

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

Improved Access. Improved Services. Better Health Outcomes.



PHOTO CREDIT: WARREN ZELMAN

FISCAL YEAR 2020 QUARTER 2 (JANUARY–MARCH 2020) REPORT

FISCAL YEAR 2020 QUARTER 2 (JANUARY–MARCH 2020) REPORT

DISCLAIMER: This document is made possible by the generous support of the American people through the US Agency for International Development (USAID) Contract No.: 7200AA18C00074. The contents are the responsibility of Management Sciences for Health and do not necessarily reflect the views of USAID or the United States Government.

TABLE OF CONTENTS

PROJECT OVERVIEW	III
ACRONYMS AND ABBREVIATIONS	V
INTRODUCTION	I
PROGRESS BY CORE-FUNDED PORTFOLIO	3
Global Health Security Agenda	3
Maternal, Newborn, and Child Health	12
Office of Health Systems, Cross Bureau Funding	17
CROSS-CUTTING ACTIVITIES	22
Gender Activities	22
PROGRESS TOWARD OBJECTIVES	23
Objective 1: Pharmaceutical-sector governance strengthened	23
Objective 2: Institutional and human resource capacity for pharmaceutical management and services increased, including regulation of medical products	26
Objective 3: Availability and use of pharmaceutical information for decision making increased and global learning agenda advanced	33
Objective 4: Pharmaceutical-sector financing, including resource allocation and use, optimized	35
Objective 5: Pharmaceutical services, including product availability and patient-centered care to achieve desired health outcomes, improved	37
PROGRESS BY REGIONAL BUREAU PORTFOLIO	41
Asia Regional Bureau	41
Intergovernmental Authority on Development (IGAD) and East African Community (EAC)	45
PROGRESS BY COUNTRY	48
Bangladesh	48
Burkina Faso	54
Cameroon	57
Côte d'Ivoire	59
Democratic Republic of Congo	63
Ethiopia	67
Jordan	72
Kenya	74
Mali	80
Mozambique	83
Nepal	88
The Philippines	92
Rwanda	96
Senegal	99
Tanzania	103
Uganda	107
MONITORING, EVALUATION, AND LEARNING	III
ANNEX I. MTAPS INDICATOR TRACKING TABLE	II5

PROJECT OVERVIEW

Program Name:		USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program
Reporting Period:		Fiscal year (FY) 2020 Quarter 2 (January–March 2020)
Activity Start Date and End Date:		September 20, 2018 – September 19, 2023
Name of Prime Implementing Partner:		Management Sciences for Health
Contract Number:		7200AA18C00074
MTaPS Partners:	Core Partners:	Boston University, FHI360, Overseas Strategic Consulting, Results for Development, International Law Institute-Africa Centre for Legal Excellence, NEPAD
	Global Expert Partners:	Brandeis University, Celsius Consulting, Deloitte USA, Duke-National University of Singapore, El Instituto de Evaluación Tecnológica en Salud, IC Consultants, MedSource, IQVIA, University of Washington
	Capacity Resource Partners:	African Health Economics and Policy Association, Ecumenical Pharmaceutical Network, U3 SystemsWork, University of Ibadan, African Collaborating Centre for Pharmacovigilance and Surveillance, Kilimanjaro School of Pharmacy, Muhimbili University, Pharmaceutical Systems Africa
	Collaborators:	International Pharmaceutical Federation, Howard University, University of Notre Dame, WHO, World Bank

Recommended Citation

This document may be reproduced if credit is given to MTAps. Please use the following citation.

2020. *USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program: Quarterly Report Fiscal Year 2020, Quarter 2 (January–March 2020)*. Submitted to the U.S. Agency for International Development by the USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program. Arlington, VA: Management Sciences for Health, Inc.

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

ACRONYMS AND ABBREVIATIONS

aDSM	active drug safety monitoring and management
AIDS	acquired immunodeficiency syndrome
AMR	antimicrobial resistance
AMRH	African Medicines Regulatory Harmonization
AMS	antimicrobial stewardship
AWaRe	access, watch and reserve (WHO)
ARV	antiretroviral
CDC	US Centers for Disease Control and Prevention
CDC	Communicable Disease Control (Bangladesh)
COR	contracting officer representative
CPD	country project director
CQI	continuous quality improvement
CTD	common technical document
DOH	Department of Health
DRC	Democratic Republic of the Congo
DTC	drug and therapeutics committee
DTG	dolutegravir
eAMS	electronic asset management system
ECOWAS	Economic Community of West African States
EDT	electronic dispensing tool
eLMIS	electronic logistics management information system
EML	essential medicines list
EMP	essential medicines and health products (WHO)
FAO	Food and Agriculture Organization
FDA	US Food and Drug Administration
FP	family planning
FY	fiscal year
GBT	Global Benchmarking Tool (WHO)
GFF	Global Financing Facility
GHSA	Global Health Security Agenda
HIV	human immunodeficiency virus
HTA	health technology assessment
IDDS	Infectious Diseases Detection and Surveillance Program
IPC	infection prevention and control
IPCAF	Infection Prevention and Control Assessment Framework
IPCAT2	IPC assessment tool
JAG	joint action groups
JEE	joint external evaluation (of International Health Regulations [2005] core capacities)
KM	knowledge management
LGU	local government unit
LMICs	low- and middle-income countries
LMIS	logistics management information system

M&E	monitoring and evaluation
MCH	maternal and child health
MDG	Millennium Development Goal
MDR	multidrug resistant
MEL	monitoring, evaluation, and learning
MNCH	maternal, neonatal, and child health
MOH	Ministry of Health
MOHFW	Ministry of Health and Family Welfare
MOU	memorandum of understanding
MSC	multisectoral coordination
MSH	Management Sciences for Health
MTC	medicines and therapeutics committee
NEPAD	New Partnership for Africa's Development
NGO	nongovernmental organization
NTP	national tuberculosis program
OIE	World Organization for Animal Health
PEPFAR	US President's Emergency Plan for AIDS Relief
PMIS	pharmaceutical management information system
PQM+	Promoting the Quality of Medicines Plus Program
PSM	procurement and supply management
PSS	pharmaceutical systems strengthening
PV	pharmacovigilance
PY	program year
RCORE	regional center of regulatory excellence
RHSC	Reproductive Health Supplies Coalition
RSS	regulatory systems strengthening
SADC	Southern African Development Community
SCMP	Supply Chain Management Portal
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
SOW	scope of work
STG	standard treatment guideline
TB	tuberculosis
TLD	tenofovir/lamivudine/dolutegravir
TOR	terms of reference
TOT	training of trainers
TWG	technical working group
UHC	universal health coverage
UN	United Nations
UNDP	United Nations Development Programme
USAID	US Agency for International Development
WASH	water, sanitation and hygiene
WHO	World Health Organization

INTRODUCTION

PURPOSE

Funded by the US Agency for International Development (USAID) and implemented by a team led by Management Sciences for Health (MSH), the purpose of the five-year MTaPS Program (2018–2023) is to provide pharmaceutical system strengthening 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, and combatting infectious disease threats, as well as expanding essential health coverage.

GOAL

The goal the MTaPS Program is to help low- and middle-income countries 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.

MTAPS APPROACH TO STRENGTHENING PHARMACEUTICAL SYSTEMS

USAID awarded the MTaPS Program to enable low- and middle-income countries to 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, “access” refers 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). “Use” refers to prescribing, dispensing (or sale or supply to the user), and consumption (or end use).

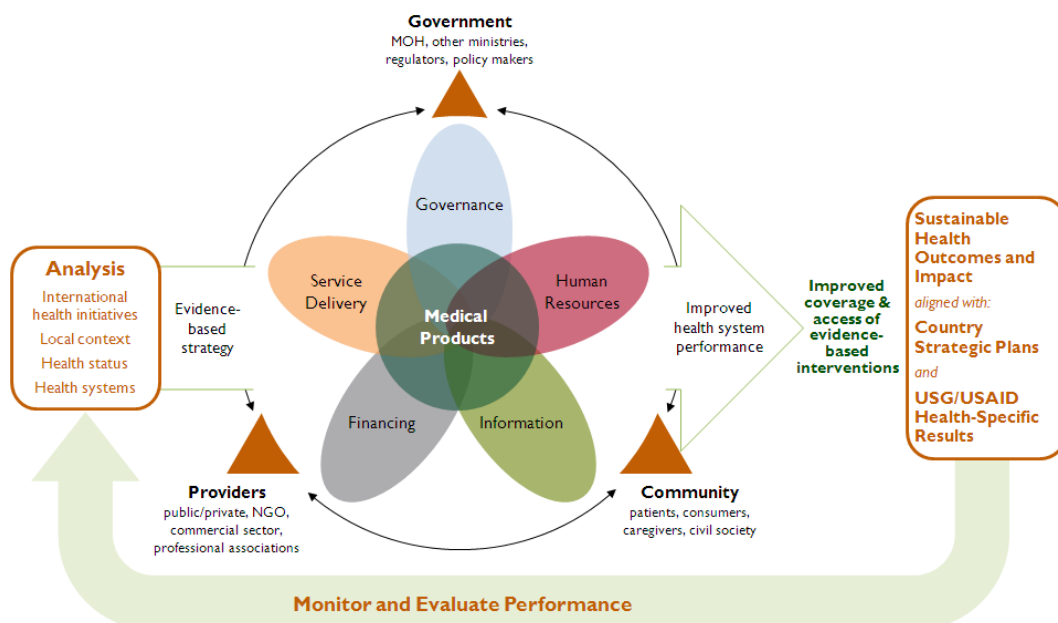


Figure 1. USAID pharmaceutical systems strengthening approach

The program's theory of change is based on USAID's Vision for Pharmaceutical Systems Strengthening (PSS),¹ 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 adopted 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.

ABOUT THIS REPORT

MTaPS has been at the forefront of the COVID-19 pandemic response. National governments, USAID, and other stakeholders have requested MTaPS' assistance in the pandemic response, specifically for activities to design/repurpose infection prevention and control (IPC) guidance and training materials, emergency supply chain management, waste management, triage, information systems, among others. By the end of the quarter, MTaPS received additional funding from USAID to respond to COVID-19 in **Bangladesh, Ethiopia, Kenya, and the Philippines**. In April 2020, MTaPS will also be implementing COVID-19 activities in **Burkina Faso, Cameroon, Côte d'Ivoire, Jordan, Mali, Mozambique, Senegal, and Tanzania**. Each MTaPS country has addressed the program's role in how MTaPS staff have quickly risen the challenge of this epidemic, building off the program's already existing platforms and best practices.

This report presents highlights from MTaPS' performance for fiscal year 2020 quarter 2 (January-March 2020). It summarizes program performance and key challenges and is organized by core funding, objective, and country.

¹ US Agency for International Development. USAID's vision for health systems strengthening, 2015–2019. Available at: <https://www.usaid.gov/sites/default/files/documents/1864/HSS-Vision.pdf>.

PROGRESS BY CORE-FUNDED PORTFOLIO

GLOBAL HEALTH SECURITY AGENDA

SUMMARY OF CORE ACTIVITIES THIS QUARTER

The GHSA technical implementation-framework documents and the GHSA performance indicator reference sheets (PIRS) are final and approved by USAID. The MTaPS monitoring, evaluation, and learning approach ensures that the MTaPS (HQ and country teams), USAID, and other stakeholders have access to timely, accurate information to monitor program performance and make appropriate decisions, as well as evaluate outcomes toward longer-term program goals. The indicators will be used to monitor GHSA country program outcomes, identify gaps in activities, and inform and adapt existing approaches and will be major components of reporting and learning.

During the quarter, MTaPS interacted with several stakeholders to share information about our GHSA/AMR work and collaborate on AMR-related activities to produce synergy and accelerate progress. Those stakeholder's are: the World Health Organization (WHO), the UN Food and Agriculture Organization (FAO) and the FAO Emergency Center for Transboundary Animal Diseases, World Organization for Animal Health (OIE), Codex Alimentarius, the US Centers for Disease Control and Prevention (CDC), the African Association for Antimicrobial Resistance Research and Control, Empower Swiss SARL, multiple training institutions and universities (including the University of Nairobi School of Pharmacy and Muhimbili University in Tanzania), and US government implementing partners, Infectious Diseases Detection and Surveillance (IDDS), HRH2030, Momentum 2 A, and Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM).

MTaPS met with the WHO AMR/antimicrobial stewardship (AMS) group to exchange information on AMR activities, particularly AMS. MTaPS provided an overview of its GHSA/AMR work in the three result areas of multisectoral coordination (MSC), infection prevention and control (IPC), and AMS. This included the generic AMS course the program recently developed, incorporating the WHO Practical AMS Toolkit. Similarly, the WHO provided information on the recent training it conducted in India based on its Practical Toolkit. Both organizations recognized the potential for collaboration going forward. MTaPS was also invited to participate in the WHO First Global Technical Partnership Meeting on AMS in Bangkok, Thailand that was scheduled for the end of February 2020, but was postponed due to the COVID-19 pandemic. The newly announced tentative dates are November 9-11, 2020.

In the previous quarters, MTaPS had finalized and distributed seven mini-guides with process checklists to MTaPS/GHSA countries relating to infection prevention and control, antimicrobial stewardship, and multisectoral coordination on AMR. The eighth mini-guide, on AMS guidelines, was drafted this quarter and will be finalized in the coming quarter. These guidance documents provide a standard and step-wise approach to the implementation process, a list of major steps, and key resources, all of which countries can adapt for their own implementation plans. These documents will also serve as a quality assurance mechanism and simplify the work by basing it on a standardized process that can potentially generate ample opportunities for cross-learning and South-South collaboration across countries.

