>	<b>Total</b>	<b>21</b>	<b>Total</b>	<b>Total</b>	
	Mozambique		0	0	0	57	Female	8	Female	5	Female	24	Female		Female	
							Male	6	Male	9	Male	21	Male		Male	
							Unknown	0	Unknown	0	Unknown	0	Unknown		Unknown	
							<b>Total</b>	<b>14</b>	<b>Total</b>	<b>14</b>	<b>Total</b>	<b>45</b>	<b>Total</b>	<b>Total</b>		
	Nigeria		0	N/A	15	51	Female	11	Female	15	Female	476	Female		Female	
							Male	12	Male	3	Male	192	Male		Male	
							Unknown	0	Unknown	0	Unknown	0	Unknown		Unknown	
							<b>Total</b>	<b>23</b>	<b>Total</b>	<b>18</b>	<b>Total</b>	<b>668</b>	<b>Total</b>	<b>Total</b>		
	Senegal		0	0	22	717	Female	181	Female	0	Female	0	Female		Female	
							Male	94	Male	0	Male	0	Male		Male	
							Unknown	0	Unknown	90	Unknown	0	Unknown		Unknown	

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result						
							Total		Total		Total		Total							
	Tanzania		0	471	17	117	Total	275	Total	90	Total	0	Total							
							Female	43	Female		Female		Female							
							Male	65	Male	N/A	Male		Male							
							Unknown	0	Unknown		Unknown		Unknown							
	Uganda		0	0	1,247	1,770	Total	108	Total		Total		Total							
							Female	0	Female	0	Female	160	Female							
							Male	0	Male	0	Male	142	Male							
							Unknown	0	Unknown	0	Unknown	0	Unknown							
						Total	0	Total	0	Total	302	Total								
IP 3	# and % of MTaPS-supported facilities that are using standardized tool(s) for monitoring IPC and informing programmatic improvement	Quarterly	50% (8/16)	100% (9/9)	94% (107/114)	100% (141/141)	95% (131/138)		91% (128/140)		90% (124/137)									
							Hospitals	55% (5/9)	Hospitals	67% (6/9)	Hospitals	100% (9/9)	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	55% (5/9)	Total	67% (6/9)	Total	100% (9/9)	Total							
							Bangladesh	0% (0/0)	0% (0/0)	100% (2/2)	100% (4/4)	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		
							Cameroon	0% (0/0)	0% (0/0)	100% (12/12)	100% (12/12)	Hospital	100% (20/20)	Hospital	100% (20/20)	Hospital	100% (16/16)	Hospital		
												Animal health centers	0% (0/0)	Animal health centers	0% (0/0)	Animal health centers	0% (0/0)	Animal health centers		
												Others	0% (0/0)	Others	0% (0/0)	Others	100% (4/4)	Others		
												Total	100% (20/20)	Total	100% (20/20)	Total	100% (20/20)	Total		
							Côte d'Ivoire	0% (0/0)	0% (0/0)	100% (12/12)	100% (22/22)	Hospitals	100% (12/12)	Hospitals	50% (6/12)	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	50% (6/12)	Total	100% (12/12)	Total		
							DRC	0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	Hospitals	100% (12/12)	Hospitals	50% (6/12)	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		



Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result
							Total		Total		Total			
Ethiopia			0% (0/0)	50% (15/30)	N/A	100% (5/5)	Total	100% (12/12)	Total	50% (6/12)	Total	100% (12/12)	Total	
							Hospitals	100% (5/5)	Hospitals	100% (7/7)	Hospitals	100% (8/8)	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	
Kenya			0% (0/0)	0% (0/0)	100% (20/20)	100% (20/20)	Total	100% (5/5)	Total	100% (7/7)	Total	100% (8/8)	Total	
							Hospitals	100% (19/19)	Hospitals	100% (19/19)	Hospitals	100% (19/19)	Hospitals	
							Health centers	100% (1/1)	Health centers	100% (1/1)	Health centers	100% (1/1)	Health centers	
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	
Mali			0% (0/0)	0% (0/0)	100% (16/16)	100% (16/16)	Total	100% (20/20)	Total	100% (20/20)	Total	100% (20/20)	Total	
							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	
Mozambique			43% (3/7)	Data not reported	100% (7/7)	100% (7/7)	Total	100% (16/16)	Total	100% (16/16)	Total	100% (16/16)	Total	
							Hospital	100% (7/7)	Hospital	100% (7/7)	Hospital	100% (3/3)	Hospital	
							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	
Nigeria			0% (0/0)	N/A	0% (0/0)	100% (7/7)	Total	100% (7/7)	Total	100% (7/7)	Total	100% (7/7)	Total	
							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	
Senegal			100% (3/3)	100% (3/3)	100% (8/8)	100% (13/13)	Total	83% (10/12)	Total	83% (10/12)	Total		Hospitals	
							Health centers	0% (0/1)	Health centers	0% (0/1)	Health centers		Health centers	
							Others	0%	Others	0%	Others		Others	

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result			
	Tanzania		33% (2/6)	100% (6/6)	100% (10/10)	100% (10/10)	Total		Total		Total		Data was not collected <sup>23</sup>	Total			
							Hospitals	100% (10/10)	Hospitals	100% (10/10)	Hospitals	100% (10/10)	Hospitals	100% (10/10)			
							Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)			
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)			
	Uganda		0% (0/0)	0% (0/0)	100% (13/13)	100% (13/13)	Total		Total		Total		Total		Total		
							Hospitals	100% (7/7)	Hospitals	100% (7/7)	Hospitals	100% (7/7)	Hospitals	100% (7/7)			
							Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)			
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)			
	IP 4		# of countries with improved performance in core IPC components at the national level from baseline to follow-up	Annually	0% (0/12)	25% (3/12)	75% (8/12)	3/4									
			Bangladesh		No	No	No	No									
			Kenya		No	Yes	Yes	Yes									
			Mali		No	No	Yes	Yes									
Nigeria		No	N/A		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)	93% (128/138)		87% (122/140)		90% (124/137)						
	Bangladesh		0% (0/0)	0% (0/0)	100% (2/2)	50% (2/4)	Hospitals	44% (4/9)	Hospitals	67% (6/9)	Hospitals	100% (9/9)	Hospitals				
							Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)			
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)			
							Total	44% (4/9)	Total	67% (6/9)	Total	100% (9/9)	Total				
	Cameroon		0% (0/6)	100% (6/6)	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	0% (0/0)			

<sup>23</sup> MTaPS Senegal was unable to collect IPC data for PY5 Quarter 3. Focus was on national program activities.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result
							Others	Total	Others	Total	Others	Total	Others	
Côte d'Ivoire			50% (2/4)	100% (4/4)	100% (12/12)	92% (20/22)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	
							<b>Total</b>	100% (12/12)	<b>Total</b>	100% (12/12)	<b>Total</b>	100% (12/12)	<b>Total</b>	
							Hospitals	100% (20/20)	Hospitals	100% (20/20)	Hospitals	100% (16/16)	Hospitals	
							Animal health centers	0% (0/0)	Animal health centers	0% (0/0)	Animal health centers	0% (0/0)	Animal health centers	
							Others	0% (0/0)	Others	0% (0/0)	Others	100% (4/4)	Others	
						<b>Total</b>	100% (20/20)	<b>Total</b>	100% (20/20)	<b>Total</b>	100% (20/20)	<b>Total</b>		
DRC			0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	Hospitals	100% (12/12)	Hospitals	50% (6/12)	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	
							<b>Total</b>	100% (12/12)	<b>Total</b>	50% (6/12)	<b>Total</b>	100% (12/12)	<b>Total</b>	
Ethiopia			0% (0/0)	70%	N/A	0% (0/5)	Hospitals	100% (5/5)	Hospitals	100% (7/7)	Hospitals	100% (8/8)	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	
							<b>Total</b>	100% (5/5)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (8/8)	<b>Total</b>	
Kenya			100% (16/16)	100% (16/16)	100% (20/20)	100% (20/20)	Hospitals	100% (19/19)	Hospitals	100% (19/19)	Hospitals	100% (19/19)	Hospitals	
							Health centers	100% (1/1)	Health centers	100% (1/1)	Health centers	100% (1/1)	Health centers	
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	
							<b>Total</b>	100% (20/20)	<b>Total</b>	100% (20/20)	<b>Total</b>	100% (20/20)	<b>Total</b>	
Mali			0% (0/5)	0% (0/5)	94% (15/16)	100% (16/16)	Hospital	89% (8/9)	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	
							<b>Total</b>	94% (15/16)	<b>Total</b>	100% (16/16)	<b>Total</b>	100% (16/16)	<b>Total</b>	
Mozambique			43% (3/7)	Data not reported	100% (7/7)	100% (7/7)	Hospital	100% (7/7)	Hospital	100% (7/7)	Hospital	100% (3/3)	Hospital	

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result
							Health centers	Others	Health centers	Others	Health centers	Others		
	Nigeria		0% (0/3)	N/A	0% (0/0)	14% (1/7)	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	
							<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (3/3)	<b>Total</b>	
							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	
	Senegal	0% (0/3)	0% (0/3)	100% (8/8)	92% (12/13)	Hospitals	75% (9/12)	Hospitals	33% (4/13)	Hospitals	Data was not collected <sup>24</sup>	Hospitals		
						Health centers	0% (0/1)	Health centers	0% (0/1)	Health centers				
						Others	0% (0/0)	Others	0% (0/0)	Others				
						<b>Total</b>	69% (9/13)	<b>Total</b>	31% (4/13)	<b>Total</b>				
	Tanzania	33% (2/6)	100% (6/6)	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		
						<b>Total</b>	100% (10/10)	<b>Total</b>	100% (10/10)	<b>Total</b>	100% (10/10)	<b>Total</b>		
	Uganda	0% (0/7)	100% (7/7)	100% (13/13)	100% (13/13)	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		
						<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>		
	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% (135/138)		93% (130/140)		90% (124/137)		
		Bangladesh		0% (0/0)	0% (0/0)	100% (2/2)	100% (6/6)	Hospitals	100% (9/9)	Hospitals	100% (9/9)	Hospitals	100% (9/9)	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	
<b>Total</b>								100% (9/9)	<b>Total</b>	100% (9/9)	<b>Total</b>	100% (9/9)	<b>Total</b>	
Cameroon		0% (0/0)		83% (5/6)	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	
							<b>Total</b>	100% (12/12)	<b>Total</b>	100% (12/12)	<b>Total</b>	100% (12/12)	<b>Total</b>	

<sup>24</sup> MTaPS Senegal was unable to collect IPC data for PY5 Quarter 3. Focus was on national program activities.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result
							Hospitals	Animal health centers	Hospitals	Animal health centers	Hospitals	Animal health centers	Hospitals	
Côte d'Ivoire			100% (4/4)	100% (4/4)	100% (12/12)	100% (22/22)	Hospitals	100% (20/20)	Hospitals	100% (20/20)	Hospitals	100% (16/16)	Hospitals	
							Animal health centers	0% (0/0)	Animal health centers	0% (0/0)	Animal health centers	0% (0/0)	Animal health centers	0% (0/0)
							Others	0% (0/0)	Others	0% (0/0)	Others	100% (4/4)	Others	
							<b>Total</b>	100% (20/20)	<b>Total</b>	100% (20/20)	<b>Total</b>	100% (20/20)	<b>Total</b>	
DRC			0% (0/0)	0% (0/0)	100% (7/7)	100% (12/12)	Hospitals	100% (12/12)	Hospitals	50% (6/12)	Hospitals	100% (12/12)	Hospitals	
							Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)
							<b>Total</b>	100% (12/12)	<b>Total</b>	50% (6/12)	<b>Total</b>	100% (12/12)	<b>Total</b>	
Ethiopia			0% (0/0)	100%	N/A	100% (5/5)	Hospitals	100% (5/5)	Hospitals	86% (6/7)	Hospitals	100% (8/8)	Hospitals	
							Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)
							<b>Total</b>	100% (5/5)	<b>Total</b>	86% (6/7)	<b>Total</b>	100% (8/8)	<b>Total</b>	
Kenya			0% (0/16)	100% (16/16)	92% (18/20)	100% (20/20)	Hospitals	100% (19/19)	Hospitals	100% (19/19)	Hospitals	100% (19/19)	Hospitals	
							Health centers	100% (1/1)	Health centers	100% (1/1)	Health centers	100% (1/1)	Health centers	100% (1/1)
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)
							<b>Total</b>	100% (20/20)	<b>Total</b>	100% (20/20)	<b>Total</b>	100% (20/20)	<b>Total</b>	
Mali			0% (0/5)	0% (0/5)	75% (12/16)	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	100% (7/7)
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)
							<b>Total</b>	100% (16/16)	<b>Total</b>	100% (16/16)	<b>Total</b>	100% (16/16)	<b>Total</b>	
Mozambique			43% (3/7)	Data not reported	100% (7/7)	100% (7/7)	Hospitals	100% (7/7)	Hospital	100% (7/7)	Hospital	100% (3/3)	Hospital	
							Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)
							<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (3/3)	<b>Total</b>	
Nigeria			0% (0/3)	N/A	0% (0/3)	86% (6/7)	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	0% (0/0)
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)
							<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>	
Senegal				100%	100%	92%	Hospitals	83% (10/12)	Hospitals	83% (10/12)	Hospitals			

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result							
							Health centers	Others	Health centers	Others	Health centers	Others			Health centers	Others					
		Annually	100% (3/3)	(3/3)	(8/8)	(12/13)	Health centers	0% (0/1)	Health centers	0% (0/1)	Health centers	Data was not collected <sup>25</sup>	Health centers								
							Others	0% (0/0)	Others	0% (0/0)	Others		Others								
							<b>Total</b>	77% (10/13)	<b>Total</b>	77% (10/13)	<b>Total</b>		<b>Total</b>								
	Tanzania		17% (1/6)	100% (6/6)	100% (10/10)	100% (10/10)	Hospitals	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	0% (0/0)							
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)							
	Uganda		100% (7/7)	100% (7/7)	100% (13/13)	100% (13/13)	Hospitals	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	0% (0/0)							
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)							
	IP 7		# and % of MTaPS-supported facilities with improved hand hygiene compliance	Annually	0	100% (36/36)	85% (88/104)	73% (103/141)													
									Bangladesh	0	N/A	100% (2/2)	100% (4/4)	Hospitals		Hospitals		Hospitals		Hospitals	
														<b>Total</b>		<b>Total</b>		<b>Total</b>			
Cameroon		0							N/A	100% (12/12)	92% (11/12)	Hospitals		Hospitals		Hospitals		Hospitals			
												<b>Total</b>		<b>Total</b>		<b>Total</b>					
Côte d'Ivoire		0							100% (4/4)	90% (9/12)	45% (10/22)	Hospitals		Hospitals		Hospitals		Hospitals			
												Health centers		Health centers		Health centers					
DRC		0							N/A	57% (4/7)	100% (12/12)	Hospitals		Hospitals		Hospitals		Hospitals			
												<b>Total</b>		<b>Total</b>		<b>Total</b>					
Ethiopia		0							N/A	N/A	0% (0/5)	Hospitals		Hospitals		Hospitals		Hospitals			
												<b>Total</b>		<b>Total</b>		<b>Total</b>					
Kenya		0							100% (16/16)	100% (20/20)	100% (20/20)	Hospitals		Hospitals		Hospitals		Hospitals			
	Health centers			Health centers		Health centers															
Mali	0	N/A	94% (15/16)	75% (12/16)	Hospital		Hospital		Hospital		Hospital										
					Health centers		Health centers		Health centers												
Mozambique	0	N/A	0% (0/7)	43% (3/7)	Hospitals		Hospitals		Hospitals		Hospitals										
					<b>Total</b>		<b>Total</b>		<b>Total</b>												
Nigeria	0	N/A	0% (1/3)	14% (1/7)	Hospitals		Hospitals		Hospitals		Hospitals										
					<b>Total</b>		<b>Total</b>		<b>Total</b>												

<sup>25</sup> MTaPS Senegal was unable to collect IPC data for PY5 Quarter 3. Focus was on national program activities.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	Senegal		0	100% (3/3)	100% (8/8)	54% (7/13)	Hospitals				
							Health Centers				
							<b>Total</b>				
	Tanzania		0	100% (6/6)	100% (10/10)	100% (10/10)	Hospitals				
							<b>Total</b>				
	Uganda		0	100% (7/7)	100% (7/7)	100% (13/13)	Hospitals				
							<b>Total</b>				
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)					
	Bangladesh						Hospitals				
							<b>Total</b>				
	Cameroon						Hospitals				
							<b>Total</b>				
	Côte d'Ivoire						Hospitals				
							Health center				
							<b>Total</b>				
	DRC						Hospitals				
							<b>Total</b>				
	Kenya						Hospitals				
							Health centers				
							<b>Total</b>				
	Mali						Hospital				
Health centers											
<b>Total</b>											
Mozambique	Hospitals										
	<b>Total</b>										
Nigeria	Hospitals										
	<b>Total</b>										
Senegal	Hospitals										
	Health centers										
	<b>Total</b>										
Tanzania	Hospitals										
	<b>Total</b>										
Uganda	Hospitals										
	<b>Total</b>										
AS 1	# of policies, legislation, regulations, or operational documents related to	Annually	0	5	12	14					



Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result		
	AMS developed or updated with MTaPS support												
	Bangladesh		0	0	0	1							
	Burkina Faso		0	0	2	N/A							
	Cameroon		0	0	0	0							
	Côte d'Ivoire		0	1	0	0							
	DRC		0	1	3	1							
	Kenya		0	1	3	3							
	Mali		0	1	N/A	1							
	Mozambique		0	N/A	1	3							
	Nigeria		0	N/A	0	1							
	Senegal		0	0	1	1							
	Tanzania		0	1	2	1							
	Uganda		0	0	0	2							
	# and % of MTaPS-supported facilities' MTC/AMS committees or other relevant groups that implemented AMS improvement plans and/or monitoring framework		10% (4/39)	81% (25/31)	60% (74/123)	72% (112/155)	80% (122/152)	85% (122/144)	94% (130/138)				
AS 2	Bangladesh	Quarterly	0% (0/0)	0% (0/0)	0% (0/2)	50% (2/4)	Hospitals	44% (4/9)	Hospitals	44% (4/9)	Hospitals	100% (9/9)	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
							<b>Total</b>	44% (4/9)	<b>Total</b>	44% (4/9)	<b>Total</b>	100% (9/9)	<b>Total</b>
	Burkina Faso		Hospitals	100% (10/10)	Hospitals	N/A	Hospitals	60% (6/10)	Hospitals				
			Health centers	0% (0/0)	Health centers		0% (0/0)	Health centers					
			Others	0% (0/0)	Others		0% (0/0)	Others					
			<b>Total</b>	100% (10/10)	<b>Total</b>		60% (6/10)	<b>Total</b>					
	Cameroon		Hospitals	100% (12/12)	Hospitals	100% (12/12)	Hospitals	92% (11/12)	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				
			<b>Total</b>	100% (12/12)	<b>Total</b>	100% (12/12)	<b>Total</b>	92% (11/12)	<b>Total</b>				
	Côte d'Ivoire		Hospitals	70% (14/20)	Hospitals	100% (20/20)	Hospitals	94% (15/16)	Hospitals				
			Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers				
			Others	0% (0/0)	Others	0%	Others	100% (4/4)	Others				