GHSA- SUPPORTED COUNTRIES:

*Bangladesh
Burkina Faso
Cameroon
Côte d'Ivoire
DRC
Ethiopia
Kenya
Mali
Senegal
Tanzania
Uganda*

QUARTER PROGRESS BY GHSA-FUNDED PORTFOLIO

The focus of the MTaPS approach and implementation framework is to help countries make progress on the pathway to the next level of joint external evaluation (JEE) capacity in MSC, IPC, and AMS. Table I highlights the areas in which MTaPS supported this quarter. In addition, MTaPS is supporting the COVID-19 response in some countries (detailed in a country sections).

Table I. GHSA activities supported this quarter by MTaPS

GHSA Result Area	Activity	GHSA-funded country										
		Bangladesh	Burkina Faso	Cameroon	Cote d'Ivoire	DRC	Ethiopia	Kenya	Mali	Senegal	Tanzania	Uganda
Effective Multisectoral Coordination on AMR	Strengthening MSC governance structures and functions			X				X		X	X	X
	Holding multisectoral meetings	X	X			X	X	X		X	X	X
	Developing/updating governance documents		X		X		X	X				
	Conducting tripartite AMR country self-assessment survey					X	X					
Infection Prevention Control Improved and Functional	Strengthening governance structures for IPC					X	X					
	Assessing IPC programs at national and facility levels								X	X	X	X
	Developing/ implementing IPC policy and guidance documents	X					X	X	X	X		
	Capacity building in IPC			X	X		X	X	X	X	X	
Use of Antimicrobial Medicines Optimized	Developing and implementing AMS policy and guidance documents		X			X			X	X	X	X
	Assessing AMS policies and practices		X	X		X		X	X		X	
	Capacity building in AMS				X	X	X	X			X	

EFFECTIVE MSC ON AMR

To implement national action plans on AMR (NAP-AMR), MSC is paramount, but it requires strong country governance structures with clear roles and mandates—and often the creation of new structures, depending on the country.

MSC highlights in four important areas are as follows:

Strengthening MSC governance structures and functions. MTaPS supported the IPC and AMS technical working group (TWG) coordination meeting in **Cameroon** for 18 participants from different departments in the Ministry of Public Health and other ministries. Participants decided to build on existing hygiene committees in health facilities to conduct IPC activities and to update the hygiene committees' terms of reference to fit WHO's IPC committee standards. In **Senegal**, MTaPS supported several meetings of the recently revitalized One Health platform permanent secretariat to establish required TWGs, including for AMS. MTaPS then provided technical and financial support for the first AMR TWG meeting jointly with the FAO Emergency Centre for Transboundary Animal Diseases, where the TWG was named PREVENTION. At the meeting, members appointed the government institutions to the following roles: TWG chair and focal points for AMR, food health security, biosecurity and biosafety, zoonoses, and immunization. MTaPS supported and participated in the first meeting of **Tanzania's** Multisectoral Coordination Committee (MCC) IPC-TWG. MTaPS advised the MCC on the

content of the TWG's terms of reference, helped the MCC develop national IPC indicators, and assisted in the development of a strategy to oversee and monitor IPC implementation at health facilities. MTaPS also worked with the **Ugandan** National AMR Sub-Committee to appoint and supply terms of reference to members to its IPC and AMS technical working committees. MTaPS senior technical advisors were appointed as members.

Holding multisectoral meetings. Following up on last quarter's NAP-AMR implementation status workshop, MTaPS, in collaboration with the Communicable Disease Control/Directorate General of Health Services in **Bangladesh**, organized a multisectoral follow-up workshop for government and development partner representatives working on AMR containment. Participants emphasized the need to develop national standard treatment guidelines on infectious diseases. In **Burkina Faso**, MTaPS, in collaboration with the Directorate General of Environmental Protection, completed the review of international conventions on the protection of the environment, and MTaPS organized a national dissemination workshop for Burkina Faso's parliament members who sit on the Commission on Rural Development, Economy, and Climate Change and for Ministry of Environment staff. The purpose was to increase awareness of these international conventions and promote AMS by strengthening the legal framework on AMR. At the meeting, the commission's chairman committed to creating an AMR coordination group to organize awareness activities and draft legislation that addresses AMR in Burkina Faso. MTaPS supported **DRC's** drug regulatory authority in holding an AMR-TWG meeting to review the implementation of the AMR Action Plan 2019 and hear about AMR measures in the human, animal, and vegetal sectors. In addition, each subcommittee created implementation roadmaps to the national commission for adoption. In **Ethiopia**, MTaPS collaborated with the MOH/Pharmaceuticals and Medical Equipment's Directorate (MOH/PMED) to conduct a workshop with regional health bureaus to review NAP-AMR implementation status. Each region agreed to assign an AMR focal person to coordinate implementation of the region's AMR action plan. In addition, MTaPS provided technical support to PMED to conduct a National AMR Advisory Committee review meeting for 25 members where representatives from the Ministry of Agriculture, Ministry of the Environment, and MOH presented their six-month performance report and plans.

Developing and updating governance documents. Through a three-day stakeholders' meeting in **Côte d'Ivoire**, MTaPS supported the AMR-TWG in developing an advocacy document to accompany the printed NAP-AMR, the governance handbook, and the national AMR policy document to disseminate to the Ministries of Health and Public Hygiene, Animal and Fishery Resources, Agriculture and Rural Development, Research and Higher Education, and Environment and Sustainable Development. **Ethiopia's** National AMR Advisory Committee recommended revising the country's NAP-AMR, which expires in 2020, for the next 10 years. In Kenya, MTaPS, in collaboration with the national AMR secretariat, held the second meeting to review the IPC policy and IPC strategic plan with 22 IPC-TWG members. The team identified the strategic priorities for IPC initiatives in the health sector and incorporated stakeholder inputs into the IPC policy and strategic plan.

Conducting tripartite AMR country self-assessment survey (TrACSS). The purpose of the annual TrACSS is to review country progress in implementing critical actions to address AMR at the national level and identify priorities for next steps. Countries also report their results to the tripartite group (WHO, FAO, and OIE) for global summary. The country responses are used to guide follow-up actions and identify areas where technical assistance and support are required from the tripartite organizations. In the last quarter, MTaPS, working with WHO, provided technical support to **DRC** to conduct the TrACSS 2019-2020. A comparative analysis of the TrACSS 2019 self-assessment and the 2020 assessment reveals that there has been improvement in multisectoral representation, antimicrobial use regulation, and in-service training for health care providers. MTaPS/**Ethiopia** also helped the MOH/PMED conduct the fourth TrACSS in that country and draft the report. Results revealed that the multisectoral working group was functional, with clear terms of reference, regular meetings, and funding for working groups with activities and reporting/accountability arrangements defined. In addition, the

NAP AMR reflects WHO Global Action Plan objectives and has a budgeted operational plan and monitoring arrangements. Finally, the assessment showed that nationwide AMR awareness campaigns, based on stakeholder analysis, focused on priority stakeholder groups and used targeted messaging.

INFECTION PREVENTION CONTROL IMPROVED AND FUNCTIONAL

Strengthening governance structures for IPC at the national and facility levels. MTaPS is a member of the IPC TWG under **Ethiopia's** National Antimicrobial Resistance and Containment Advisory Committee and serves as its secretary. In FY20Q2, MTaPS attended the IPC-TWG's first meeting and helped review the draft terms of reference. This TWG will develop the annual operational and strategic plans and program focus areas. It will also help implement the operational and strategic plan and monitor and evaluate related interventions. In **DRC**, MTaPS is supporting the Red Cross by helping IPC committees in 21 of their health facilities use our continuous quality improvement (CQI) approach to strengthen their operations. MTaPS is implementing a supervision/coaching and mentoring strategy and developing indicators for monitoring the effectiveness of these committees in Red Cross-supported facilities.

Assessing IPC programs at national and facility levels and developing responsive action plans. The MTaPS team in **Mali** worked with the AMR National Focal Point and DGS to assess IPC core components at the central level using the WHO national IPC assessment tool (IPCAT2). Results for the main IPC components were as follows: IPC programs, 43%; IPC guidelines, 81%; IPC education and training, 38%; health care-associated infection surveillance, 13%; multimodal strategies, 25%; and monitoring/audit of IPC practices and feedback and control activities, 6%. Only the IPC guidelines component had a satisfactory score; therefore, interventions need to be developed to improve the scores in the other five components. An assessment using Infection Prevention and Control Assessment Framework (IPCAF) at the facility level is planned for next quarter. In **Senegal**, MTaPS, in collaboration with WHO, the IPC national steering committee, and the Directorate of Hospital Quality, Security, and Hygiene (DQSHH), also used IPCAT2 to evaluate the IPC strategy at the national level and develop the first draft of the national IPC action plan for 2020. At the facility level in **Tanzania**, MTaPS conducted IPC baseline assessment using the IPCAF tool in six regional and zonal hospitals (figures 1 and 2). Results showed that the scores on presence of guidelines were relatively high because MTaPS had already trained and distributed guidelines to facilities prior to this assessment. On the other hand, health care-associated infection surveillance and audit of IPC practices scored low in almost all hospitals. MTaPS provided feedback and the hospitals developed action plans to address gaps. MTaPS will mentor hospital staff on implementing the action plans to increase their capacity and strengthen their IPC programs.

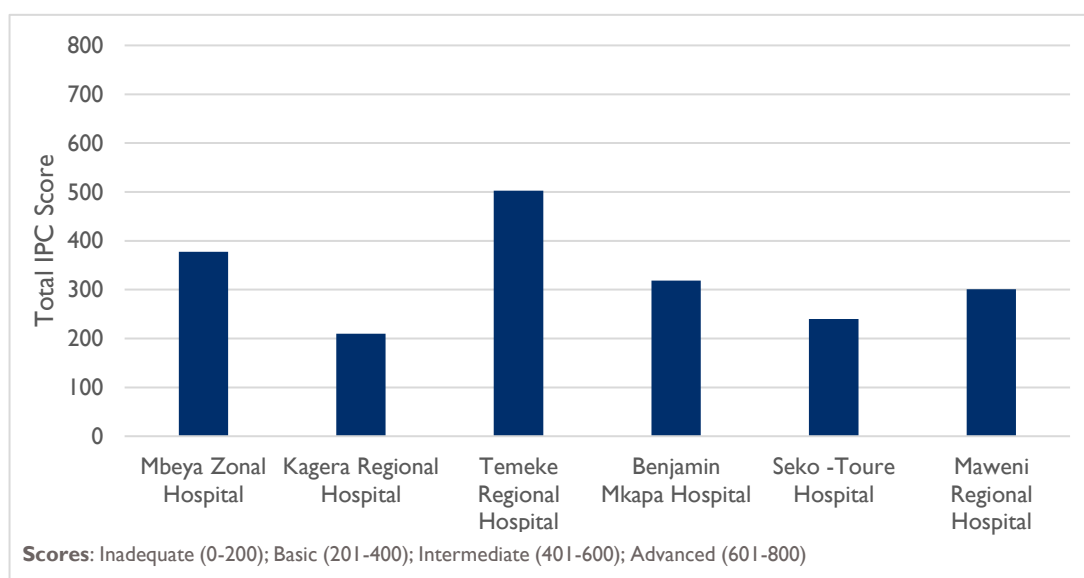


Figure 1. Overall MTaPS-supported hospital IPC baseline assessment scores in Tanzania

Results showed that the scores on presence of guidelines were relatively high because MTaPS had already trained and distributed guidelines to facilities prior to this assessment. On the other hand, health care-associated infection surveillance and audit of IPC practices scored low in almost all hospitals. MTaPS provided feedback and the hospitals developed action plans to address gaps. MTaPS will mentor hospital staff on implementing the action plans to increase their capacity and strengthen their IPC programs.

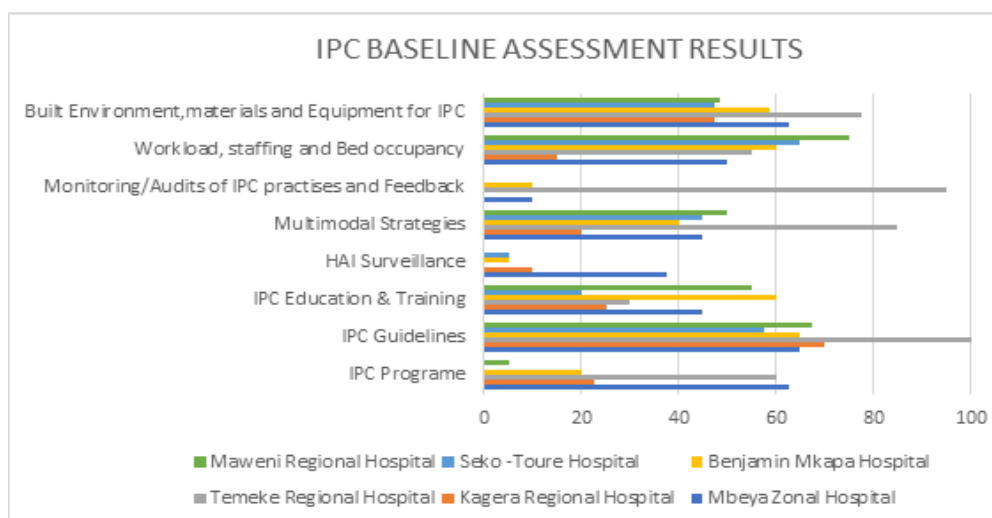


Figure 2. MTaPS-supported Hospital IPC baseline assessment scores by IPC component in Tanzania

During this quarter, MTaPS/**Uganda** supported seven health facilities in implementing CQI action plans for IPC that they had developed based on their IPCAF scores. As part of its support to the CQI process, MTaPS helped the facilities develop terms of reference for the hospital IPC committees, propose members for IPC committees and IPC teams, prioritize activities for early implementation, print and disseminate IPC reference documents, and choose which lower-level health facilities would receive support supervision by regional referral hospitals. In addition, MTaPS conducted another baseline IPC survey for Nagalama Hospital.