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result	
									(0/0)						
							<b>Total</b>	70% (14/20) <sup>26</sup>	<b>Total</b>	100% (20/20)	<b>Total</b>	95% (19/20)	<b>Total</b>		
Ethiopia			0% (0/0)	N/A	N/A	0% (0/5)	Hospitals	100% (5/5)	Hospitals	100% (7/7)	Hospitals	100% (8/8)	Hospitals		
							Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	
							<b>Total</b>	100% (5/5)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (8/8)	<b>Total</b>		
DRC			0% (0/0)	0% (0/0)	100% (7/7)	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	0% (0/0)	
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	
							<b>Total</b>	100% (12/12)	<b>Total</b>	100% (12/12)	<b>Total</b>	100% (12/12)	<b>Total</b>		
Kenya			6% (1/16)	100% (18/18)	83% (20/24)	100% (21/21)	Hospitals	95% (20/21)	Hospitals	100% (21/21)	Hospitals	100% (21/21)	Hospitals		
							Health centers	100% (1/1)	Health centers	100% (1/1)	Health centers	100% (1/1)	Health centers	100% (1/1)	
							Pharmacy	0% (0/2)	Others	0% (0/2)	Pharmacy	0% (0/2)	Pharmacy	0% (0/2)	
							<b>Total</b>	87% (21/24)	<b>Total</b>	92% (22/24)	<b>Total</b>	92% (22/24)	<b>Total</b>		
Mali			0% (0/0)	0% (0/0)	56% (9/16)	75% (12/16)	Hospital	78% (7/9)	Hospitals	89% (8/9)	Hospital	100% (9/9)	Hospital		
							Health centers	86% (6/7)	Health centers	86% (6/7)	Health centers	100% (7/7)	Health centers	100% (7/7)	
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	
							<b>Total</b>	81% (13/16)	<b>Total</b>	87% (14/16)	<b>Total</b>	100% (16/16)	<b>Total</b>		
Mozambique			0% (0/7)	Data not reported	0% (0/7)	43% (3/7)	Hospitals	100% (7/7)	Hospitals	100% (7/7)	Hospitals	100% (3/3)	Hospitals		
							Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	
							<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (3/3)	<b>Total</b>		
Nigeria			0% (0/3)	N/A	0% (0/0)	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	0% (0/0)	
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	
							<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>		
Senegal			0% (0/0)	0% (0/0)	0% (0/8)	0% (0/14)	Hospitals	0% (0/12)	Hospitals	0% (0/12)	Hospitals	N/A	Hospitals		
							Health centers	0% (0/1)	Health centers	0% (0/1)	Health centers		0% (0/0)	Health centers	0% (0/0)
							Others	0% (0/0)	Others	0% (0/0)	Others		0% (0/0)	Others	0% (0/0)
							<b>Total</b>	0% (0/13)	<b>Total</b>	0% (0/13)	<b>Total</b>		0% (0/13)	<b>Total</b>	

<sup>26</sup> Data was not collected from six facilities in PY5 Quarter 1.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result					
							Hospitals	Health centers	Others	Total	Hospitals	Health centers			Others	Total	Hospitals	Health centers	Others
AS 3	Tanzania	Quarterly	0% (0/6)	0% (0/6)	20% (2/10)	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	0% (0/0)					
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)					
							<b>Total</b>	100% (10/10)	<b>Total</b>	100% (10/10)	<b>Total</b>	100% (10/10)	<b>Total</b>	100% (10/10)					
	Uganda		43% (3/7)	100% (7/7)	100% (13/13)	100% (13/13)	Hospitals	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	0% (0/0)					
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)					
							<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)					
AS 3	# of persons trained in AMS topics with MTaPS support	Quarterly	0	436	4721	4,051	1,080		522		824								
							Bangladesh	0	0	0	420	Female	N/A	Female	0	Female	26	Female	
												Male		Male	0	Male	145	Male	
												Unknown		Unknown	0	Unknown	0	Unknown	
												<b>Total</b>		<b>Total</b>	0	<b>Total</b>	171	<b>Total</b>	
							Burkina Faso <sup>27</sup>	0	0	97	86	Female	158	Female	N/A	Female	N/A	Female	
												Male	192	Male		Male		Male	
												Unknown	0	Unknown		Unknown		Unknown	
												<b>Total</b>	350	<b>Total</b>		<b>Total</b>		<b>Total</b>	
							Cameroon	0	0	222	17	Female	N/A	Female	N/A	Female	N/A	Female	
												Male		Male		Male			
												Unknown		Unknown		Unknown			
												<b>Total</b>		<b>Total</b>		<b>Total</b>			
							Côte d'Ivoire	0	0	237	104	Female	6	Female	N/A	Female	N/A	Female	
												Male	30	Male		Male			
												Unknown	0	Unknown		Unknown			
												<b>Total</b>	36	<b>Total</b>		<b>Total</b>			
							DRC	0	0	274	91	Female	N/A	Female	N/A	Female	N/A	Female	
												Male		Male		Male			
												Unknown		Unknown		Unknown			
												<b>Total</b>		<b>Total</b>		<b>Total</b>			
							Ethiopia	0	0	N/A	180	Female	36	Female	14	Female	55	Female	
												Male	93	Male	132	Male	160	Male	
												Unknown	0	Unknown	0	Unknown	0	Unknown	
												<b>Total</b>	129	<b>Total</b>	146	<b>Total</b>	215	<b>Total</b>	
							Kenya	0	165	1,333	869	Female	271	Female	169	Female	23	Female	
												Male	237	Male	128	Male	16	Male	
												Unknown	0	Unknown	0	Unknown	0	Unknown	

<sup>27</sup> Continuing activity from PY4; activity not planned for the rest of PY5.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result	
							Total	Female	Total	Female	Total	Female	Total		Female
Mali	Mali	Quarterly	0	0	136	49	Total	508	Total	297	Total	39	Total		
							Female		Female		Female		Female		
							Male	N/A	Male	N/A	Male	N/A	Male		
							Unknown		Unknown		Unknown		Unknown		
	Total			Total		Total		Total							
	Mozambique		0	0	0	34	Female	7	Female	5	Female	24	Female		
							Male	8	Male	7	Male	21	Male		
							Unknown	0	Unknown	0	Unknown	0	Unknown		
							Total	15	Total	12	Total	45	Total		
	Nigeria		0	N/A	18	108	Female	0	Female	7	Female	19	Female		
							Male	0	Male	10	Male	14	Male		
							Unknown	0	Unknown	0	Unknown	0	Unknown		
							Total	0	Total	17	Total	33	Total		
	Senegal		0	0	0	0	Female	0	Female	N/A	Female	7	Female		
							Male	0	Male	N/A	Male	12	Male		
							Unknown	0	Unknown	N/A	Unknown	0	Unknown		
							Total	0	Total	N/A	Total	19	Total		
	Tanzania		0	201	0	N/A	Female	0	Female	N/A	Female	N/A	Female		
							Male	0	Male	N/A	Male	N/A	Male		
							Unknown	0	Unknown	N/A	Unknown	N/A	Unknown		
							Total	0	Total	N/A	Total	N/A	Total		
	Uganda		0	70	2,513	1,776	Female	17	Female	18	Female	160	Female		
							Male	25	Male	32	Male	142	Male		
							Unknown	0	Unknown	0	Unknown	0	Unknown		
Total		42					Total	50	Total	302	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)	73% (111/152)		74% (106/144)		97% (124/128)				
			Bangladesh	0% (0/0)	0% (0/0)	0% (0/2)	50% (2/4)	Hospitals	44% (4/9)	Hospitals	44% (4/9)	Hospitals	100% (9/9)	Hospitals	
	Health centers			0% (0/0)	0% (0/0)	0% (0/0)	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	0% (0/0)	Health centers	
	Others			0% (0/0)	0% (0/0)	0% (0/0)	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	
	Total		44% (4/9)	Total	44% (4/9)	Total	100% (9/9)	Total	100% (9/9)	Total	100% (9/9)	Total			
	Burkina Faso <sup>28</sup>		0% (0/0)	100% (5/5)	25% (3/12)	0% (0/10)	Hospitals	100% (10/10)	Hospitals	N/A	Hospitals	N/A	Hospitals		
			Health centers	0% (0/0)	0% (0/0)	0% (0/0)	Health centers	0% (0/0)	Health centers	N/A	Health centers	N/A	Health centers		
			Others	0% (0/0)	0% (0/0)	0% (0/0)	Others	0% (0/0)	Others	N/A	Others	N/A	Others		
	Total		100% (10/10)	Total	100% (10/10)	Total	100% (10/10)	Total	100% (10/10)	Total	100% (10/10)	Total			
	Cameroon		0% (0/0)	0% (0/6)	92% (11/12)	100% (12/12)	Hospitals	100% (12/12)	Hospitals	100% (12/12)	Hospitals	100% (12/12)	Hospitals		