Developing and implementing IPC policy and guidance documents. In **Bangladesh**, MTaPS facilitated development of national guidelines on IPC for health care providers under the leadership of Communicable Disease Control/Directorate General of Health Services and with participation of working group members from DGHS, quality improvement secretariat, Institute of Epidemiology Disease Control and Research, US CDC, International Centre for Diarrhoeal Disease Research, Bangladesh [icddr,b], National Institute of Preventive and Social Medicine, public medical college hospitals, private institutes and hospitals, and other stakeholders. MTaPS/**Ethiopia** drafted a supportive supervision checklist to monitor implementation of IPC activities at designated health facilities. The checklist covers revised national IPC guidelines and core components of IPC activities in the health facilities. The draft checklist will be reviewed and endorsed by government stakeholders before it is distributed for use. In **Mali**, MTaPS supported the national multisectoral committee and the Hygiene Sub-Directorate of the General Directorate of Health to validate the human health-sector IPC guidelines that were revised in November 2019 (final document now available); likewise, MTaPS/**Senegal** supported the technical validation and finalization of the national IPC policy document.

Developing individual and institutional capacities. Following the training of 10 experts on how to adapt curricula for adult learning in the previous quarter in **Cameroon**, MTaPS organized two working sessions with five of these experts to finalize the macro-design and micro-design of the trainer's guide and to develop the facilitator guide and participant manual on hygiene and IPC. In **Côte d'Ivoire**, MTaPS collaborated with the Directorate General of Health, the Directorate of Hospital and Proximity Medicine, the Directorate of Training and Health Research, and the Directorate of Veterinary Services to support the multisectoral technical committee in charge of IPC and sanitation (MTC 4) to organize a workshop to convert IPC training materials to a competency-based training package adapted for e-learning. The workshop offered MTaPS the opportunity to build the capacity of 10 MTC 4 members on innovative approaches to designing and implementing skills-based training programs. The MTC 4

members developed the macro-design and the micro-design of the trainer's guide and finalized the guide and participant handbook on hygiene and IPC, in collaboration with MTaPS staff. In addition, MTaPS helped train 12 trainers using the finished materials. The last training day was dedicated to COVID-19 and led by WHO. These new trainers will be responsible for training on-site health workers on COVID-19 and IPC.

In **Ethiopia**, MTaPS supported the Addis Ababa City Administration Health Bureau (AACAHB) in conducting basic IPC training for IPC committee members and IPC coordinating professionals from 19 public and 6 private hospitals. The purpose of the eight-day training was to build the capacity of IPC committee members so they could effectively implement IPC activities. The session included a one-day site visit to Bishoftu Hospital to observe IPC practices. Six hospitals presented their draft IPC action plans, and, following the training, MTaPS and AACAHB made frequent supportive supervision visits to help get the IPC action plans endorsed by their respective hospital management, which they accomplished. AACAHB also requested that MTaPS support training of 33 health professionals (physicians, field epidemiologists, nurses, and environmental health professionals) who will be working in public COVID-19-suspect isolation centers in Addis Ababa on basic IPC and a new COVID-19 module.

MTaPS/**Kenya** engaged 29 representatives from 12 health professional associations, along with nongovernmental organizations, a training institution, and the MOH to develop health care workers' competencies in IPC and AMS. In addition, MTaPS collaborated with the National Nursing Association of Kenya and the national AMR secretariat to host a meeting for the nursing association's education team and professional association representatives to develop a continuing professional development (CPD) and relicensure-linked IPC/AMS training course for professional associations to deliver. The team identified the modules to include and CPD allocation criteria and drafted a roadmap for the development process. MTaPS also provided technical assistance to a health facility IPC training of 96 trainers that was fully financed by the Nyeri Country Referral Hospital.

In **Mali**, MTaPS provided technical support to a competency-based workshop to strengthen the skills of the GCMN-RAM (including DGS) on the design and delivery of innovative capacity-building approaches to IPC training for 30 DTC members from the human and animal health sectors. Participants produced a competency-based curriculum consisting of a facilitator guide, a timed agenda for face-to-face training sessions, a participant guide based on IPC guidelines, and PowerPoint slides covering 20 sessions. A toolkit that includes IPC guidelines, curriculum, and job aids will be validated as a next step.

With the COVID-19 pandemic situation, **Senegal's** DQSHH requested that MTaPS begin implementing some IPC priority activities from the hospitals' action plans. In response, MTaPS supported an on-the-job training session for 25 participants at the level 3 hospital HOGIP in Dakar focused on hand hygiene, waste management, and prevention of cross-infection transmission. The session emphasized identifying the hospital's gaps on IPC practices and developing an action plan to address them. These actions are included in the hospital's infection control committee action plan. MTaPS will help the hospital use CQI to ensure that IPC activities are implemented and supported by a culture of quality improvement.

MTaPS/**Senegal** also supported a meeting for the final review and approval of the IPC training modules that were uploaded to the e-learning platform this quarter. The DQSHH has developed videos of hand hygiene, bio cleaning, and waste management practices to add as training support for IPC e-learning. The next step will be to select participants from three target hospitals to pilot the e-course.

MTaPS continued to convert the IPC training materials into an e-learning format to be used by the Centre for Distance Education for online training in **Tanzania**. So far, MTaPS has converted eight sessions. MTaPS also conducted IPC training for 61 trainers from training institutions, including Muhimbili University, Kampala International University, and Kilimanjaro Christian Medical Center. Participants included tutors who are medical laboratory scientists, nurses, doctors, pharmacists, and environmental specialists, among others. The training included demonstrations of IPC skills, such as how

to wear personal protective equipment. These tutors will teach pre-service students on current IPC practices and guidelines and increase the number of health care workers within Tanzania who have updated knowledge and skills on IPC best practices.

USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Developing and implementing AMS policy and guidance documents. Under the leadership of the Directorate General of Pharmacy, Medicines, and Laboratories and the WHO, MTaPS participated in the update of **Burkina Faso's** essential medicines list to ensure that antimicrobials are classified according to the WHO AWARe categorization. MTaPS/**DRC** is also providing technical support to incorporate AWARe categorization in the essential medicines list there. During the quarter, MTaPS worked with stakeholders in **Mali** to collect data and documents as a step toward developing standard treatment guidelines for infectious diseases; at the same time, MTaPS/**Senegal** team members continued working with the National Committee for Antibiotic Treatment subgroups to incorporate AWARe classification into applicable standard treatment guidelines. During a technical meeting, the four TWG subgroups presented their updated guidelines. MTaPS/**Tanzania** supported MOHCDGEC to finalize the policy guidelines on implementing the country's AMS program. MCC approved the document in February 2020 and will guide stakeholders who are implementing AMS-related activities. In **Uganda**, MTaPS and an animal health expert reviewed a draft essential medicines list for veterinary use and guidelines for antimicrobial use in the animal sector that were developed by consultants this quarter. The next step will be to facilitate a stakeholder meeting to review the documents. MTaPS also continued working with six regional referral hospitals to help them get their AMS and IPC committees up and running, including understanding their roles, proposing members, prioritizing AMS activities, disseminating AMS references, finalizing terms of reference, and prioritizing lower-level health facilities to receive supportive supervision under the center of excellence model.

Assessing AMS policies and practices. A number of MTaPS GHSA countries conducted rapid assessments of AMS policies and regulations during this quarter. To inform the development of **Burkina Faso's** national AMS plan, MTaPS conducted a rapid assessment of stewardship policies, tools, and field activities to uncover the gaps that perpetuate irrational antimicrobial use. MTaPS, the MOH, the Ministry of Animal Resources and Fishery, and the FAO agreed on the assessment tool and conducted a desk review of laws, decrees, policy documents, and regulations for both sectors (human and animal). The resulting draft report has been reviewed and will be finalized during a national MSC workshop. Following desk review of policies and regulations on the use of antimicrobials in **Cameroon**, MTaPS supported a 3-day workshop for 10 pharmacists and clinicians from several departments in the Ministry of Public Health to complete the AMS assessment in the human sector. The analysis is the first step in developing a national AMS plan. MTaPS/**DRC** worked with the AMR-TWG secretariat to conduct a rapid AMS assessment as well as map AMS stakeholders. Last quarter in **Mali**, MTaPS supported a rapid assessment of stewardship policies and regulations and the supply chain management of antimicrobials in the human health sector. A draft version of the report is available and plans are underway to conduct the same for the animal sector. In **Tanzania**, MTaPS continues to work with government stakeholders to analyze data from pharmaceutical companies and health facilities to determine national antimicrobial consumption, which will help drive national and facility-level AMS interventions.

Developing individual and local capacities. In **Côte d'Ivoire**, MTaPS is working side-by-side with the AMR-TWG to improve the rational use of antimicrobials in the human and animal sectors. MTaPS helped organize a meeting of the AMS-TWG (MTC 5) to validate a DTC evaluation tool and start developing materials to train DTC members in health facilities. The meeting participants identified 11 training topics and assigned different MTC 5 members to develop materials, which will be based on the results of a DTC evaluation in 2 teaching hospitals in the previous quarter. MTaPS also supported a training for MTC 5 members that included 18 representatives from the AMR Secretariat/National Observatory on Antimicrobial Resistance in Côte d'Ivoire, Teaching Hospitals of Treichville, National

Laboratory for the Support of Agricultural Development, Oceanography Research Center, World Organization for Animal Health, Pasteur Institute of Côte d'Ivoire, National Program for the Development of Pharmaceutical Activity, Ivorian Anti-Pollution Center, professional associations, and Directorate of Pharmacy, Medicines, and Laboratories. The training built the capacity of MTC 5 members to develop AMS training materials that align with adult-learning principles and how to design and draft curricula.

In **DRC**, MTaPS carried out AMR sensitization and introduced the role of DTCs to multidisciplinary clinical teams (200 participants) from 3 hospitals that will pilot DTCs. MTaPS also collaborated with the University of Kinshasa's National Pharmacovigilance Center team to integrate AMS- and IPC-related issues into the DTC training modules, which were finalized.

MTaPS/**Ethiopia** is working with private sector and civil society groups to raise awareness of AMR issues; for example, during the past quarter, MTaPS collaborated with the Ethiopian Pharmaceuticals Association to train 29 community pharmacy practitioners to improve rational antimicrobial use. MTaPS also continued working with the Ethiopian Youth and Women Federations to give volunteers the skills to add AMR awareness to their existing work promoting hygiene and maternal and child health in their communities. MTaPS trained 29 volunteers in January from the Addis Ababa Youth and Women Federation. MTaPS trained an additional 36 AMS team members from 15 facilities on how to conduct prospective audit and feedback interventions in their hospitals. MTaPS assessed DTC functionality in a second batch of 16 hospitals in 4 regions; results showed that DTCs existed in 14 hospitals, but only functioned in 42% of them. Only four hospitals had stewardship programs, but only one of those was functioning. The assessment will serve as a critical reference point for the hospitals to develop monitoring and evaluation frameworks, but also for MOH and MTaPS to identify major gaps and guide possible interventions.

MTaPS continued its work to strengthen AMS activities in Nyeri and Kisumu Counties in **Kenya**, including conducting mentoring visits at target health facilities and community pharmacies to track the status of AMS-related work plans and hold feedback dissemination meetings with county health management teams. MTaPS is also working with the Kenyatta National Hospital and Gertrude's Children's Hospital to strengthen medicine use, including helping Kenyatta finalize its formulary to use as a tool to promote good prescribing and training prescribers at the children's hospital in managing infectious diseases appropriately. Similar to its work to create a CPD course for IPC, MTaPS is also collaborating with the Pharmaceutical Society of Kenya and other health professional associations to develop a CPD curriculum for AMS in health care settings and the community. In addition, MTaPS worked with the University of Nairobi School of Pharmacy in FY20Q2 to conduct a pre-service AMS training needs assessment that contributed to the development of an AMS curriculum and course content for undergraduate and graduate students.

MTaPS/**Tanzania** adapted the generic AMS training material that MTaPS headquarters had previously developed to suit the Tanzanian context. Using the adapted materials, MTaPS trained 27 newly appointed National Medicines and Therapeutic Committee members to build their capacity on coordinating and overseeing Tanzania's AMR/AMS-related activities.

ACTIVITIES FOR NEXT QUARTER FOR MTAPS GHSA CORE ACTIVITIES

ACTIVITY AND DESCRIPTION	DATE
Finalization of AMS mini-guide	May
Update AMR courses in USAID's Global Health eLearning (GHeL) Center	April-September
<ul style="list-style-type: none"> Review the existing GHeL courses and revise incorporating newer data and reflect the GHSA/JEE/benchmark concepts 	
Finalize and disseminate MTaPS GHSA Technical Implementation Framework	April-June
<ul style="list-style-type: none"> Send the revised two-part technical implementation framework for their review and then finalize and disseminate the revised version to MTaPS country teams 	
Generic AMS training set	April-June
<ul style="list-style-type: none"> Revise the training set based on experiences and lessons learned from its pilot in the previous quarter in Mozambique 	
Collaborate with WHO on AMS	April-June
<ul style="list-style-type: none"> Have a follow-on meeting with WHO, potentially at the end of May, exchange our respective training sets, and find ways of harmonizing the materials and collaborating for future training events 	

MATERNAL, NEWBORN, AND CHILD HEALTH

Preventing child and maternal deaths requires treatment with safe, effective, and quality-assured medicines and pharmaceutical services. The MTaPS maternal, newborn, and child health (MNCH) portfolio contributes to achieving Sustainable Development Goal 3: Ensure healthy lives and promote well-being for all at all ages and preventing child and maternal deaths by increasing global awareness of the barriers to access to essential maternal and child health medicines and supplies and providing technical assistance to reduce these barriers at both the global and country levels. The goal of the MTaPS/MNCH portfolio is to ensure 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.

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

Activity 2.1.1: Review of registration of MNCH commodities

MTaPS continues to support countries to ensure the quality of MNCH medicines by strengthening the registration systems of those medicines and improving procurement practices at sub-national levels. During this quarter, data were gathered in seven of the nine countries (Mali, Mozambique, Nepal, Rwanda, Senegal, Tanzania, and Uganda) approved by USAID missions to engage in this activity. The country teams in DRC and Bangladesh will be oriented to conduct the activity next quarter. Reports are being developed to document the processes and bottlenecks of registration of MNCH medicines and medical devices in each country and to highlight key issues that the national medicines regulatory authorities should consider to further improve the process.

MTaPS has also finalized a topic guide/questionnaire to study manufacturers' perspectives on registration and the barriers they encounter to register quality MNCH products in low- and middle-income countries. MTaPS prepared a list of 2 manufacturing associations and 18 manufacturers of MNCH medicines to interview, some of which are WHO prequalified products, and a consultant has been hired to conduct those interviews in the coming quarter.

Activity 2.1.2: Document quality assurance in local procurement

This activity is to document best practices to ensure quality of medicines when they are procured locally, using examples from Tanzania and Nigeria. During this quarter, a consultant was recruited in Nigeria, and initial discussions were held with key stakeholders, such as USAID, the Promoting the Quality of Medicines Plus (PQM+) and Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) projects, and the World Bank project team. Discussion is ongoing to recruit a consultant in Tanzania. The data collection instrument is being finalized, but it is unlikely that the consultants will be able to travel to the different states and regions to collect data due to the travel restrictions of the COVID-19 response. As a result, this activity is on hold until travel can resume in Tanzania and Nigeria and the aim is to complete the activity during the last quarter of this program year.

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

3.2.2: Global learning on pharmaceutical systems for MNCH

As part of the global learning agenda on pharmaceutical systems for MNCH, MTaPS is developing a series of microlearning² videos to raise awareness and promote understanding of why strengthening the pharmaceutical system is important for women's and children's health outcomes. These microlearning videos are a complement to the MTaPS online and face-to-face training program on pharmaceutical systems strengthening. During this quarter, MTaPS further refined the draft content, including defining the audience, key messages, and examples to be provided in each video. The first video will be a general introductory video; the second will be on regulatory systems and their importance for improving access to safe, effective, and quality-assured medical products and improving maternal, child, and newborn health outcomes; and the third will be on financing pharmaceuticals and medical products for MNCH outcomes. A consultant for video development and a narrator are on standby until the storyboards are completed. It is expected the videos will be completed in next quarter.

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

Activity 5.1.1: Revise RMNCH quantification guide

MTaPS drafted the revision of the RMNCH quantification supplement developed under the UN Commission on Life-Saving Commodities (UNCoLSC) during this quarter, updating global recommendations and incorporating contributions from a number of partners, including John Snow, Inc. (JSI), Gynuity, Path, Clinton Health Access Initiative (CHAI), GHSC-PSM, Results for Development (R4D), and Ferring. The document structure has been revised so that each chapter focuses on a condition rather than on a medical product to reduce repetition. The complete draft was shared with partners for review. Comments will be incorporated into the document to finalize it.

Activity 5.2.1: Improve adherence to amoxicillin dispersible tablets (DTs) for childhood pneumonia

A virtual meeting was held with UNICEF and USAID in February to discuss barriers to amoxicillin use and how to improve adherence. An option that was explored was to utilize the work carried out under the UNCoLSC to develop job aids and dispensing envelopes. However, as there was concern about the low level of increase in adherence noted in a study in Bangladesh using the tools, it was agreed that MTaPS should explore further the barriers to adherence identified in the studies. It was agreed that the tools could be made available on the UNICEF website through an existing link to an amoxicillin document in which they are already mentioned. MTaPS is in the process of finalizing the tools by incorporating minor edits from validation studies conducted several years ago, to prepare a final package for dissemination.

Activity 5.2.2: Define respiratory package

During this quarter, MTaPS drafted a mapping of technical packages of medical devices for oxygen therapy and their technical specifications. The discrepancies in these packages will be further analyzed and presented to the group of partners collaborating on oxygen. MTaPS is also mapping the support of

² This process entails turning complex technical content into smaller bite-size or shorter nuggets of content that are more easily digestible content by employing learning tactics in a manner that makes sense, saves time, and engages our learners.

partners in the respiratory ecosystem to define what is being done where and how best to strengthen systems to ensure appropriate oxygen administration.

MTAPS COUNTRY ACTIVITIES TO PREVENT CHILD AND MATERNAL DEATHS

This section highlights selected areas of work and achievements of the country portfolios of the MTaPS program during quarter 2 that will improve access to and appropriate use of safe, effective, and quality-assured medicines and pharmaceutical services for women and children.

In **DRC**, where MTaPS has a GHSA-funded portfolio, MTaPS has received MNCH funding to work in the east of the country in a fragile setting to strengthen pharmaceutical systems for maternal and child health outcomes. This quarter, MTaPS conducted a scoping visit to North Kivu (Goma) and Ituri (Bunia) to define a technical approach, which was documented in a work plan submitted in February. The visit was also used to inform decisions on office locations and logistics in these fragile zones of constant unrest. A security plan was drafted, and four staff were recruited to start next quarter to implement the MNCH-funded work.

In **Rwanda**, MTaPS continued discussions with USAID on the work plan presented to USAID Rwanda in the previous quarter that targeted activities to improve access to and use of MNCH medicines, such as improving conservation of oxytocin and use of maternal health medicines, improving access to and use of oxygen, streamlining registration of MNCH medicines and medical devices, and supporting management of medicines at the community level.

While the activities that MTaPS implements in country are to strengthen pharmaceutical systems in general and are not necessarily focused specifically on MNCH medicines and technologies, they contribute to improving women's and children's health through regulatory systems strengthening, supporting antimicrobial stewardship, strengthening the use of information for decision making, building human resource capacity for pharmaceutical management, and strengthening pharmacovigilance and financing. More details on these activities can be found in the country-specific sections of this quarterly report.

Regulatory systems strengthening

In **Mozambique, Nepal, Bangladesh, and Rwanda**, MTaPS is supporting the regulatory authority to improve the regulatory system and raise the maturity level as per Global Benchmarking Tool (GBT) assessments and thereby ensure quality of medicines and pharmaceutical services for women and children. These activities will standardize the regulatory system and make it more efficient for ensuring the quality and safety of medicines, including those for women and children. In addition to the MNCH core-funded activity to assess registration for MNCH medicines that MTaPS is conducting in several countries, Nepal, Rwanda, and Mozambique made progress on their regulatory system strengthening activities this quarter.

MTaPS in **Nepal**, in collaboration with other international partners, is supporting the Department of Drug Administration (DDA) to strengthen the national regulatory system based on the DDA's self-assessment using the WHO GBT conducted in August 2019. MTaPS is conducting a desk verification of the modules on market surveillance, control, registration, and marketing authorization that will inform the update of the Institutional Development Plan. MTaPS is also working to streamline the registration process by mapping workflow and preparing to establish an electronic regulatory management information system.

During this quarter in **Rwanda**, the Rwanda FDA Institutional Development Plan, which MTaPS had supported the Rwanda FDA to develop, was used as a guidance document during the Coalition of Interested Partners workshop held in January with support of WHO Geneva. MTaPS also participated in a validation workshop with the Rwanda FDA at which five regulations and eight guidelines, including the

classification of medical devices, were validated. MTaPS also contributed to and participated in the review of the list of authorized human medicines that will be used as reference documents for importation of medicines into the country.

In **Mozambique**, the MTaPS team continued with the process of contracting an IT company to provide support to the DNF in ensuring that the Pharmadex tool for medicines registration is functional by launching the procurement process. MTaPS continued working with DNF counterparts to install the online version of Pharmadex. The medicines importation module of Pharmadex will allow applicants to request import authorization online. This enhancement is intended to improve speed and quality of the medicine registration process for essential medicines including MNCH products, reduce the clerical workload for registration technicians, and improve customer service and efficiency.

Pharmacovigilance for medicine safety is equally relevant for medicines used for women and children. In **Bangladesh**, MTaPS continued to provide technical assistance to the DGDA to improve the current reporting and monitoring system for adverse drug events, including for MNCH medicines, by facilitating a workshop to evaluate adverse drug events received by the DGDA in November and December 2019 and supporting planning for the scale up of the PV system to 50 hospitals and 50 pharmaceutical companies.

In **Mozambique**, the active monitoring pharmacovigilance activity has an MNCH component as pregnant women being treated with the new ARV - tenofovir, lamivudine, and dolutegravir (TLD) are a target group for enrollment and follow up. During this quarter, 7 MCH nurses from 10 selected facilities were trained as part of the group of 67 healthcare providers trained. As such they are enabled to capture ADEs on MNCH medicines used by the women in addition to TLD or used by other women.

Support antimicrobial resistance initiatives

MTaPS promotes antimicrobial stewardship, which is particularly important for women's and children's health due to the increased risk of newborn infections and maternal sepsis.

In **Mozambique**, MTaPS worked with the Hospital Pharmacy Department of the Ministry of Health to prepare for and implement training on antimicrobial stewardship for health providers to equip them with knowledge to understand the importance of antimicrobial control and good governance processes to reduce the emergence and control the spread of antimicrobial resistance. In total, 29 health workers from 7 regional hospitals and 7 general hospitals were trained on antimicrobial resistance and its global and country impact, the AWARe categorization, the quantity and quality of antibiotic use, and implementation of antimicrobial control interventions. They later developed antimicrobial stewardship plans for their health facilities.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
2.1.1: Review of registration of MNCH commodities	
<ul style="list-style-type: none"> Complete the data gathering in DRC and Bangladesh; finalize the country summary reports, including action steps for all nine countries; and conduct interviews with pharmaceutical manufacturers. Draft technical brief 	May
2.1.2: Document quality assurance in local procurement	
<ul style="list-style-type: none"> Collect information on local procurement when possible in both countries Draft best practices document 	July August
3.2.2: Global learning on pharmaceutical systems for MNCH	
<ul style="list-style-type: none"> Finalize the content for the microlearning modules on MNCH for the PSS training program and develop videos for review and finalization 	June
5.1.1: Revise RMNCH quantification guide	
<ul style="list-style-type: none"> Integrate reviewer comments into the guide Finalize guide and format for dissemination 	April May
5.2.1: Improve adherence to amoxicillin DT for pneumonia	
<ul style="list-style-type: none"> Finalize job aids and dispensing envelopes in English, French, and Spanish Coordinate dissemination with UNICEF Identify the barriers to adherence to amoxicillin encountered in the adherence aid studies 	May
5.2.2: Define respiratory package	
<ul style="list-style-type: none"> Finalize comparison of technical packages for oxygen therapy Finalize mapping of global landscape of implementation and support on respiratory package 	June

OFFICE OF HEALTH SYSTEMS, CROSS BUREAU FUNDING

ACTIVITY 1: REFINE/VALIDATE PSS INSIGHT IN USAID MTAPS-SUPPORTED COUNTRIES

This quarter, MTaPS completed the indicator reduction exercise for PSS Insight, bringing the number of proposed indicators from 117 to 38. Many indicators were transferred from PSS Insight v1.0. However, a few were redeveloped to reflect the ongoing discussions with the World Health Organization (WHO) regarding PSS Insight's inclusion in or complementarity with a potential WHO's benchmarking tool for pharmaceutical systems.

Discussions with the WHO regarding the relationship between PSS Insight and their team's efforts to measure pharmaceutical systems continued this quarter. The MTaPS team is still clarifying the role of PSS Insight within that effort and has held informational discussions with various units at the WHO to gain insight into their existing efforts to measure aspects of pharmaceutical systems and glean lessons learned and opportunities to optimize our efforts going forward. Topics have included the development and piloting experience with WHO's MedMon, an innovative multi-language tool for rapidly collecting and analyzing data on the price and availability of medicines in health facilities and procurement centers, the WHO's nascent development of a benchmarking tool or checklist for pharmaceutical systems, the Global Benchmarking Tool (GBT) for regulatory systems, as well as ongoing development of a quantitative tool for potential use in certifying WHO listed authorities for regulatory systems.

ACTIVITY 2: ENHANCE THE GLOBAL PHARMACEUTICAL SYSTEMS LEARNING AGENDA

MTaPS continued to make progress on developing the PSS 101 course. Based on feedback gathered at the first training session in November 2019, the program refined the face-to-face version of the course to train a second cohort of USAID staff members. The training was scheduled for March but had to be cancelled because of the pandemic. MTaPS has since uploaded the materials to a shared Google drive so that participants can access the materials and learn at their own pace. Work on the e-learning version of the course, which was interrupted because of organizational changes with our partner, has resumed this quarter. The program contracted a new vendor and resumed work on developing the storyboard for the remaining course module.

Following MTaPS' presentation of its concept for a learning exchange at the Joint Learning Network for Universal Health Coverage (JLN) global meeting in Bahrain in December 2019, the JLN steering group asked the program to develop a scope of work detailing the activities to be included in the exchange. This quarter, MTaPS drafted the scope of work, and, based on participants' interest at the meeting, proposed that the learning exchange focus on medicine pricing strategies. The exchange would run from April to August 2020 and consist of two two-hour webinars facilitated by MTaPS and its partner, Boston University's School of Public Health. The exchange would also include a moderated, asynchronous component to allow additional discussion among participants and gathering of additional input on the selected topics. The steering group has since approved the scope of work and the program developed a request for expression of interest from country participants. However, the request has not yet been issued to the countries. Upon advice of the JLN team, MTaPS is pursuing conversations with another JLN-facilitating organization to explore the possibility of partnering on the learning exchange. If the partnership comes to fruition, it would allow the program to expand the scope of the proposed exchange to engage substantively with country participants on the issue of medicine pricing.