<sup>28</sup> Continuing activity from PY4; activity not planned for the rest of the project year.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result
							Health centers	Others	Health centers	Others	Health centers	Others		
Côte d'Ivoire <sup>29</sup>			0% (0/0)	100% (2/2)	90% (9/10)	91% (20/22)	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	
							<b>Total</b>	100% (12/12)	<b>Total</b>	100% (12/12)	<b>Total</b>	100% (12/12)	<b>Total</b>	
							Hospitals	70% (14/20)	Hospitals	100% (20/20)	Hospitals	94% (15/16)	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	100% (4/4)	Others	
							<b>Total</b>	70% (14/20)	<b>Total</b>	100% (20/20)	<b>Total</b>	95% (19/20)	<b>Total</b>	
							Hospitals	100% (12/12)	Hospitals	50% (6/12)	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	
							<b>Total</b>	100% (12/12)	<b>Total</b>	33% (6/12)	<b>Total</b>	100% (12/12)	<b>Total</b>	
							DRC			0% (0/0)	100% (3/3)	100% (7/7)	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								
<b>Total</b>	100% (12/12)	<b>Total</b>	33% (6/12)	<b>Total</b>	100% (12/12)	<b>Total</b>								
Ethiopia			3% (1/30)	13% (4/30)	N/A	0% (0/5)	Hospitals	100% (5/5)	Hospitals	100% (7/7)	Hospitals	100% (8/8)	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	
							<b>Total</b>	100% (5/5)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (8/8)	<b>Total</b>	
Kenya			100% (18/18)	100% (18/18)	92% (22/24)	91% (21/23)	Hospitals	95% (20/21)	Hospitals	100% (21/21)	Hospitals	100% (21/21)	Hospitals	
							Health centers	100% (1/1)	Health centers	100% (1/1)	Health centers	100% (1/1)	Health centers	
							Pharmacy	0% (0/2)	Pharmacy	0% (0/2)	Pharmacy	0% (0/2)	Pharmacy	
							<b>Total</b>	87% (21/24)	<b>Total</b>	92% (22/24)	<b>Total</b>	92% (22/24)	<b>Total</b>	
Mali			0% (0/5)	0% (0/5)	13% (2/16)	75% (12/16)	Hospital	78% (7/9)	Hospitals	89% (8/9)	Hospital	100% (9/9)	Hospital	
							Health centers	86% (6/7)	Health centers	86% (6/7)	Health centers	100% (7/7)	Health centers	
							Others	0% (0/0)	Others	0% (0/0)	Others	0% (0/0)	Others	
							<b>Total</b>	81% (13/16)	<b>Total</b>	87% (14/16)	<b>Total</b>	100% (16/16)	<b>Total</b>	
Mozambique			0% (0/7)	Data not reported	57% (4/7)	100% (7/7)	Hospital	0% (0/7)	Hospital	0% (0/7)	Hospital	100% (3/3)	Hospital	
							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	
							<b>Total</b>	0% (0/7)	<b>Total</b>	0% (0/7)	<b>Total</b>	100% (3/3)	<b>Total</b>	

<sup>29</sup> Data was not collected from six facilities in PY5 Quarter 1.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result		PY5Q2 Result		PY5Q3 Result		PY5Q4 Result	PY5 Cumulative Result			
							Hospitals	Health centers	Hospitals	Health centers	Hospitals	Health centers			Hospitals	Health centers	
Nigeria	Nigeria	Annually	0% (0/3)	N/A	0% (0/3)	14% (1/7)	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				
							<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>				
	Senegal		0% (0/3)	0% (0/3)	0% (0/8)	0% (0/14)	Hospitals	0% (0/12)	Hospitals	0% (0/12)	Hospitals	N/A	Hospitals				
							Health centers	0% (0/1)	Health centers	0% (0/1)	Health centers						
							Others	0% (0/0)	Others	0% (0/0)	Others						
							<b>Total</b>	0% (0/13)	<b>Total</b>	0% (0/13)	<b>Total</b>						
	Tanzania		0% (0/6)	100% (6/6)	20% (2/10)	60% (6/10)	Hospitals	60% (6/10)	Hospitals	70% (7/10)	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				
							<b>Total</b>	60% (6/10)	<b>Total</b>	70% (7/10)	<b>Total</b>	100% (10/10)	<b>Total</b>				
Uganda	86% (6/7)	100% (7/7)	100% (13/13)	100% (13/13)	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						
					<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>	100% (7/7)	<b>Total</b>						
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)											
							Bangladesh	0%	N/A	0% (0/2)	50% (2/4)	Hospitals					
												<b>Total</b>					
							Burkina Faso	0%	0% (0/5)	0% (0/12)	0% (0/10)	Hospitals					
												<b>Total</b>					
							Cameroon	0%	N/A	0% (0/12)	92% (11/12)	Hospitals					
												<b>Total</b>					
							Côte d'Ivoire	0%	0% (0/2)	0% (0/12)	14% (3/22)	Hospitals					
												Health centers					
							DRC	0%	100% (3/3)	0% (0/7)	58% (7/12)	Hospitals					
												<b>Total</b>					
							Kenya	0%	100% (18/18)	92% (22/24)	91% (21/23)	Hospitals					
Health centers																	
Pharmacies																	
Mali	0%	N/A	13% (2/16)	0% (0/16)	Hospital												
					Health centers												

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
							<b>Total</b>				
	Mozambique		0%	N/A	71% (5/7)	28% (2/7)	Hospitals				
							<b>Total</b>				
	Nigeria		0%	N/A	0% (0/3)	0% (0/7)	Hospitals				
							<b>Total</b>				
	Senegal		0%	N/A	0% (0/8)	0% (14/14)	Hospitals				
							<b>Total</b>				
	Tanzania		0%	100% (6/6)	60% (6/10)	70% (7/10)	Hospitals				
							<b>Total</b>				
	Uganda		0%	0% (0/7)	0% (0/7)	31% (4/13)	Hospitals				
							<b>Total</b>				
DRC 1	# of quality assured MNCH, RH/FP, and TB medicine products registered with MTaPS support	Semiannually	0	0	29	26	N/A				
DRC 4	% of facilities implementing appropriate storage of oxytocin	Quarterly	0	N/A	64% (46/72)	75% (54/72)	76% (55/72)	83% (60/72)	83% (60/72)		
DRC 5	# of DPS and/or IPS using the updated directory of registered medicines	Semiannually	0	0	7	4	4				
DRC 8	# of HZs involved in provincial quantification exercises with MTaPS support	Semiannually	0	0	19	10	N/A				
DRC 9	# of MNCH treatment protocols or job aids disseminated to HFs with MTaPS support	Semiannually	0	0	0	0	N/A				
DRC 10	# of contraceptive kits (reduced FP package) distributed to community care sites in MTaPS-supported HZs	Semiannually	0	0	0	0	0				
DRC 11	% of community care sites reporting contraceptive data to HFs in MTaPS-supported HZs	Semiannually	0%	0	0% (0/12)	0%	0% (0/12)				
DRC 12	# of mini awareness-raising campaigns for active detection of TB and adherence to TB	Semiannually	0	0	0	2	N/A				



Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
	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					
BG 1	% of procurement packages of DGFP and DGHS that are on schedule	Annually	0	0	82%	50%					
BG 4	% of target HF's that keep complete TB patient information (as per national standards)	Annually	0	N/A	44%	71% (64/90)					
BG 8	# of laws, policies, regulations, action plans or standards formally proposed, adopted, or implemented as supported by USG assistance	Annually	N/A	N/A	N/A	N/A					
BG 9	# of program approaches/initiative adopted/changed because of evidence-based recommendations and/or advocacy by USAID-supported activities	Annually	N/A	N/A	N/A	N/A					
BG 10	# and % of district hospitals using eAMS	Annually	N/A	N/A	N/A	N/A					
BG 12	# of health commodities tracked through USAID-supported eLMIS	Annually	N/A	N/A	N/A	N/A					
BG 13	# of organizations whose members/staff were trained and/or mentored through USAID support	Semiannually	N/A	N/A	N/A	N/A	5				
BG 14	# of TB patients registered in e-TB Manager	Quarterly	0	N/A	N/A	N/A	70,495	74,365	74,285		

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
DRC 2	# of CBO members that have been capacitated to participate in oversight of pharmaceutical management for MNCH commodities with MTaPS support	Annually	0	0	350	344					
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					
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					
IP.MP.1 <sup>30</sup>	# of facilities receiving MTaPS support to strengthen IPC and/or WASH practices for monkeypox DRC	Quarterly	0	N/A	N/A	N/A	30	46	46		
			0	N/A	N/A	N/A	30	46	46		
IP.MP.2 <sup>22</sup>	# of people trained to prevent, detect, and/or respond to monkeypox outbreak with MTaPS support DRC	Quarterly	0	N/A	N/A	N/A	30	71	248		
			0	N/A	N/A	N/A	30	71	248 <sup>31</sup>		
IP.MP.3 <sup>22</sup>	# of post-training supervision visits conducted DRC	Quarterly	0	N/A	N/A	N/A	N/A	3	3		
			0	N/A	N/A	N/A	N/A	3	3		
IP.MP.4 <sup>22</sup>	# of field supervision visits conducted DRC	Quarterly	0	N/A	N/A	N/A	N/A	N/A	5		
			0	N/A	N/A	N/A	N/A	N/A	5		
IP.MP.5 <sup>22</sup>	Were the findings from supervision visits sent to HZs and/or HFfs? DRC	Quarterly	0	N/A	N/A	N/A	N/A	N/A	1		
			0	N/A	N/A	N/A	N/A	N/A	1		

<sup>30</sup> Indicators IP.MP.1, 2, 3, 4, 5, 6, and 7 track progress on monkeypox activities in DRC.

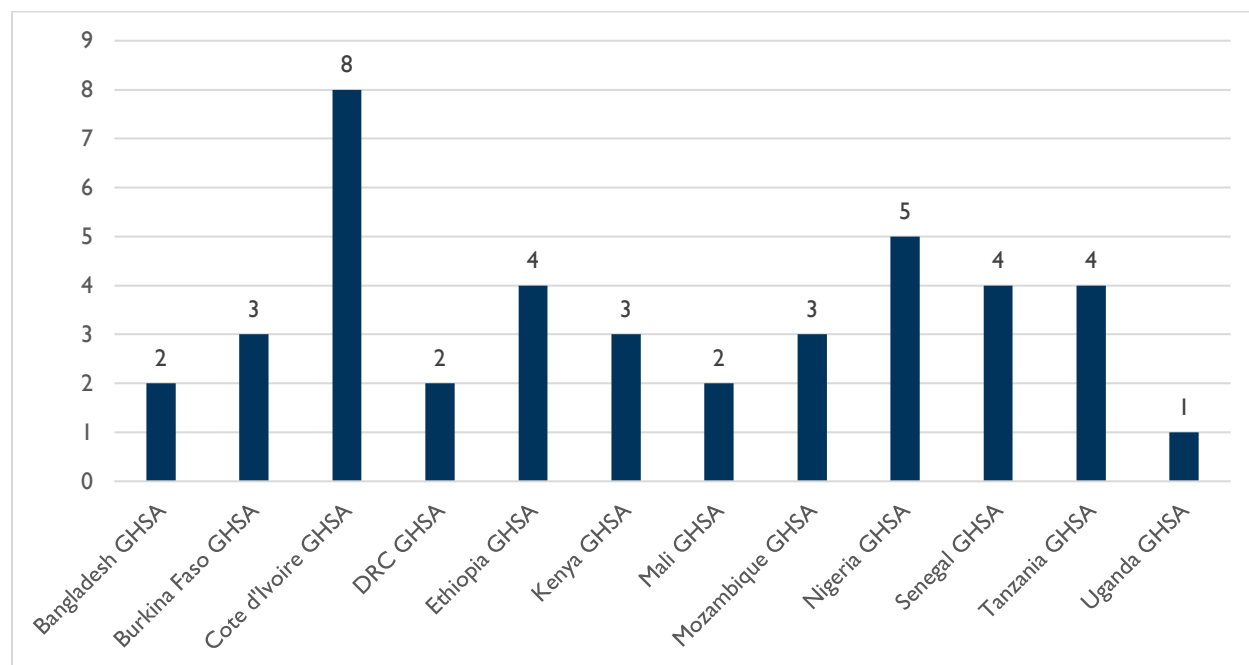
<sup>31</sup> Training took place in PY5 Quarter 2, due to reporting delays the values are reported in Quarter 3.