MTaPS hosted a virtual meeting of the Pharmaceutical Systems Strengthening Technical Advisory Group (PSS TAG). Prior to the meeting, the program worked internally to clarify the purpose of the group in an effort to ensure substantive, ongoing engagement with TAG members. The program developed a concept note proposing that the TAG convene twice per year instead of quarterly and that each

meeting involve a deep discussion of a topical issue, which forms the basis for a subsequent editorial or commentary. The concept note formed the basis for discussions at the virtual meeting. Key meeting outcomes included agreement on the proposal to meet semiannually and to have targeted discussions on key PSS-related issues. Additionally, the group agreed to draft an editorial and develop a series on PSS to be published in the *Journal of Pharmaceutical Policy and Practice* (JOPPP). The group also discussed plans for a proposed speaker series on PSS and agreed to participate as featured speakers and panel members in the series. Engaging the TAG in these various activities will allow the program to balance its budget constraints while still working with the group in a substantive way to advance a global PSS learning agenda and create a positive shift to a more holistic view of the role of medicines in national health systems.

MTaPS also continued work on its publication pipeline this quarter. The program has drafted one commentary on integrating PSS into the global health agenda and several other analyses and drafts are at varying stages of development. The program also drafted two conference abstracts, one for an Asia Bureau activity on managing conflicts of interest in pharmaceutical committees, which was submitted to Health Systems Research (HSR) 2020. The second was for a skills-building session on PSS measurement, which was also intended for HSR 2020. However, the program decided not to submit and wait until the ongoing discussions about PSS insight and its alignment with the WHO's tool are resolved. Last quarter, MTaPS was notified that its abstract entitled "Understanding Underreporting of Adverse Drug Events for Improving the Pharmacovigilance System in the Philippines" was accepted for an oral presentation at the International Society to Improve the Use of Medicines Conference in January.

During this quarter, the program launched its "Pharmaceutical Systems in Practice Series," a brown bag series open to MTaPS staff and partners and all MSH staff. The series provides a collegial environment for MTaPS staff and partners to share lessons and discuss questions and challenges emerging from program implementation. The Bangladesh team presented the rollout of an electronic asset management system (eAMS) in Bangladesh in partnership with the Ministry of Health and Family Welfare to manage medical equipment. The presentation has since led to plans for a publication on the effect eAMS has on the efficiency of medical equipment management in the country, and the program is now in early stages of accessing and exploring the data.

ACTIVITY 3: IN COLLABORATION WITH CORE PARTNER NEPAD, SUPPORT THE AFRICAN MEDICINES REGISTRATION HARMONISATION (AMRH) INITIATIVE TO INCREASE INSTITUTIONAL AND HUMAN RESOURCE CAPACITY FOR PHARMACEUTICAL REGULATORY SYSTEMS IN AFRICA

MTaPS continued supporting the strengthening of institutional and human resource capacity for pharmaceutical regulatory systems in Africa through collaboration with AUDA-NEPAD. Previously, the program had engaged a consultant to use the validated monitoring and evaluation (M&E) tool for regional centers of regulatory excellence (RCOREs) to complete data collection on the performance of 11 selected RCOREs and analyze the data. This quarter, MTaPS worked with FHI360 to review the resulting baseline report and plans for disseminating the findings to the RCOREs and drafting a peer-reviewed publication on the findings.

MTaPS had several face-to-face and virtual meetings with AUDA-NEPAD to discuss progress on implementing work plan activities. At a meeting on February 13, 2020, to discuss the joint action groups and the support provided by development partners, MTaPS submitted a high-level brief informing the AMRH partnership platform of its support to the Policy and Regulatory Reform Technical Working Group (TWG). The program also expressed its interest in supporting other AMRH TWGs including the ones on medical devices, medicine registration, and pharmacovigilance, once created. The program also provided an update on Coalition of Interested Parties Rwanda and the creation of African Medicines Agency.

The program was scheduled to participate in the AMRH week, but it has been postponed to November 2020. Following discussions with AUDA-NEPAD, MTaPS agreed instead to perform a quality review of the Medicines Regulatory Harmonization Program management guidance document. The document aims to facilitate a more effective, efficient, and sustainable operation of the regional medicine regulatory harmonization programs. The program has conducted a preliminary review and has made plans to engage a consultant from IGAD, where the guidance document will be piloted, to provide insight on the operational procedures at the regional level for medicine regulatory harmonization.

ACTIVITY 5: DEVELOP A ROADMAP FOR HEALTH TECHNOLOGIES ASSESSMENTS (HTA) INSTITUTIONALIZATION FOR LMICS

The team invited 26 global experts to review the first draft of the roadmap; they have received feedback from 12 of them. Work is now in progress on the second draft and completion is expected June 2020.

ACTIVITY 6: EXAMINE OPPORTUNITIES FOR AND BARRIERS TO THE USE OF DRUG SELLERS IN INCREASING ACCESS TO MEDICINES AND OTHER HEALTH TECHNOLOGIES IN LOW- AND MIDDLE-INCOME COUNTRIES IN SUPPORT OF UNIVERSAL HEALTH COVERAGE OBJECTIVES

In collaboration with Launch DSI, funded by the Bill & Melinda Gates Foundation, MTaPS initiated a case study in Tanzania on engagement of retail drug outlets by the National Health Insurance Fund (NHIF) in the national benefits program. During this quarter, the team compiled and analyzed the results of semi-structured interviews conducted with 20 informants in Tanzania. The informants included nine government representatives from NHIF, the President's Office of Regional Administration and Local Government, the Pharmacy Council, and officials from the district health offices of Bahi, Mvomero, and Gairo districts. Also represented were owners or dispensers from seven pharmacies and five accredited drug-dispensing outlets. Based on the analysis, the team drafted a case study and compiled a list of follow-up questions for the local consultants in Tanzania to get additional clarifying information from NHIF. MTaPS also reviewed the draft internally, which will eventually be submitted for peer-reviewed publication.

ACTIVITY 7: SUPPORT WHO-LED CONSULTATIONS ON IDENTIFYING ENABLERS AND PREDICTORS OF ACCESS TO MEDICINES

During program year 1, MTaPS participated in WHO-led consultations on developing a dashboard to measure access to pharmaceuticals. As a consequence of that initial meeting, MTaPS and the team from the WHO Access to Medicines Division met again in December 2019 and agreed to work on the Access Dashboard with plans to define the collaboration at a follow-up spring meeting. The teams met this quarter to discuss plans for moving forward on developing the measurement tool. At the meeting, MTaPS learned that WHO had abandoned the Access Dashboard and was moving forward with a GBT for Access, which WHO views as different from, but complementary to, PSS Insight. One of the points raised in that meeting was the need to better understand the lessons learned from developing the GBT for assessing the capacity of national regulatory agencies and using the accompanying optional quantitative tool. MTaPS, therefore, participated in a meeting with the WHO regulatory systems strengthening team to glean lessons from their experience. The team shared materials and insights that will help the program refine its indicators for the regulatory systems strengthening component of PSS Insight and inform its ongoing deliberations with the Access to Medicines Division team.

This quarter, the program also hosted a presentation by the WHO Access to Medicines Division team on the "Essential Medicines and Health Products Price and Availability Monitoring Mobile Application (MedMon)." The presentation had approximately 40 participants representing USAID and MTaPS. The presentation led to ensuing conversations about how MTaPS could potentially collaborate with WHO

on rolling out this application. The MedMon platform is undergoing a technical upgrade, and the program will continue to monitor for new developments and opportunities for collaboration.

ACTIVITY 8: SUPPORT AFRICAN REGIONAL HARMONIZATION EFFORTS FOR PHARMACOVIGILANCE

During this quarter, MTaPS developed a concept note to outline a strategy for MTaPS' support for the harmonization of pharmacovigilance systems in Africa. The program held a virtual meeting with AUDA-NEPAD to share the concept and agree on areas of support. The parties agreed that a regional approach should be adopted in which MTaPS works with the regional economic communities (RECs) to implement regional pharmacovigilance databases. Working with the RECs will facilitate easier access to the GBT assessment reports and associated institutional development plans for each country within the region. This approach would also facilitate the necessary collaboration with the information management system team in each REC. Following subsequent internal discussions, MTaPS developed an implementation plan that outlines starting in Economic Community of West African States. The platform will enable member states in the region to exchange information and share experiences and will serve as a one-stop point for development partners to identify pharmacovigilance areas for support. MTaPS has already started supporting other RECs, such as EAC and IGAD, on their harmonization efforts at a regional level.

ACTIVITY 9: LOCAL HEALTH SYSTEM SUSTAINABILITY PROJECT (LHSS) AND MTAPS COLLABORATION ON INCREASING ACCURACY OF PHARMACEUTICAL EXPENDITURES

This activity is in its first phase, which focuses on exploratory work using Burkina Faso as a target country for data collection. This exploratory work has two primary aims. First, to obtain pharmaceutical expenditure data to determine how best to compile and use that data for tracking pharmaceutical expenditures; second, to better understand the country's challenges and priorities in conducting pharmaceutical expenditure tracking. MTaPS, in collaboration with LHSS, has also initiated consultations with WHO to obtain existing reports on tracking pharmaceutical expenditures and discuss some policy questions.

ACTIVITY 10: IDENTIFY GAPS IN INTEGRATION OF IPC/WASH CRITICAL CONDITIONS INTO THE QUALITY OF CARE AND QUALITY IMPROVEMENT TOOLS AND PROCESSES

With the help of the local team in Bangladesh, MTaPS identified and reviewed 19 relevant documents related to quality of care/quality improvement (QOC/QI) in the Bangladesh health system, with an emphasis on maternal, newborn, and child health (MNCH) documents. For the analysis, the program used the same methodology as in the USAID/Maternal and Child Survival Program (MCSP) gap analysis published in its [*Tools for Improving Quality of Care for Mothers and Newborns*](#).³ To better characterize how IPC/WASH is integrated into these quality improvement documents, MTaPS developed additional IPC indicators to enhance the MCSP analysis. The additional IPC indicators are based on the WHO's core components on IPC. The analysis included the proportion of critical IPC/WASH/ conditions in each document and by document type, the critical conditions and the break-out of sub-conditions by document, a ranking of the conditions that were the most prevalent across documents, and a summary

³ MCSP. 2019. Tools for Improving Quality of Care for Mothers and Newborns. A Review and Gap Analysis of Critical Environmental Conditions. USAID Maternal and Child Survival Program. <https://www.mcsp.org/resource/tools-for-improving-quality-of-care-for-mothers-and-newborns-a-review-and-gap-analysis-of-critical-environmental-conditions/>

of instances of IPC/WASH references that apply specifically to MNCH topics in the Bangladesh QOC documents.

ACTIVITIES FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES (2020)
I	Finalize the indicator set and determine next steps pending discussions with WHO's Access to Medicines Division	April-June
2.1	Pending discussions with the JLN team and the other facilitating organization, revise the proposed scope of work and expression of interest request and recruit country participants	April-June
2.2	Work with PSS TAG to draft an editorial in JOPPP	April
2.3	Complete the remaining module and finalize the e-learning course	April-June
2.4	Submit two manuscripts for peer-reviewed publication	June
3.2	Draft manuscript on the findings from the baseline assessment of RCOREs' performance	May
3.3	MTaPS team to work with consultant to perform quality review of the MRH program management guidance document in preparation for piloting in IGAD region	April-May
5	Complete the second draft of the roadmap	April-June
6	Incorporate additional information from NHIF and reviewer feedback into the case study draft, finalize, and submit for peer-reviewed publication	April-June
7	Continue discussions with the WHO Access to Medicines Division to develop a roadmap for technical collaboration on PSS measurement and use that to draft a project agreement	April-June
8	Meet with the contact person for ECOWAS to share the concept note and get buy-in for implementation	April 15
8	Share the implementation plan with ECOWAS and agree on priorities for implementation	April 20
8	Discuss the possibility of hosting the web-based platform with WHO SharePoint	May 12
8	Consolidate data and information to be uploaded on the web-based system and design the platform specifications	May 19
10	<p>Identify key informants and develop an interview guide to gather information on the use of QOC/QI processes as they relate to WASH and IPC practices in health facilities in Bangladesh and how they have been used so far</p> <p>Apply the IPC/WASH critical conditions analysis to key QOC/QI and MNCH documents from other MtaPS countries, conveniently sampled, to provide some country-level comparison to help contextualize the findings from Bangladesh</p> <p>Conduct a literature review focusing on articles that describe barriers, successes, and lessons learned in improving IPC/WASH using QOC approaches with an emphasis on MNCH</p>	April-June

CROSS-CUTTING ACTIVITIES

GENDER ACTIVITIES

The gender activities for this quarter continued to focus on bringing gender to the forefront of MTaPS through building staff capacity, writing gender-focused pieces, creating knowledge learning products for dissemination, and revisiting MTaPS gender indicators with the MEL team. A key activity is the monthly gender working group (GWG), which is led by MTaPS partner Overseas Strategic Consulting (OSC). The focus this quarter has been on group input on the gender integration framework created by OSC, additional recruitment for the GWG, ideas for the gender toolbox, and mechanisms for further gender integration. After several iterations of the gender framework, there is a solid draft of a dynamic integration tool, which the GWG is currently reviewing. An accompanying user guide is also being developed and will be completed in April 2020.

Gender-related products from this quarter:

Gender Toolkit: [Gender Checklist for Pharmaceutical Systems Strengthening \(PSS\)](#)

Blog: [Tackling Gender Inequities in Pharmaceutical Systems](#)

Blog: [Thinking about gender while responding to an epidemic: Must have or nice to have?](#)

For International Women's Day 2020, MTaPS' gender expert wrote a blog entitled *Tackling Gender Inequities in Pharmaceutical Systems*, which focused on how gender inequities are important in the context of pharmaceutical systems strengthening. It was disseminated on the MTaPS website and in the March MTaPS newsletter. In addition, staff create a tool that will be included in the MTaPS gender toolkit entitled a *Gender Checklist for Pharmaceutical Systems Strengthening (PSS)*. This checklist highlights key questions and considerations for integrating gender into PSS. OSC is creating a second version for MTaPS staff that outlines each objective and sub-objective. These products are being worked on in coordination with the MTaPS communications

and knowledge management teams. An MTaPS staff member wrote an article entitled *Thinking about gender while responding to an epidemic: Must have or nice to have?* for LeaderNet, which looks at the implications of gender during an epidemic with a focus on workforce needs and considerations.