Code	Performance Indicator	Reporting Frequency	Baseline Value	PY2 Result	PY3 Result	PY4 Result	PY5Q1 Result	PY5Q2 Result	PY5Q3 Result	PY5Q4 Result	PY5 Cumulative Result
IP.MP.6 <sup>22</sup>	Are the recommendations made after supervision visits implemented by HZs and/or HFs?	Quarterly	0	N/A	N/A	N/A	N/A	N/A	I		
	DRC		0	N/A	N/A	N/A	N/A	N/A	I		
IP.3.MP.7	# and % of MTaPS-supported HFs that are using standardized tool(s) for monitoring IPC and informing programmatic improvement for monkeypox	Semiannually	N/A	N/A	N/A	N/A	0				
	DRC		N/A	N/A	N/A	N/A	0				

## ANNEX 2. GLOBAL HEALTH SECURITY AGENDA—QUARTER PROGRESS FOR FY23Q3

### SUMMARY OF ACTIVITIES FOR THIS QUARTER (FY23Q3)

#### SELECTED MTAPS GHSA INDICATOR PROGRESS



Annex Figure 1. MSC I. # of AMR-related in-country meetings or activities conducted with multisectoral participation in PY5Q3

Annex Table 2.1 IP3. % of MTaPS-supported facilities that are using standardized tools for monitoring IPC and informing programmatic improvement

Quarter	Country											
	Bangladesh <sup>1</sup>	Cameroon	Côte d'Ivoire	DRC <sup>2</sup>	Ethiopia <sup>3</sup>	Kenya	Mali	Mozambique <sup>4</sup>	Nigeria <sup>5</sup>	Senegal <sup>6</sup>	Tanzania	Uganda <sup>7</sup>
PY4Q3	50% (2/4)	100% (12/12)	100% (20/20)	100% (12/12)	100% (5/5)	100% (20/20)	100% (16/16)	100% (3/3)	28% (2/7)	61% (8/13)	100% (10/10)	100% (13/13)
PY4Q4	100% (4/4)	100% (12/12)	100% (20/20)	100% (12/12)	100% (5/5)	100% (20/20)	100% (16/16)	100% (7/7)	100% (7/7)	100% (13/13)	100% (10/10)	100% (13/13)
PY5Q1	55% (5/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (5/5)	100% (20/20)	100% (16/16)	100% (7/7)	100% (7/7)	77% (10/13)	100% (10/10)	100% (7/7)
PY5Q2	67% (6/9)	100% (12/12)	100% (20/20)	50% (6/12)	100% (7/7)	100% (20/20)	100% (16/16)	100% (7/7)	100% (7/7)	77% (10/13)	100% (10/10)	100% (7/7)
PY5Q3	100% (9/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	100% (3/3)	100% (7/7)	Data not collected	100% (10/10)	100% (7/7)

<sup>1</sup> Five new facilities were added at the beginning of PY5. In PY5Q1 and Q2, supportive supervision was not provided to four facilities and training was not provided to three facilities.

<sup>2</sup> In PY5Q2, six facilities did not receive supportive supervision but DTCs were functional.

<sup>3</sup> In PY5Q2, as requested by the Ethiopia MOH and Addis Ababa City Administration Health Bureau, two hospitals were added; in Q3, one additional facility was added.

<sup>4</sup> In PY4Q3, a new IPC coordinator was hired and could only support three HF; the remaining facilities did not have supportive supervision and information could not be collected for this indicator. In PY5Q3, four facilities were dropped (total facilities reduced from seven to three) due to budget constraints.

<sup>5</sup> In PY4Q3, the IPC team started the implementation of its work plan in two facilities, following the completion of capacity training for its IPC team.

<sup>6</sup> In PY4Q3, information for five facilities was not captured. In PY5Q1-Q2, one facility had inadequate IPC capacity; a strategic plan was created in Q2 to improve capacity. Data for the two remaining facilities was not obtained. In PY5Q3, data was not collected at facilities and values could not be reported due to time constraints. Activities were focused on national IPC implementation.

<sup>7</sup> In PY5, the number of facilities was reduced to seven due to funding constraints and the need to scale down activities.

**Annex Table 2.2. IP5. % of MTaPS-supported facilities implementing continuous quality improvement (CQI) to improve IPC**

Quarter	Country											
	Bangladesh <sup>1</sup>	Cameroon	Côte d'Ivoire	DRC <sup>2</sup>	Ethiopia <sup>3</sup>	Kenya	Mali <sup>4</sup>	Mozambique <sup>5</sup>	Nigeria <sup>6</sup>	Senegal <sup>7</sup>	Tanzania	Uganda <sup>8</sup>
PY4Q3	50% (2/4)	100% (12/12)	100% (20/20)	100% (12/12)	0% (0/5)	100% (20/20)	100% (16/16)	100% (3/3)	14% (1/7)	61% (8/13)	100% (10/10)	100% (13/13)
PY4Q4	50% (2/4)	100% (12/12)	100% (20/20)	100% (12/12)	0% (0/5)	100% (20/20)	100% (16/16)	100% (7/7)	14% (1/7)	92% (12/13)	100% (10/10)	100% (13/13)
PY5Q1	44% (4/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (5/5)	100% (20/20)	94% (15/16)	100% (7/7)	100% (7/7)	69% (9/13)	100% (10/10)	100% (7/7)
PY5Q2	67% (6/9)	100% (12/12)	100% (20/20)	50% (6/12)	100% (7/7)	100% (20/20)	100% (16/16)	100% (7/7)	100% (7/7)	31% (4/13)	100% (10/10)	100% (7/7)
PY5Q3	100% (9/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	100% (3/3)	100% (7/7)	Data not collected	100% (10/10)	100% (7/7)

<sup>1</sup> Five new facilities were added at the beginning of PY5. A consultant was hired to assist in developing and updating CQI plans in PY5Q2 and implement the plans in the remaining facilities.

<sup>2</sup> In PY5Q2, six facilities did not receive supportive supervision but DTCs were functional.

<sup>3</sup> In PY4Q1-Q2, work resumed after a pause in PY3; facilities were selected but CQI work had not started. In PY5Q2, as requested by the Ethiopia MOH and Addis Ababa City Administration Health Bureau, two hospitals were added; in Q3, one additional facility was added.

<sup>4</sup> In PY5Q1, the Dermatology Hospital of Bamako had not begun implementing action plans. In Q2, all facilities implemented CQI.

<sup>5</sup> In PY4Q3, a new IPC coordinator was hired and could only support three HF; the remaining facilities did not have supportive supervision and information could not be collected for this indicator. In PY5Q3, four facilities were dropped due to budget constraints.

<sup>6</sup> In PY4Q3, the IPC team started implementation of its CQI plan in one facility, following the completion of capacity training for its IPC team.

<sup>7</sup> In PY4Q3, information for five facilities was not captured. In PY5Q2, four remaining facilities conducted a self-evaluation. The six facilities that implemented standardized tools and the remaining two facilities were not evaluated for CQI. In PY5Q3, data was not collected at facilities and values could not be reported. Activities were focused on national IPC implementation.

<sup>8</sup> In PY5, the number of supported facilities was reduced to seven due to funding constraints and the need to scale down activities.

**Annex Table 2.3. IP6. % of MTaPS-supported facilities with functional IPC committees**

Quarter	Country											
	Bangladesh <sup>1</sup>	Cameroon	Côte d'Ivoire	DRC <sup>2</sup>	Ethiopia <sup>3</sup>	Kenya	Mali	Mozambique <sup>4</sup>	Nigeria <sup>5</sup>	Senegal <sup>6</sup>	Tanzania	Uganda <sup>7</sup>
PY4Q3	100% (4/4)	92% (11/12)	100% (20/20)	100% (12/12)	100% (5/5)	100% (20/20)	100% (16/16)	100% (3/3)	28% (2/7)	61% (8/13)	100% (10/10)	100% (13/13)
PY4Q4	100% (4/4)	100% (12/12)	100% (20/20)	100% (12/12)	100% (5/5)	100% (20/20)	100% (16/16)	100% (7/7)	86% (6/7)	92% (12/13)	100% (10/10)	100% (13/13)
PY5Q1	100% (9/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (5/5)	100% (20/20)	100% (16/16)	100% (7/7)	100% (7/7)	77% (10/13)	100% (10/10)	100% (7/7)
PY5Q2	100% (9/9)	100% (12/12)	100% (20/20)	50% (6/12)	86% (6/7)	100% (20/20)	100% (16/16)	100% (7/7)	100% (7/7)	77% (10/13)	100% (10/10)	100% (7/7)
PY5Q3	100% (9/9)	100% (12/12)	100% (20/20)	100% (12/12)	100% (8/8)	100% (20/20)	100% (16/16)	100% (3/3)	100% (7/7)	Data not collected	100% (10/10)	100% (7/7)

<sup>1</sup> Five new facilities were added at the beginning of PY5.