In coordination with the MEL team, OSC is working to re-evaluate what gender indicators will be included in the resubmission of the MTaPS MEL plan to USAID. This includes reviewing all annexes provided by the MEL team and holding numerous discussions with the team. The MEL team is also reviewing the gender integration framework. Each of the above activities builds on and increases MTaPS' gender capacity and learning within the program.

At the country level, OSC is revising the *Philippines Gender Exploratory Research Report* in response to country/team feedback.

PROGRESS TOWARD OBJECTIVES

OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED

Promoting transparency and accountability is a prerequisite for improving access to essential medicines and strengthening health systems to achieve universal health coverage (UHC).⁴ Poor governance in pharmaceutical systems can reduce access to pharmaceutical products, inflate medicine prices, and waste scarce health system resources.⁵ 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 respond to challenges. This section highlights selected areas of work on MTaPS governance activities in this reporting period.

TRANSPARENCY AND ACCOUNTABILITY OF COUNTRY PHARMACEUTICAL SYSTEMS IMPROVED

As a result of MTaPS' technical assistance in governance to GHSA-supported countries:

- Ethiopia drafted TOR for the newly established national infection prevention and control (IPC) technical working group, which is expected to develop and participate in the implementation of annual operational and strategic plans and to monitor and evaluate interventions.
- The national IPC working group in Mali developed TOR for local IPC committees at five health facilities. The TOR will be validated in the next quarter.
- The TOR for Uganda's national IPC technical working committee developed in year 1 with assistance from MTaPS were approved and members were issued appointment letters.
- Also in Uganda, seven MTaPS-supported health facilities drafted TOR for their hospital IPC committees, and a number of regional hospitals prepared draft TOR for their medicines and therapeutics committees and AMS teams.

In the **Philippines**, MTaPS is providing technical assistance to the Department of Health (DOH) to boost its capacity to plan, implement, and sustain an integrated and well-functioning supply chain that will ensure adequate availability of health commodities and support the government's commitment to UHC. In this reporting period, MTaPS continued its support to the DOH's procurement and supply chain management (PSCM) team and the Public Health Support Team in clarifying and delineating roles and responsibilities for PSCM at the central, regional, and local levels in support of the DOH's strategic objective to devolve PSCM functions and strengthen PSCM capacity at the local level. A key component of the technical assistance focuses on strengthening stewardship, coordination, and oversight of PSCM to support the transition from a centralized model with fragmentation of PSCM functions to a decentralized and integrated system. An important benchmark toward this end was achieved during this reporting period when the DOH PSCM team, with support from MTaPS, completed an exercise to refocus its role from operational management of PSCM to the provision of leadership, policy, guidance, and capacity-building support to the provincial and local levels. MTaPS helped the PSCM team articulate its redefined role and responsibilities along with the related key

performance indicators and benchmarks in a strategic commitment document. This exercise is a key step toward improving leadership, coordination, and accountability and ultimately the performance of PSCM systems in the country. Additionally, as part of efforts to strengthen oversight and accountability

4 Wirtz VJ, Hogerzeil HV, Gray AL et al. 2017. Essential medicines for universal health coverage. *The Lancet* 389(10067), 403–476.

5 WHO. 2013. Good Governance in the Pharmaceutical Sector. Geneva: World Health Organization. Available at: http://www.who.int/medicines/areas/governance/EMP_brochure.pdf?ua=1

for PSCM at the region level, MTaPS supported the Central Visayas region to establish a regional governance mechanism for PSCM and pharmacovigilance.

As part of Global Health Security Agenda (GHSA)-funded efforts to support countries to improve their joint external evaluation (JEE) scores for antimicrobial resistance (AMR), MTaPS has been assisting countries to develop or update the terms of reference (TOR) of entities that play crucial roles in leadership, coordination, management, and technical implementation of antimicrobial stewardship (AMS) and infection control activities. In year 1 of the project, MTaPS provided support to transform the role of **Ethiopia's** National Advisory Committee for Antimicrobial Resistance and Containment (NAMRAC) from an advisory to a multisectoral coordination committee in support of the One Health approach, revise its structures, and update and align its TOR with World Health Organization (WHO) model guidance for such committees. In this reporting period, the country completed its fourth AMR country self-assessment survey as part of the global monitoring and evaluation framework for tracking progress on national AMR action plan implementation. A notable finding of the survey was that NAMRAC is functional and has clear TOR and well-defined lines for reporting and accountability. This finding signals that Ethiopia, with assistance from MTaPS, is making progress toward improving the JEE score in this area.

For more detail on MTaPS' AMR activities and the GHSA, refer to the [GHSA](#) section and [objective 5/AMR](#) activities in this report.

EVIDENCE-BASED MEDICINES POLICIES, LAWS, REGULATIONS, GUIDELINES, NORMS, AND STANDARDS IMPROVED AND ENFORCED

In **Rwanda**, MTaPS is providing technical assistance to develop and validate regulations to support the newly enacted medicines act. MTaPS participated in the review and validation of five regulations for the newly created Rwanda Food and Drug Administration (FDA) that govern the registration of medicinal products; classification of medical devices; control of cosmetics, pesticides, and household chemicals; and registration of pesticides, chemicals, and poisons. Eight related guidelines and three Rwanda FDA lists for authorized human medicines, veterinary medicines, and medicated cosmetics were reviewed and validated at the same workshop. The list of authorized human medicines, which was updated with support from MTaPS, will form the basis for guiding the importation of medicines into the country.

Another important area of work is MTaPS' collaboration with the Ministry of Health (MOH), **Rwanda** FDA, and national Pharmacy Council to develop pharmaceutical care standards to complement the well-established clinical care standards. The standards and related performance assessment tools were submitted for MOH approval during this reporting period. MTaPS also helped draft a plan that will guide the implementation of the standards once approved.

As a first step toward strengthening **Nepal's** legal and regulatory framework for medicines and supplies, MTaPS and its core partner, the International Law Institute African Centre for Legal Excellence (ILI-ACLE), is assisting the Ministry of Health and Population (MOHP) and the Department of Drug Administration (DDA) to review existing legislation to identify gaps. The existing legislation needs to be updated to include adequate provisions for DDA and related entities to regulate, enforce legal provisions for, and facilitate access to essential pharmaceuticals. MTaPS joined the DDA and the Nepal Law Commission in a planning meeting for the gap analysis and development of new legislative instruments. The process will include MTaPS-supported provincial meetings to facilitate consultation and input to the draft amendments.

In **Bangladesh**, MTaPS is collaborating with the UK Department for International Development-funded Better Health in Bangladesh (BHB) Project to assist the Directorate of Drug Administration (DGDA) in developing a strategy and tools for inspection and monitoring of private retail medicine shops and pharmacies. This is part of the BHB project-led initiative to establish an accreditation system for

medicine shops, which are the first port of call for health care and medicines for many people in Bangladesh. The strategy and the inspection checklist for new and renewal license applications from medicines shops have been submitted to the DGDA for approval.

As part of efforts to improve supply chain management at the regional level in the **Philippines**, MTaPS helped the Commission on Population and Development (POPCOM) prepare guidelines on logistics and supply chain management of family planning commodities. The guidelines provided the basis for training of POPCOM and DOH staff as part of efforts to help decongest the DOH warehouses, which are short on space.

As part of GHSA-funded activities to strengthen AMS in **Tanzania**, MTaPS assisted the country to finalize policy guidelines for implementing the AMS program, which have been approved. In **Mali**, the IPC guidelines for the human sector, which MTaPS helped to revise in the previous quarter to integrate a water, sanitation, and hygiene component and WHO recommendations on IPC have now been validated and finalized.

MTaPS is helping the Directorate General of Health Services (DGHS) of **Bangladesh's** Ministry of Health and Family Welfare (MOHFW) to implement activities to respond to the COVID-19 pandemic. As part of this technical assistance, MTaPS worked to draft two guidelines on IPC for cleaners and drivers and a standard operating procedure on triaging and managing patient access.

STAKEHOLDER ENGAGEMENT AND EMPOWERMENT, INCLUDING CIVIL SOCIETY AND CONSUMERS, INCREASED

Twenty-nine participants from 25 community pharmacies in Addis Ababa participated in an AMR training organized by MTaPS in collaboration with the **Ethiopian** Pharmaceutical Association. The intention of the training was to build the knowledge and skills of community pharmacists to promote appropriate use of antimicrobials in the community.

Also in Ethiopia, MTaPS organized and facilitated a three-day training on AMR prevention and containment for 21 female and 8 male volunteers from the Ethiopian Youth and Women Federation. The 29 participants developed action plans on follow on work in the community as part of the training, which aimed to increase their knowledge on AMR and approaches for raising awareness in their communities, where they already work to promote better sanitation, hygiene, and maternal and child health care.

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

INSTITUTIONALIZATION OF PROVEN, INNOVATIVE APPROACHES TO BUILDING HUMAN RESOURCE CAPACITY

Planning and Conducting Competency-Based Training Activities in IPC/AMS/COVID-19

In this reporting period, MTaPS provided capacity-building support to several countries to support Global Health Security Agenda (GHSA)-funded and COVID-19-related activities. Activities involved designing and reforming infection prevention and control (IPC) curricula and training materials; establishing e-learning programs, including setting up platforms and developing courses; and planning and conducting competency-based training activities in IPC.

MTaPS supported **Kenya, Tanzania, Senegal, and Côte d'Ivoire** in planning and implementing training activities to strengthen the capacity of health care professionals on IPC, AMS and COVID-19 responses. Each country's approach to COVID-19 training varied slightly based on its stage in the pandemic. Some countries conducted training of trainers (TOT) workshops while others focused on providing just-in-time training programs at health facilities using an on-the-job training approach.

MTaPS, in collaboration with the **Kenya** Ministry of Health (MOH), held TOTs to boost the capacity of 60 health care personnel in COVID-19 responses. Using the TOT approach enabled the country to roll out comparable COVID-19-related training workshops in 8 regions covering 33 counties and training 266 medical officers, clinical officers, nurses, laboratory scientists, public health officers,

surveillance officers, and pharmacists. The trained participants from the 33 counties are expected to conduct in-county capacity development sessions for health care workers on managing COVID-19 in each county.

In **Tanzania**, MTaPS helped the MOH train 61 tutors (20 males, 41 females) as part of the country's efforts to reform its national pre-service curricula at higher levels of education with the aim of increasing the number of health care workers trained on current IPC guidelines and teaching methodologies. Since this was a competency-based training, a complete training package, including the IPC guidelines and TOT toolkit, was provided to participants. At the end of the training, tutors walked away with updated knowledge and skills on basic IPC practices. These trained tutors are expected to teach pre-service students on current IPC practices as needed and contribute to ensuring that newly qualified health care workers are equipped with basic IPC knowledge and skills.

Because of COVID-19, MTaPS capacity-building activities in **Senegal** focused on planning and implementing a series of just-in-time, skills-based training sessions. The MTaPS/Senegal team led these activities, in collaboration with the Directorate of Quality, Security, and Hospital Hygiene (DQSHH) in charge of IPC at the MOH. By the end of these skill-based training sessions, 25 health care workers from the level 3 hospitals in Dakar were equipped with competencies in hand hygiene, waste management, and preventing cross-infection transmission using complementary precautions in hospital care. An important aspect of the training involved the on-the-job training approach. The training enabled participants to apply IPC skills to assess their respective units, identify gaps in IPC recommended practices, and develop an action plan with corrective actions to address these gaps. MTaPS supported the DQSHH in recruiting and training two local consultants to plan and carry out training programs for health care professionals in three selected hospitals: three from the district hospital, four from the secondary hospital, and eight from the tertiary hospital. These trained health care professionals will serve as master trainers and will train other staff from their respective hospitals.

Training Materials and Curricula Design/Reform

Building on curriculum design activities initiated in the last quarter, MTaPS supported **Cameroon**, **Côte d'Ivoire**, and **Mali** in designing and producing comprehensive training packages to strengthen institutional capacity in IPC, AMS, and COVID-19. The training packages were designed based on each country's national guidelines and SOPs. Each training package consisted of a facilitator's guide that explains how to lead the training, a timed agenda for face-to-face sessions, a participant's guide for classroom use, PowerPoint slides, a TOT guide, and a participant's handbook. Although the number of modules covered varies from one country to another, the approach used for developing the training package in each country is the same. First, conduct a curriculum design capacity-building workshop and equip IPC/AMS champions with skills for developing a competency-based training package based on the national guidelines and SOPs that follow standard training guidelines and adult learning principles; second, use the new training package to teach a pool of health care professionals how to provide high-quality training programs that familiarize learners with the latest national IPC guidelines.

"This training is very helpful. I also learned and applied many other training methods, which are the participatory methods for adults.

I learned that the latter is different from the methods we were used to. I learned how to formulate general as well as specific objectives to make my training a competency-based training; it helped me to develop IPC training materials and curricula.

I also learned how to carry out very enriching training activities especially using the cone of Edgar Dale and the different learning retention rates, which is very important for IPC training."

-Participant feedback from an IPC training

By the end of the workshops, the IPC/AMS/COVID-19 champions demonstrated that they could develop standard training packages based on the national guidelines and SOPs for human and animal health sectors. The curriculum design and capacity-building workshops were very well received in all three countries. Overall, 69 IPC/AMS/COVID-19 champions from Mali (30 DTC members), Côte d'Ivoire (10 IPC and 15 AMS champions), and Cameroon (14 IPC experts) were trained and are expected to use the skills acquired to develop quality training materials on their own.

Of note, the training packages also came in handy during the outbreak of COVID-19. For example, in **Côte d'Ivoire**, the new training package was used to conduct a TOT workshop to produce a national pool of 20 highly competent trainers (3 staff from the WHO) in COVID-19 and IPC for human and animal health sectors. Soon after, these new trainers provided on-site training of health workers on COVID-19 and IPC. The success of this activity is attributed to the strong commitment and ownership on the part of several departments in MOH, including the General Directorate of Health, Directorate of Hospital and Proximity Medicine, and the Directorate of Training and Health Research, and the MTaPS/Côte d'Ivoire team.

E-Learning

As part of MTaPS capacity-building efforts for health professionals and students, the program supported the governments of **Mali**, **Cameroon**, and **Côte d'Ivoire** in establishing IPC/AMS e-learning programs. Critical first steps involved conducting e-learning assessments and selecting a suitable institution to host the e-learning platform. Subsequent steps will focus on developing e-learning courses and capacity building local teams responsible for managing the platforms. MTaPS also continued to support **Tanzania** and **Senegal** in converting their IPC training materials into an e-learning format to enable health workers to receive the training or refreshers through distance learning. The conversion of IPC sessions into e-learning modules, in collaboration with Tanzania's Centre for Distance Learning, are in the final stages of the design process. The e-learning modules are expected to be uploaded to the platform and deployed next quarter. The development of e-learning programs in Tanzania has been a bit challenging because of delays in receiving feedback from local stakeholders on draft versions. MTaPS also continued to support the Senegal MOH in developing videos on hand hygiene, bio cleaning, and waste management practices to supplement its IPC e-learning programs. The final e-learning modules and the videos were installed on the MOH's platform and pilot tested. Results from the pilot revealed a second

test is needed to ensure that the course is glitch-free and user friendly and the second pilot test is planned for next quarter before the course goes live.

Workforce Development

As part of efforts to institutionalize procurement and supply chain management (PSCM) and pharmacovigilance (PV) systems in the **Philippines**, MTaPS assisted the Department of Health (DOH) in planning and conducting a workforce assessment. Key aspects of the assessment involved conducting interviews and group discussions with resource persons, conducting gap analysis, and creating and presenting a PSCM and PV workforce development plan. The plan includes recommendations on addressing the gaps in the PSCM and PV workforce, especially the number of staff positions, their roles, and skill sets required to ensure strong PSCM and PV systems in the Philippines.

STRONGER CAPACITY OF GOVERNMENT TO MANAGE PHARMACEUTICAL SYSTEMS

Well-functioning pharmaceutical systems depend on national departments of pharmacy, procurement agencies, contracting, accreditation, and other national and sub-national government departments and managers that have enough capacity to steward, manage, and effect positive change within the pharmaceutical sector.

In **Bangladesh**, MTaPS is providing support to the Ministry of Health and Family Welfare (MOHFW) and its key directorates and health programs to bolster and modernize procurement processes to improve procurement efficiency and performance and to strengthen in-country capacity to support Bangladesh's progress toward self-reliance. In this reporting period, 24 senior officials from the MOHFW, its Directorates General of Health Services (DGHS) and Family Planning (DGFP), and other directorates that oversee and procure products participated in an MTaPS-facilitated two-day training on public procurement management. Ensuring that the secretary, additional secretary, joint secretaries, line directors, and other high-level officials are well oriented on procedures and their roles and responsibilities is an important step to strengthen oversight of public procurement at the national level. Additionally, MTaPS contributed to the mid-term review of Bangladesh's current health sector program and recommended that a separate directorate be created for procurement and supply management within the MOHFW to enhance coordination and efficiency.

MTaPS/**Philippines** has been assisting the DOH Procurement Services Unit and the Pharmacy Division in revising the national guidelines on framework agreements to provide for pooled procurement and use of an international procurement mechanism to support decentralization and to address delays connected to the current requirement for rigid, fixed quantities and fiscal year-based procurement policy. In this work plan period, MTaPS worked to link the framework agreement mechanism to other procurement objectives, including the creation of a central price negotiation board, devolution of budgets to local government units, and establishment of a mechanism for pooled procurement to maximize efficiency. MTaPS organized a workshop that brought together key DOH stakeholders working in PSCM to map key procurement processes, identify challenges, and propose improvement actions. The workshop participants agreed that the revisions to the framework agreement guidelines, together with a well-functioning central price negotiation board and effective pooled procurement mechanism, would be instrumental for improving procurement efficiency and mitigating issues, such as few suppliers, high product prices, and poor on-time delivery. MTaPS will continue working with the National Price Negotiation Board, the Pharmacy Division, and the Government Procurement Policy Board to finalize the administrative order that will institutionalize the framework agreement. The revised framework agreement guidelines will provide the foundation for an efficient mechanism for procuring medicines, medical devices, and supplies that is in compliance with the Universal Health Coverage Law and enables the achievement of lower unit costs, shorter lead times, and reduced workloads in preparing procurement packages.

IMPROVED CAPACITY OF PRIVATE-SECTOR ORGANIZATIONS TO SUPPORT PHARMACEUTICAL OPERATIONS

Large segments of the population use retail pharmacies and medicine outlets as the first point of care. In **Bangladesh**, up to 80% of people seek care from village doctors and retail outlets where overprescribing, selling unnecessary medicines, and issuing antibiotics without prescriptions are frequent occurrences. To support implementing an accredited medicine shop initiative to improve access to safe, affordable, quality medicine and pharmacy services, MTaPS worked with the Better Health in Bangladesh Project (funded by the UK Department of International Development) to review the inspection and monitoring strategy for model pharmacies and medicine shops and the inspection checklist for new and renewal license applications developed with the Directorate of Drug Administration (DGDA) in the previous quarter. The strategy and checklist are now pending DGDA approval.

MTaPS is working with the **Rwandan** MOH, the Rwanda Food and Drugs Authority (FDA), and National Pharmacy Council to develop standards for pharmaceutical services and performance assessment tools that will be used to accredit pharmacies as part of a comprehensive quality assurance framework for measuring, evaluating, and improving the quality of health services in the country. The standards address pharmaceutical care practices and safety of medicines in health care systems, including reporting adverse drug reactions and suspected pharmaceutical quality-related concerns to relevant clinical governance committees and to the Rwanda FDA. The standards were finalized and submitted to the MOH for approval and MTaPS helped formulate a plan for implementing the standards.

As part of GHSA-funded efforts to support **Kenya** to improve IPC, optimize the use of antimicrobial medicines, and strengthen multisectoral coordination for containing antimicrobial resistance (AMR), MTaPS coordinated and supported a meeting of professional associations to discuss the need and obtain support for a continuing professional development program on IPC and AMS for their members. The in-service training courses are intended to be delivered through professional associations and could be linked to relicensure of members. Additionally, MTaPS collaborated with the Pharmaceutical Society of Kenya and representatives of other health professional associations to hold a two-day workshop to develop an in-service curriculum for AMS in health care settings and the community.

STRONGER MEDICINES REGULATORY CAPACITY, INCLUDING THROUGH REGIONAL REGULATORY HARMONIZATION

This quarter, MTaPS expanded its efforts to strengthen the legal and regulatory framework for effective medicine regulation in three supported countries as a starting point for providing a systematic approach to strengthen the existing weak regulatory systems. These efforts are geared to ensuring that countries have the necessary legal basis for carrying out their regulatory functions.

As a means of strengthening their regulatory systems and improving efficiency of their regulatory processes, efforts to engage consultants to support establishment of quality management systems (QMS) in regulatory authorities commenced during the quarter.

Training for health care providers on different aspects of PV and using the PV Information Management System (PViMS) augments the plan to ensure patient safety and therapeutic effectiveness in supported countries. MTaPS continues to provide support for harmonizing medicine regulation and increased collaboration among regions and their member states.

Strategies to mitigate the emergence of COVID-19 in countries were developed and regulatory systems strengthening activities switched from face-to-face interactions to remote support through virtual meetings and to explore capacity enhancement through online training.

In the wake of COVID-19 disrupting the medicine supply chain, regulators should have mechanisms in place for rapid response amidst the pandemic. Such mechanisms rely on other recognized regulators for

approval of medicines and medical devices and establishing clear abridged procedures for review of medicines required and use technology for exchange of information on medicines. These strategies were advocated by MTaPS for implementation as part of the greater pharmaceutical system in Rwanda, Mozambique, and Bangladesh.

MTaPS continued to work with national medicine regulatory authorities (NMRAs) to support countries in attaining their objective of achieving a functional and stable regulatory system status, i.e., to achieve maturity level 3 according to the WHO Global Benchmarking Tool (GBT). Using their GBT assessment reports and institutional development plans, the program continued to work with countries in collaboration with core partners and other global experts to improve the key regulatory functional scores. The major areas of support during the quarter are reported below.

Improving the Legal and Regulatory Framework for the Pharmaceutical Regulatory System

In collaboration with core partner ILI-ACLE and engagement of an independent consultant, MTaPS supported review of the legal framework for pharmaceutical regulation and drafting of regulations in line with the existing laws and rules in **Rwanda, Mozambique, and Nepal**. In **Rwanda**, MTaPS worked with the USAID GHSC-PSM project to validate five regulations and eight guidelines to operationalize the Rwanda FDA. A scope of work for technical assistance to build the capacity of the Direção Nacional de Farmácia (DNF) legal and technical staff in developing new regulations and reviewing existing regulations and guidelines was drafted in **Mozambique**. Working with ILI-ACLE, MTaPS engaged a consultant to assess the current laws and rules governing the regulation of medicines and other health products in **Nepal**. In consultation with the Nepal Law Commission, amendments to the National Drug Act 2035 (1978) and rules will be discussed and agreed upon. Additionally, MTaPS developed terms of reference for engaging a consultant to help in developing a new structure for Directorate of Drug Administration (DDA) Nepal that is in line with the country's decentralization policy.

Establishing QMS for NMRAS

A functional QMS that complies with national and international standards is essential to ensuring that NMRA operational processes are clearly defined, controlled, measured, and monitored. A QMS increases legitimacy, prevents mistakes, reduces costs, and has a positive impact on regulatory outputs. A good, harmonized QMS, as recommended by WHO, also facilitates recognition of regulatory decisions by other national regulatory agencies. For this reason, MTaPS is collaborating with global expert Celsian to document and implement QMS in supported countries. Overarching governance and guidance documents, such as laws, rules, and strategic plans have to be established in order to have a systematic approach in implementation.

MTaPS supported review and implementation of existing strategic plans for NMRAs in **Mozambique, Rwanda, and Bangladesh**. In **Bangladesh**, MTaPS supported review of implementation of DGDA's five-year strategic plan through consultative workshops. Priority areas for improvement were identified during the workshops and a draft plan of action was developed, which is currently under review. MTaPS reviewed the draft strategic plans for Rwanda and Mozambique, identifying gaps and recommending actions to address them.

In **Nepal**, MTaPS contracted its partner Celsian to support establishment of a QMS at the DDA to enhance its regulatory system. Celsian experts will undertake an assessment to identify gaps and opportunities for setting up a robust QMS, including review of the draft quality manual for the NMRA. MTaPS has engaged a consultant to support the **Rwanda** FDA to develop and implement a QMS that ensures streamlined and improved service delivery through appropriate documentation of procedures. Similarly, MTaPS commenced efforts to support the DNF in Mozambique in reviewing its quality manual through a series of activities, including capacity building for quality lead auditors. MTaPS will support the plans of the three countries, leading to certification according to ISO 9001:2015 for their regulatory system.

Marketing Authorization and Product Registration

Effective product registration performed by adequately capacitated NMRA is critical in ensuring the quality, safety, and efficacy of medicines and other health products. To support improvements in registration systems, it is important to assess the capacity and function of the system to identify gaps and weaknesses, thereafter making recommendations to address the problems encountered. MTaPS, through the MNCH portfolio, conducted a survey of the registration process of MNCH medicines in **Bangladesh, Nepal, Rwanda, Mozambique, Tanzania, Uganda, Senegal, Mali, and DRC** and developed recommendations for improvement. The preliminary findings indicate the need for updating regulations to incorporate changes that allow for reliance on decisions of regulators in other well-resourced countries; abridged registration procedures; and capacity building of regulators in new requirements like common technical document guidelines and bioequivalence/bioavailability studies, among others. A technical brief that summarizes the key findings and recommendations will be finalized in the next quarter.

Additionally, in **Nepal**, MTaPS, in collaboration with the WHO, assisted the DDA in assessing the marketing authorization function, together with other key regulatory functions using the GBT.

Regulatory Inspections and Market Surveillance/Control

MTaPS, in partnership with the BHB Project, worked to review the inspection strategy and corresponding checklists for a model pharmacy and model medicine shop as part of efforts to improve monitoring retail outlets in **Bangladesh**.

Strengthen Use of Electronic Information Technology Solutions for Efficient and Transparent Medicine Regulatory Processes

Electronic management information systems facilitate efficient and transparent procedures for carrying out regulatory functions. MTaPS worked with countries using tools, like Pharmadex, PViMS, and WHO GBT, to establish effective registration, PV, and importation processes together with support functions, like financing, in this reporting period.

In **Mozambique**, the team worked on engaging a local IT company to provide essential support to the DNF on ensuring the full functioning of Pharmadex, including maintaining the DNF Pharmadex computer network, ensuring smooth running of the DNF IT system, installing software upgrades, and training DNF, MISAU, and MTaPS staff on Pharmadex network maintenance. MTaPS also worked with DNF staff to improve and install the online version of Pharmadex using the cloud-based solution through Amazon Web Services. Cloud hosting offers advantages, such as lower internet costs and higher data security, that make it easier for pharmaceutical companies to submit applications for marketing authorization online and will enhance speed, efficiency, and quality of the medicine registration process. MTaPS continued to work on developing the medicine import module on Pharmadex to enable applicants to request and print import authorizations online, which will reduce paperwork, manual analysis, and reporting import requests.