<sup>2</sup> In PY5Q2, six facilities did not receive supportive supervision but DTCs were functional.

<sup>3</sup> In PY5Q2, as requested by the Ethiopia MOH and Addis Ababa City Administration Health Bureau, two hospitals were added; in Q3, one additional facility was added.

<sup>4</sup> In PY4Q3, a new IPC coordinator was hired and could only support three HF; the remaining facilities did not have supportive supervision and information could not be collected for this indicator. In PY5Q3, four facilities were dropped due to budget constraints.

<sup>5</sup> In PY4Q3, the IPC team started the implementation of its workplan in two facilities, following the completion of capacity training for the IPC teams, the remaining facilities followed in the subsequent quarter.

<sup>6</sup> In PY4Q3, information for five facilities was not captured. In PY5Q1-Q2, one facility had inadequate IPC capacity and a strategic plan was created in Q2 to improve. Data for the two remaining facilities was not obtained. In PY5Q3, data was not collected at facilities and values could not be reported. Activities were focused on national IPC implementation.

<sup>7</sup> In PY5, the number of supported facilities was reduced to seven due to funding constraints and the need to scale down activities.

**Annex Table 2.4. AS2. % of MTaPS-supported facilities' medicines and therapeutics/AMS committees or other relevant groups that implemented AMS improvement plans and/or monitoring framework**

Quarter	Country												
	Bangladesh <sup>1</sup>	Burkina Faso <sup>2</sup>	Cameroon <sup>3</sup>	Côte d'Ivoire <sup>4</sup>	DRC <sup>5</sup>	Ethiopia <sup>6</sup>	Kenya <sup>7</sup>	Mali <sup>8</sup>	Mozambique <sup>9</sup>	Nigeria <sup>10</sup>	Senegal <sup>11</sup>	Tanzania	Uganda <sup>12</sup>
PY4Q3	50% (2/4)	0% (0/10)	100% (12/12)	100% (20/20)	100% (12/12)	0% (0/5)	91% (21/23)	100% (16/16)	14% (2/7)	43% (3/7)	0% (0/13)	100% (10/10)	100% (13/13)
PY4Q4	50% (2/4)	0% (0/10)	100% (12/12)	100% (20/20)	100% (12/12)	0% (0/5)	91% (21/23)	75% (12/16)	43% (3/7)	100% (7/7)	0% (0/13)	100% (10/10)	100% (13/13)
PY5Q1	44% (4/9)	100% (10/10)	100% (12/12)	70% (14/20)	100% (12/12)	100% (5/5)	87% (21/24)	81% (13/16)	100% (7/7)	100% (7/7)	N/A	100% (10/10)	100% (7/7)
PY5Q2	44% (4/9)	N/A	100% (12/12)	100% (20/20)	100% (12/12)	100% (7/7)	92% (22/24)	87% (14/16)	100% (7/7)	100% (7/7)	N/A	100% (10/10)	100% (7/7)
PY5Q3	100% (9/9)	60% (6/10)	92% (11/12)	95% (19/20)	100% (12/12)	100% (8/8)	92% (22/24)	100% (16/16)	100% (3/3)	100% (7/7)	N/A	100% (10/10)	100% (7/7)

<sup>1</sup> Five facilities were added at the beginning of PY5. In PY5Q1, five facilities did not receive supportive supervision or training. In PY5Q2, six facilities received supportive supervision and training. During visits it was found that facilities were not implementing AMS activities as needed due to a lack of technical expertise and training. The MTaPS team gave strong feedback on AMS activities at each facility at that time.

<sup>2</sup> Indicator-related activities began in PY4Q3; however, DTCs did not function as planned, and improvement and monitoring frameworks were not implemented. In PY5Q1, AMS supervision and support were provided to all 10 facilities, and activities were implemented. In PY5Q2, MTaPS was unable to conduct supervision visits and obtain activity data. In PY5Q3, four facilities did not receive site visits to document achievements.

<sup>3</sup> In PY5Q3, activity implementation was not optimal in Mbal Mayo District Hospital because the trained personnel have been posted to different health facilities.

<sup>4</sup> In PY5Q1, six sites did not receive supportive supervision from the AMS team; thus, information for this indicator was not collected for the facilities. In PY5Q3, San Pedro's AMS committee was not functional. San Pedro received a new CHR. This has led to a suspension of the AMS committee's activities.

<sup>5</sup> Five facilities were added in PY4Q3.

<sup>6</sup> In PY4Q3, facilities were selected, but work had not started as the work plan had not been approved. In PY4Q4, MTaPS identified gaps in AMS, including a lack in AMS committees' operationality; four of five hospitals established or reinstated their committees; however, improvement plans or frameworks had yet to be developed. In PY5Q2, as requested by the Ethiopia MOH and Addis Ababa City Administration Health Bureau, two hospitals were added; in Q3, one additional facility was added.

<sup>7</sup> In PY5Q1, two community pharmacies were not implementing AMS activities for various underlying issues. One hospital was added to MTaPS and underwent preparatory work before activity implementation began. In PY5Q2-Q3, all facilities have active AMS committees, however, the two community pharmacies have not been able to implement additional activities. MTaPS is reviewing the implementation strategy for these two sites.

<sup>8</sup> In PY4Q4, MTaPS Mali implemented virtual supportive supervision visits; four facilities did not attend; thus no data was obtained for these facilities. In PY5Q1, three facilities did not have sufficient time to implement activities. In PY5Q2, MTaPS provided coaching sessions to the previously mentioned facilities, which increased performance; however, two facilities reported competing priorities in implementing AMS activities.

<sup>9</sup> In PY4Q3, a new IPC coordinator was hired and could only provide support to three HFs; the remaining facilities did not have supportive supervision and information could not be collected for this indicator. In PY5Q3, four facilities were dropped due to budget constraints.

<sup>10</sup> In PY4Q3, workplan implementation began in three facilities; the remaining facilities followed in the subsequent quarter.

<sup>11</sup> In PY4, Senegal prioritized IPC activities. In PY4Q3, one facility was removed as the hospital had temporarily closed. In PY5Q1, AMS activities experienced delays due to delayed MOH endorsement of trainings. AMS activities continued at the national level through PY5Q2 and Q3; however, implementation of facility-level AMS activities have continued to experience challenges because of stakeholder support.

<sup>12</sup> In PY5, the number of facilities was reduced to seven due to funding constraints and the need to scale down activities.

**Annex Table 2.5. AS4. % of MTaPS-supported facilities implementing CQI to improve AMS**

Quarter	Country												
	Bangladesh <sup>1</sup>	Burkina Faso <sup>2</sup>	Cameroon	Côte d'Ivoire <sup>3</sup>	DRC <sup>4</sup>	Ethiopia <sup>5</sup>	Kenya <sup>6</sup>	Mali <sup>7</sup>	Mozambique <sup>8</sup>	Nigeria <sup>9</sup>	Senegal <sup>10</sup>	Tanzania <sup>11</sup>	Uganda <sup>12</sup>
PY4Q3	25% (1/4)	0% (0/10)	100% (12/12)	100% (20/20)	100% (12/12)	0% (0/5)	91% (21/23)	100% (16/16)	14% (1/7)	14% (1/7)	0% (0/14)	60% (6/10)	100% (13/13)
PY4Q4	50% (2/4)	0% (0/10)	100% (12/12)	100% (20/20)	100% (12/12)	0% (0/5)	91% (21/23)	75% (12/16)	100% (7/7)	14% (1/7)	0% (0/14)	60% (6/10)	100% (13/13)
PY5Q1	44% (4/9)	100% (10/10)	100% (12/12)	70% (14/20)	100% (12/12)	100% (5/5)	87% (21/24)	81% (13/16)	0% (0/7)	100% (7/7)	N/A	60% (6/10)	100% (7/7)
PY5Q2	44% (4/9)	N/A	100% (12/12)	100% (20/20)	33% (6/12)	100% (7/7)	92% (22/24)	87% (14/16)	0% (0/7)	100% (7/7)	N/A	70% (7/10)	100% (7/7)
PY5Q3	100% (9/9)	N/A	100% (12/12)	95% (19/20)	100% (12/12)	100% (8/8)	92% (22/24)	100% (16/16)	100% (3/3)	100% (7/7)	N/A	100% (10/10)	100% (7/7)

<sup>1</sup> Five facilities were added at the beginning of PY5. In PY5Q1, five facilities did not receive supportive supervision or training. In PY5Q2, six facilities received supportive supervision and training. During visits it was found that facilities were not implementing AMS activities as needed due to a lack of technical expertise and training. The MTaPS team gave strong feedback on AMS activities at each facility at that time.

<sup>2</sup> In PY4, MTaPS Burkina Faso harmonized action plans for all hospitals. Indicator-related activities began in PY4Q3; DTCs did not function as planned, and improvement plans and monitoring frameworks were not implemented. In PY5Q1, AMS supervision and support were provided to all 10 facilities and activities were implemented. In PY5Q2 and Q3, MTaPS was unable to conduct supervision visits and obtain activity data.



<sup>3</sup> In PY5Q1, six sites did not receive supportive supervision from the AMS team, thus information for this indicator was not collected for the facilities. In PY5Q3, San Pedro's AMS committee was not functional. San Pedro got a new CHR. This has led to a suspension of the AMS committee's activities.

<sup>4</sup> Five facilities were added in PY4Q3. In PY5Q2, supported facilities provided written reports on AMS activities; CQI activities were not included and just six facilities received supervision visits to obtain this information.

<sup>5</sup> In PY4Q3, facilities were selected, but work had not started as the work plan had not been approved. In PY4Q4, MTaPS identified gaps in AMS, including a lack in AMS committee operationality; four of five hospitals established or reinstated their committees, but improvement plans or frameworks had yet to be developed. In PY5Q2, as requested by the Ethiopia MOH and Addis Ababa City Administration Health Bureau, two hospitals were added; in Q3 an additional facility was added.

<sup>6</sup> In PY5Q1, two community pharmacies did not implement AMS activities for various underlying issues. One hospital was added to MTaPS, which underwent preparatory work before activity implementation began. In PY5Q2-Q3, all facilities had active AMS committees; however, two community pharmacies have not been able to implement additional activities. MTaPS is reviewing the implementation strategy for these two sites.

<sup>7</sup> In PY4Q4, MTaPS Mali implemented virtual supportive supervision visits; four facilities did not attend; thus no progress/data was obtained for these facilities. In PY5Q1, three facilities reported that they did not have sufficient time to implement activities. In PY5Q2, MTaPS provided coaching sessions to these facilities, which increased performance; however, two facilities have reported competing priorities in implementing AMS activities.

<sup>8</sup> AMS site visits delayed for PY5; thus, no facility progress was documented in Q1 and Q2. In PY5Q3, four facilities were dropped due to budget constraints.

<sup>9</sup> In PY4Q3, implementation of AMS CQI plans began in one facility, following the completion of capacity training.

<sup>10</sup> In PY4, Senegal prioritized IPC activities. In PY4Q3, one facility was removed as the hospital had temporarily closed. In PY5Q1, AMS activities experienced delays due to delayed MOH endorsement of trainings. AMS activities continued at the national level through PY5Q2 and Q3; however, implementation of facility-level AMS activities continued to experience challenges because of stakeholder support.

<sup>11</sup> In PY5Q1, four facilities had slow uptake of MTCs for AMS CQI implementation. The Tanzania team conducted supportive supervision for MTCs and AMS CQI activities. Progress has been made in PY5Q2 and Q3.

<sup>12</sup> In PY5, the number of facilities was reduced to seven due to funding constraints and the need to scale down activities.

## ANNEX 3. MONTHLY COVID-19 INDICATORS, FY23Q3

Annex Table 3.1. Number of staff and volunteers trained on COVID-19 vaccine-related topics with MTaPS' support (COV 2. [CVI.3-3.])

Portfolio/ disaggregation	Country	April–June 2023
	Bangladesh	0
	Cameroon	123
	Côte d'Ivoire	167
	Kenya	153
	Nigeria	60
	Philippines	258
	Rwanda	0
	Senegal*	N/A
	Tanzania	0
	<b>Total</b>	<b>761</b>
Sex	Male	284
	Female	457
	Unknown sex	20
Technical area**	Storage, handling, delivery, and waste management of COVID-19 vaccines	605
	Planning and organizing COVID-19 vaccination sessions	180
	AEFI monitoring for COVID-19 vaccination	312
	Recording and monitoring COVID-19 vaccination	180
	Communication with the community about COVID-19 vaccination	60
	Other	21

\*COVID activities in Senegal were completed in March 2023; therefore, there is no data to report on Senegal for PY5 Q3.

\*\*Disaggregation by technical area for training staff and volunteers is not exclusive of each other.

**Annex Table 3.2. Number of COVID-19 vaccine multisectoral coordination mechanisms that meet regularly (at least once a month) with MTaPS' support (COV 4. [0.8])**

Portfolio/ disaggregation	Country	April–June 2023
	Bangladesh	0
	Côte d'Ivoire	0
	Kenya	0
	Philippines	0
	Rwanda	0
	Senegal	N/A
	<b>Total</b>	<b>0</b>

**Annex Table 3.3. Number of health facilities where MTaPS provided support for IPC and/or water, sanitation, and hygiene (WASH) for COVID-19 (COV 5. [(CV.2.4-17)])**

Portfolio/ disaggregation	Country	April–June 2023
	Bangladesh	0
	Cameroon	N/A*
	Côte d'Ivoire	0
	Kenya	0
	Senegal	N/A
	<b>Total</b>	<b>0</b>

\* Corresponding activity has been completed in Cameroon; therefore, no data to report in PY5 Q3.

**Annex Table 3.4. Number of workers who received COVID-19-related training in IPC and/or WASH with MTaPS' support (COV 6. [CV.2.4-18])**

Portfolio/ disaggregation	Country	April–June 2023
	Bangladesh	0
	Cameroon	0
	Côte d'Ivoire	0
	Kenya	0
	Senegal	N/A
	<b>Total</b>	<b>0</b>
Sex	Male	0
	Female	0
	Unknown sex	0
Trainee Category	HCW	0
	Non-HCW	0

**Annex Table 3.5. Number of policies, protocols, standards, and guidelines across any of the result areas developed or adapted with MTaPS' support for COVID-19 (COV 7. [CV.2.6-22])**

Portfolio/ disaggregation	Country	April–June 2023
	Bangladesh	0
	Cameroon	0
	Côte d'Ivoire	3
	Kenya	0
	Madagascar	8
	Philippines	1
	Rwanda	1
	Senegal	N/A
	Tanzania	0
<b>Total</b>		<b>13</b>
Technical area	Risk communication and community engagement	0
	Surveillance, rapid response teams, case investigation	0
	Laboratory systems	6
	Case management	0
	IPC	0
	Coordination and operations	7
	Vaccine introduction (incl., PV)	0

**Annex Table 3.6. Number of AEFI reports reviewed by the appropriate responsible bodies with USG support among those submitted to country monitoring systems (COVI [CV.1.5-9])**

Portfolio/ Disaggregation	Country	April–June 2023
	Bangladesh	7
	Côte d'Ivoire	N/A***
	Nigeria	0
	Kenya	833
	Rwanda	N/A
	Tanzania	29
	Senegal	N/A
<b>Total</b>		<b>919</b>
USG Support	Direct support	7
	Indirect support	912
Severity of event*	Minor	28
	Moderate	6
	Serious/severe**	2

\*This activity is closed in Rwanda.

\*\* In Kenya, data on severity of events not available from government.

\*\*\* In Cote d'Ivoire, this activity is out of scope for this quarter.

**Annex Table 3.7. 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 2023
	Bangladesh	0
	Côte d'Ivoire	N/A*
	Kenya	1
	Rwanda	0
	Senegal	N/A
	<b>Total</b>	<b>1</b>
Technical area	Establishing surveillance systems	0
	Monitoring and responding to AEFIs	1
	Monitoring and responding to AEs of special interest	0
	Safety data management systems	0
	COVID-19 vaccine safety communication	0

\*In Cote d'Ivoire, this activity is out of scope for this quarter.

**Annex Table 3.8. Country has developed or adapted COVID-19 vaccine microplans with MTaPS' support (COV 8. [C.1])**

Country	April-June 2023
Bangladesh	No
Côte d'Ivoire	N/A*
Kenya	N/A*
Senegal	N/A

\*In Kenya and Cote d'Ivoire, this activity is out of scope for this quarter.

**Annex Table 3.9. Country has improved the regulatory and/or policy environment for COVID-19 vaccines with MTaPS support (COV 9. (C.2))**

Country	April-June 2023
Bangladesh	Yes
Côte d'Ivoire	No
Kenya	Yes
Rwanda	Yes
Senegal	N/A

**Annex Table 3.10 Country has developed or adapted vaccine tracking systems to track COVID-19 vaccine with MTaPS' support (COV 11 [C.4])**

Country	April-June 2023
Côte d'Ivoire	N/A*
Kenya	N/A*
Philippines	Yes
Senegal	N/A

\* In Cote d'Ivoire and Kenya, this activity is out of scope for this quarter.

**Annex Table 3.11 Number of vaccine doses delivered to designated in-country destinations with MTaPS support (COV 13 [CV. 1.2-2])**

Portfolio/ disaggregation	Country	April-June 2023
	Cameroon	39,300
	<b>Total</b>	<b>39,300</b>
Vaccine Brand	Moderna	0
	Pfizer	18
	Astra Zeneca	0
	Janssen	31,469
	Other (Sinopharm)	7,813

**Annex Table 3.12 Number of health workers who are remunerated by MTaPS to support workload required for COVID-19 vaccine delivery in the reporting period (COV 14 [CV.1.3-4])**

Portfolio/ disaggregation	Country	April-June 2023
	Cameroon	1,166
	Côte d'Ivoire	373
	Nigeria	631
	<b>Total</b>	<b>2,170</b>
Cadre	Clinical	0
	Community/Law	0
	Data management	621
	Supervision and Logistics	1,549

**Annex Table 3.13 Number of vaccination sites supported by MTaPS during the reporting period (COV 15 [CV.1.4-5])**

Portfolio/ disaggregation	Country	April-June 2023
	Cameroon	780
	Côte d'Ivoire	66
	Nigeria	327
	Senegal	N/A
<b>Total</b>		<b>1,173</b>
Type	Fixed site	180
	Community-based outreach vaccination sites	213
	Mobile team (or clinic) or transit team strategy	780
	Mass vaccination sites/campaigns	0

**Annex Table 3.14 Number of people who have received a first dose of an approved COVID-19 vaccine (COV-1) with MTaPS' direct support (COV 16 [CV.1.4-6])**

Portfolio/ disaggregation	Country	April-June 2023
	Nigeria*	0
	Cameroon	26,293
<b>Total</b>		<b>26,293</b>
Vaccine Brand	Moderna	0
	Pfizer	18
	Astra Zeneca	0
	Janssen	21,726
	Other (Sinopharm)	4,549
Sex	Male	13,650
	Female	12,643
	Unknown sex	0

\*In Nigeria, Janssen is the only COVID-19 vaccine brand available, and it is a single dose vaccine. Its single dose is counted as the last recommended dose and thus, is counted in the indicator CV 1.4-7 below.



**Annex Table 3.15 Number of people who received a last recommended dose of primary series of an approved COVID-19 vaccine (COV 17 [CV. 1.4-7]) with MTaPS' direct support**

Portfolio/ disaggregation	Country	April-June 2023
	Nigeria	61,667
	Cameroon	2,103
<b>Total</b>		<b>63,770</b>
Vaccine Brand	Moderna	0
	Pfizer	0
	Astra Zeneca	0
	Janssen	61,667
	Other (Sinopharm)	2,103
Sex	Male	31,358
	Female	32,412
	Unknown sex	0

**Annex Table 3.16 Number of people who received a booster dose of primary series of an approved COVID-19 vaccine (COV 2,3,4) with MTaPS' support (COV 18 [CV. 1.4-8])**

Portfolio/ disaggregation	Country	April-June 2023
	Nigeria	31,089
	Cameroon	10,904
<b>Total</b>		<b>41,993</b>
Vaccine Brand	Moderna	0
	Pfizer	0
	Astra Zeneca	0
	Janssen	40,832
	Other (Sinopharm)	1,161
Sex	Male	19,266
	Female	22,727
	Unknown sex	0

**Annex Table 3.17 Number of health workers trained in COVID-19 testing or specimen transport with USG support (CV.2.3-15)**

Portfolio/ disaggregation	Country	April-June 2023
	Madagascar	0
<b>Total</b>		<b>0</b>
Sex	Male	0
	Female	0
	Unknown	0

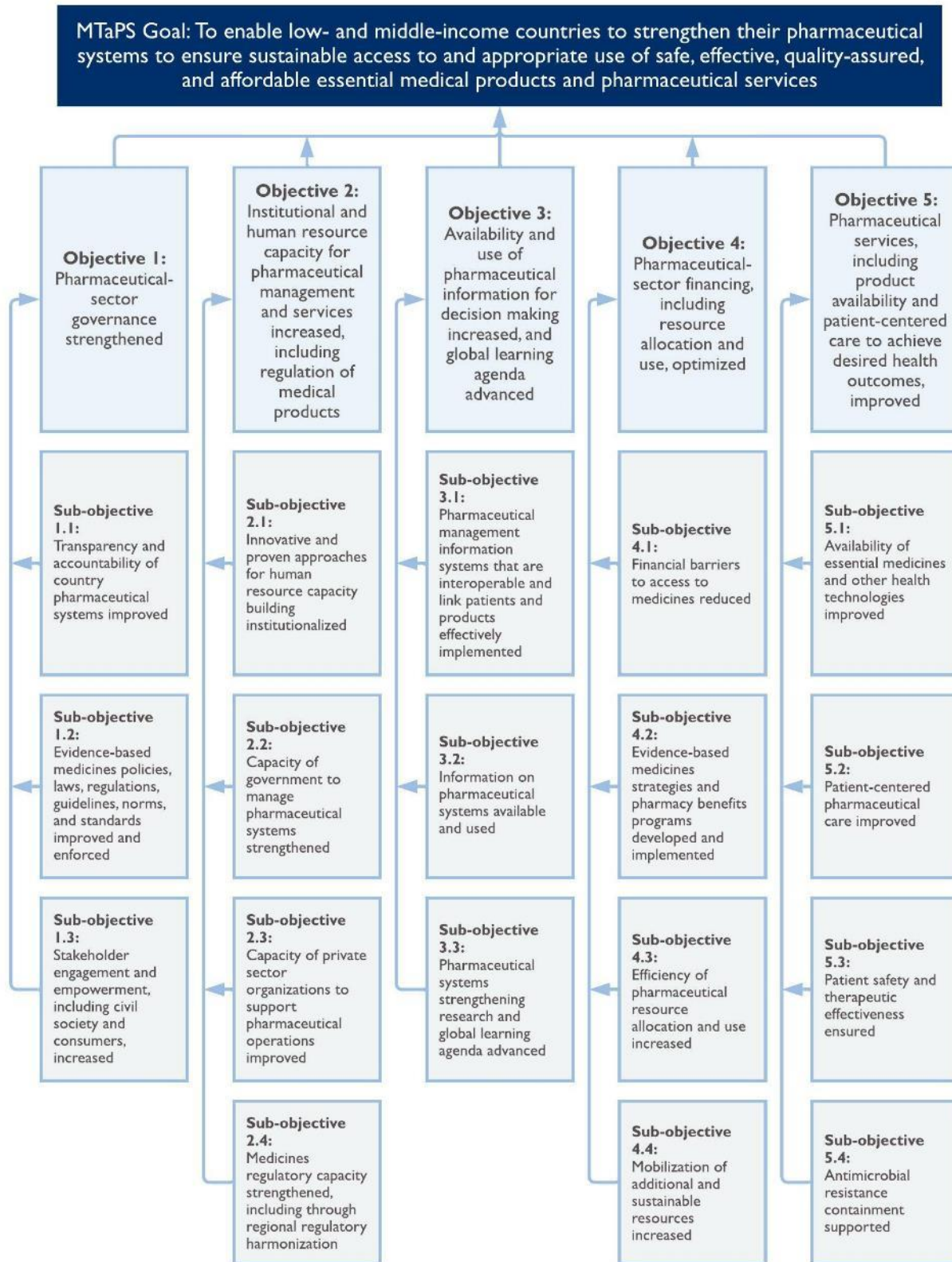
**Annex Table 3.18 Number of facilities that received oxygen-related technical assistance within the reporting period (CV.2.5-24)**

Portfolio/ disaggregation	Country	April–June 2023
	Philippines	2
<b>Total</b>		<b>2</b>
Technical Assistance	Clinical	0
	Engineering	0
	Other	2

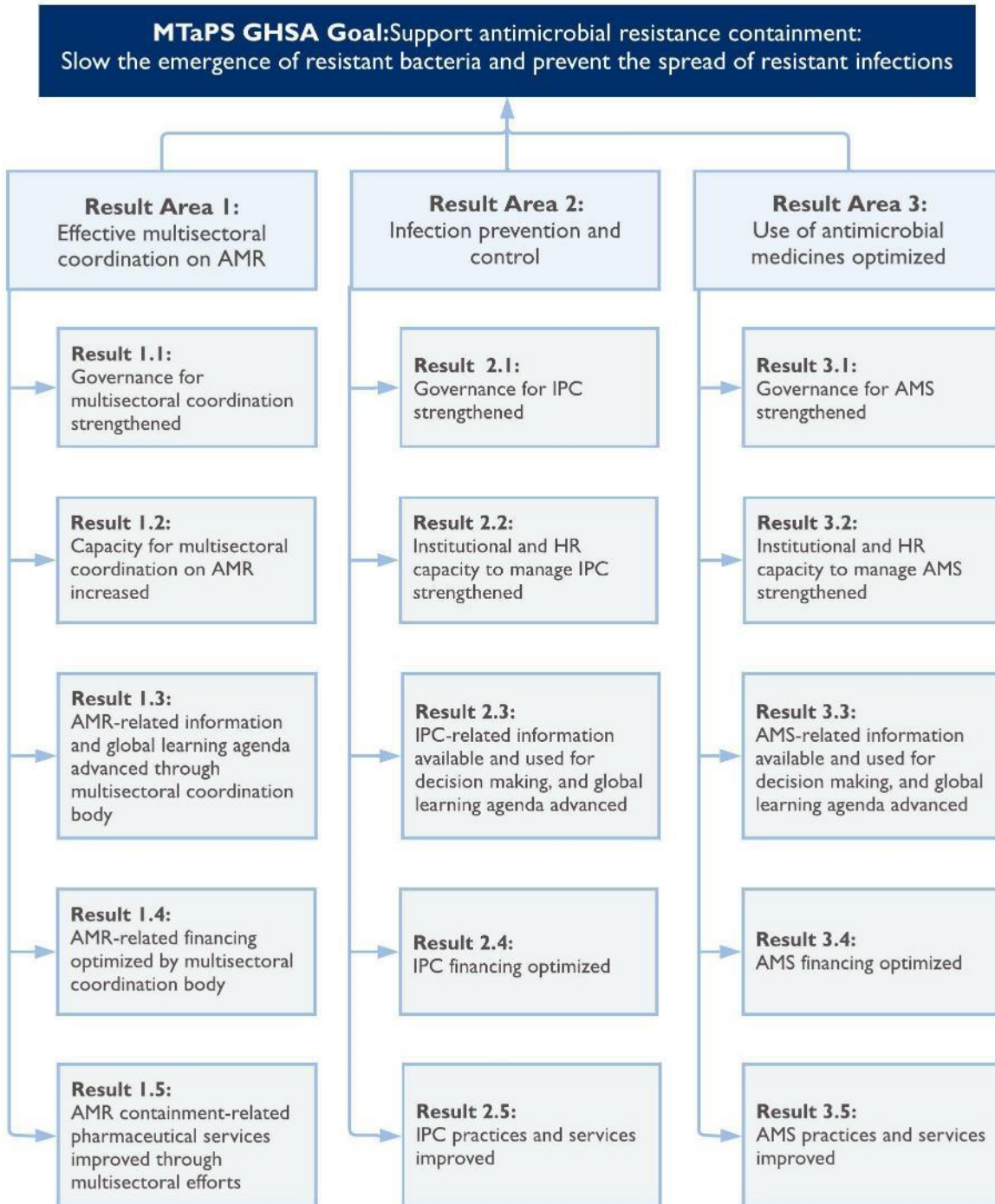
**Annex Table 3.19 Number of times oxygen-related technical assistance was provided within the reporting period (CV.2.5-25)**

Portfolio/ disaggregation	Country	April–June 2023
	Philippines	7
<b>Total</b>		<b>7</b>
Technical Assistance	Clinical	0
	Engineering	0
	Above site	7
	Other	0

## ANNEX 4. MTAPS RESULTS FRAMEWORK



## ANNEX 5. GHSA RESULTS FRAMEWORK



## **ANNEX 6. COVID-19 RESULTS FRAMEWORK**

**USAID Objective 1:** Accelerate widespread and equitable access to and delivery of safe and effective COVID-19 vaccinations

**USAID Objective 2:** Reduce morbidity and mortality from COVID-19, mitigate transmission, and strengthen health systems, including to prevent, detect, and respond to pandemic threats

**Result Area 4:** Infection Prevention and Control

**Result Area 6:** Coordination and Operations

## ANNEX 7. MNCH RESULTS FRAMEWORK