In cooperation with Trademark EA, MTaPS supported the **Rwanda** FDA to activate the dormant modules in their Pharmaceutical Regulatory Information Management System (PRIMS). Additionally, MTaPS installed PViMS on the Rwanda FDA server and trained the staff on how to report adverse events by using this electronic tool, which will be primarily used to monitor adverse drug reactions from the ongoing Ebola immunization and the new dolutegravir antiretroviral therapy regimen. In Mozambique, MTaPS, working with Columbus Consulting, adapted the PViMS tool for active safety surveillance and agreed with DNF on the approach for electronic data entry at facilities that are implementing active surveillance. MTaPS procured 10 tablets to support data entry at 10 health facilities.

Using the globally accepted assessment tool, WHO GBT version VI, MTaPS, in collaboration with other partners, such as WHO and PQM+, finalized plans to conduct an interim assessment of the regulatory

system in **Nepal**. However, due to the COVID-19 situation, the physical assessment was changed to an interim desk review that will be conducted in April 2020. Results of the WHO GBT assessments were used in countries, such as Bangladesh, Rwanda, Mozambique, and Nepal, to either develop or update institutional development plans and action plans.

Regional Harmonization Efforts for Medicines Regulation

MTaPS continued to foster collaboration among various regional harmonization initiatives for medicine regulation in Africa and Asia. To advance the harmonization of PV systems in the **IGAD region**, MTaPS supported a workshop that brought member states together to operationalize a governance structure for PV in the region. In addition training was conducted for regulators on use of harmonized PV assessment tools and development of action plans for PV system improvement. MTaPS held discussions with EAC member states on domestication of the PV compendium developed earlier with support from MTaPS' predecessor program SIAPS. Further talks in both IGAD and EAC to agree on the approach for adopting regional guidance documents and customization to the local context were postponed because of the current COVID-19 situation.

Explorative work was carried out to determine the areas for regulatory system support in the **Asia region**, leading to mapping stakeholders, initiatives, and networks. Several discussions were held through virtual meetings with World Health Organization South East Asia Regional Office and South-East Asia Regulatory Network regarding the potential for collaboration on efforts to strengthen medicine regulation in Asia.

Support to AMS Policies and Regulations

As guided by the WHO's International Health Regulation (IHR) benchmarks, it is important to assess policies and regulations for AMS in the plan to support countries in raising their joint external evaluation (JEE) levels. During this quarter, MTaPS reviewed assessment reports on AMS policies and regulations in **Burkina Faso, Cameroon, and Côte d'Ivoire**. The reports relate to stewardship policies, regulations, and guidelines for antimicrobials in the human and animal health sectors. The output of these assessments will inform development of the national AMS strategy and national action plan.

Enhancing Patient Safety and Therapeutic Effectiveness Through Improved PV Activities

MTaPS/Bangladesh helped assess 142 adverse drug events received between November and December 2019. This analysis informs clinical and regulatory decision, ultimately ensuring patient safety.

In an effort to support assessment of safety data that will inform clinical and regulatory decisions, MTaPS facilitated a workshop in **Bangladesh** with the DGDA's technical sub-committee to assess 142 adverse drug events received by DGDA between November and December 2019. In addition, MTaPS met with the PV focal point and ADRM cell to discuss the central PV software requested by DGDA and inclusion of the PV structure in the DGDA organogram. MTaPS also helped DGDA draft a plan to support the scale up of ADR reporting to 50 hospitals and 50 pharmaceutical companies.

DNF and the national HIV program in **Mozambique**, with support from MTaPS, had a three-day training to orient health care workers and provincial focal persons on the protocol for active surveillance of patients on the new dolutegravir-based antiretroviral medicine. In total, 14 provincial focal persons (10 males, 4 females) for HIV and PV and 58 facility-level health care providers (29 males, 29 females) from the 10 facilities participating in the active surveillance were trained. Following feedback from the training, MTaPS revised the data collection forms, printed them, and sent them to the provinces and respective facilities. Additionally, MTaPS supported DNF and the HIV program in organizing on-site trainings at the 10 participating facilities to sensitize more staff about active surveillance to secure their cooperation. These are all in the effort to increase reporting and generate sufficient safety data that will inform and support clinical and regulatory decisions related to medicine use for improved treatment outcomes.

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

INTEROPERABILITY OF PHARMACEUTICAL MANAGEMENT INFORMATION SYSTEMS THAT LINK PATIENTS AND PRODUCTS

MTaPS/**Philippines** continued to support the Department of Health (DOH) to establish and procure an electronic logistics management information system (eLMIS) to handle end-to-end data collection, management, and reporting of pharmaceutical supply chain processes for the DOH. This will include information on the tender, procurement, and payment processes, as well as storage and distribution data. During this quarter, MTaPS/Philippines finalized the eLMIS technical specifications and terms of reference required to evaluate system vendors and proceed with procurement. The DOH posted the invitation for expression of interest to participate in the procurement process; however, the project has been put on hold while the DOH and MTaPS/Philippines transition their focus to the COVID-19 emergency response. The activity should proceed later this year.

In **Bangladesh**, MTaPS continued training on the electronic asset management system (eAMS) initiated last quarter. Five trainings were conducted in four districts, covering 29 district hospitals. The eAMS is designed to increase the efficiency of procurement, distribution, and maintenance of diagnostic and treatment equipment in medical facilities. As the system is rolled out to more hospitals, the Ministry of Health and Family Welfare (MOHFW) can get a better picture of where equipment is concentrated and where resources for repair should be deployed. Additional training sessions have been delayed by the COVID-19 emergency response. In recent weeks, MTaPS/Bangladesh developed an inventory management tool to track personal protective equipment and other commodities needed to combat COVID-19 in the country. This tool has already been integrated with the MOHFW supply chain management portal and is providing critical data to support decision making in the emergency response to COVID-19.

MTaPS teams in **Rwanda** and **Mozambique** continued to roll out PViMS to improve spontaneous reporting of adverse events and promote patient safety. In **Rwanda**, MTaPS installed PViMS on the Food and Drug Administration (FDA) server and trained FDA staff, as well as public and private health care workers, on adverse event reporting. In **Mozambique**, MTaPS worked with the National Directorate of Pharmacy (DNF) to optimize existing data collection forms for reporting adverse events in anticipation of implementing PViMS in the near future. This system will establish active surveillance led by the DNF's national PV center, with activities conducted by the national TB and HIV programs. This quarter, MTaPS worked with the DNF to design the data capture system, defined equipment specifications, and procured tablets for data entry focal points.

MTaPS/**Nepal** also worked this quarter to ensure the quality of medicines through the finalization, installation, and configuration of the laboratory management information system (LMIS) at the National Medicines Laboratory. The development process for the LMIS was initiated in 2017, but it wasn't operational until this quarter. Now, when inspectors send samples to the National Medicines Laboratory, they are logged through the LMIS and test and analysis reports for postmarketing surveillance are generated through the new system.

INCREASED AND BETTER USE OF INFORMATION ON PHARMACEUTICAL SYSTEMS FOR DECISION MAKING

MTaPS/Rwanda identified substandard medicines at 11 health facilities during an assessment, which were reported to the Rwanda FDA for further investigation.

In **Rwanda**, MTaPS conducted a baseline assessment comprising 22 pharmaceutical service system indicators set by the Ministry of Health. During the assessment, substandard medicines were identified at 11 of 54 health facilities. All product quality issues were reported to the Rwanda FDA, and investigations were promptly initiated.

MTaPS/**Philippines** also performed data collection this quarter in support of the country's Family Planning 2020 goals to address unmet needs for family planning commodities. MTaPS and its partner IQVIA collected family planning commodity distribution and consumption data to compute couple years of protection (CYP), a common family planning indicator. CYP is a measure to estimate a couple's protection from pregnancy over one year based on the availability of a variety of family planning methods and commodities.

Efforts to optimize the medicines registration system in **Nepal** continued this quarter as MTaPS mapped the registration and renewal processes for new, generic, and analog medicines and used this information to develop system requirement specifications for an electronic regulatory management system. MTaPS has been compiling information on the current system and on other information management systems for regulation of pharmaceutical products to compare system requirements and inform the selection of a new system or optimization of the current system to best meet the needs of the medicines regulatory authority in the country.

ADVANCEMENTS IN PHARMACEUTICAL SYSTEMS STRENGTHENING RESEARCH AND THE GLOBAL LEARNING AGENDA

Please refer to [Cross Bureau activity 2](#) for a full description of progress on this activity.

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

IMPLEMENTATION OF EVIDENCE-BASED MEDICINES STRATEGIES AND PHARMACY BENEFITS PROGRAMS

During this quarter, MTaPS also completed a review of possible tools for costing a pharmaceutical benefits package. The draft report analyzed a set of criteria, including electronic and paper-based tools, that allow for customization and flexibility in treatment guidelines to reflect the local context and also enable forecasting and projections. The report identified the OneHealth Tool as the most suitable to conduct pharmaceutical benefits package costing.

MTaPS has nearly completed the guidance documents to build country capacity to use the OneHealth Tool for conducting pharmaceutical benefits package costing. The OneHealth Tool facilitates strategic planning for to enable better health financing.

MTaPS is developing guidance documents to build countries' capacity to use the OneHealth Tool for pharmaceutical benefits package costing. The OneHealth Tool, developed by Avenir Health, is a costing tool for high-level health financing strategies and diagnostic-specific services. It can be used as either a bottom-up costing tool or a top-down costing tool. The implementation of these materials will better enable stakeholders to use the OneHealth Tool to

derive coverage targets, costing, and impact information; assess health system strengthening activities, including medicines forecasting, and improve the overall health system performance; assess government contributions and financial/fiscal gaps to afford the medicines needed in the country; and facilitate discussions and negotiation processes for prioritization, including priority setting for each disease and adjustments to each pharmaceutical package under each disease, intervention, or health condition. The guidance document will be finalized and disseminated in the next quarter.

MTaPS/**Asia Regional Bureau** portfolio moved to the next phase in developing the roadmap for health technology assessment (HTA) institutionalization in low- and middle-income countries. The draft was shared with 11 global and regional experts for their feedback in February, which helped spur additional dialogue. The feedback was positive and its anticipated that the section draft will be completed in June.

MTaPS/**Asia Regional Bureau** completed an analysis on how countries define pharmaceutical benefits in 12 countries in Asia. The draft report presents the analyses of financing arrangements in the selected countries to understand how they define service and pharmaceutical benefits packages, how products are purchased through these schemes, and the degree of cost sharing for covered products. It also investigated trends in public and private expenditures for medical products and results of previous exercises that analyzed the contents of the 12 countries' essential medicines lists. As key findings, the majority of the analyzed countries define a service benefits package but do not define an explicit set of pharmaceutical benefits. Private expenditure on medical products was the predominant source of spending, suggesting that financing arrangements in many countries do not provide adequate financial protection to medical product spending. The report will be finalized and disseminated in the next quarter to help countries streamline benefits packages to ultimately increase service coverage and access to pharmaceuticals to the population.

MTaPS is also reviewing available guidelines on defining pharmaceutical benefits coverage in the **Asia region**. Key findings will be included in a short brief next quarter. This brief will also look closely at the Indonesian case and the package defined as part of the country's national health insurance scheme as an example to potentially be used by other countries in the Asia Region.

Under **Cross Bureau**, MTaPS drafted a scope of work for a learning exchange focused on medicines pricing strategies. The plan is to run two two-hour webinars facilitated by MTaPS and Boston University School of Public Health between April and August 2020. The exchange would also include a moderated asynchronous component to allow additional discussions among participants and gather additional input on the selected topics.

INCREASED EFFICIENCY OF PHARMACEUTICAL RESOURCE ALLOCATION AND USE

MTaPS/**Philippines** supported the Department of Health's Procurement Services Unit and Pharmacy Division develop a Framework Agreement and set up a medicines price negotiation board, a decentralized budget devolution to local government units, and pooled procurements to maximize value for money and address procurement-related financing bottlenecks. The Framework Agreement will be an important instrument to address the identified issues in compliance with the Universal Health Coverage Law and help to address current bottlenecks associated with rigid fixed quantity and fiscal year-based procurement policy. Ultimately, this will help reduce unit costs, process lead time, and workload in executing procurement packages, resulting in more affordable products, less procurement and supply chain management disruption, and increased availability of and access to medicines for Filipinos.

MTaPS began collaboration with Abt Associates' Local Health System Sustainability (LHSS) project on increasing the accuracy of pharmaceutical expenditure tracking. This activity is in its first phase, which is focused on exploratory work using Burkina Faso as a target country for the data collection. This exploratory work has two primary aims: to obtain pharmaceutical expenditure data to determine how best to compile and use the data for pharmaceutical expenditure tracking and to better understand the country's challenges and priorities in conducting pharmaceutical expenditure tracking. MTaPS, in collaboration with LHSS, has also initiated consultations with WHO to obtain existing reports on tracking pharmaceutical expenditures and discuss policy questions.

During this quarter, MTaPS continued work on developing a guide to promote transparency in pricing policies through the development of a regional pricing database. MTaPS started research on pricing policies and techniques used within countries in the **Asia Region**. A literature review yielded 1,033 academic articles that, once screened, identified 29 with relevance to the topic. The team will be also looking in the grey literature and exploring outreach to in-country contacts. The results will be summarized in a brief report next quarter.

MOBILIZATION OF ADDITIONAL AND SUSTAINABLE RESOURCES INCREASED

MTaPS/**Bangladesh** assisted the National TB Program (NTP) in preparing concept notes for funding through the Global Fund for 2020-2023. Should the NTP receive funding from the Global Fund, it will assist the NTP in carrying out its National Strategic Plan and achieve sustainable organizational capacity.

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

INCREASED AVAILABILITY OF ESSENTIAL MEDICINES AND OTHER HEALTH TECHNOLOGIES

Continuous availability of safe, effective, quality-assured, and affordable medicines and health technologies is critical for effective health outcomes. Implementing regular demand planning and monitoring and efficient and coordinated procurement with optimized warehousing, inventory management, and delivery systems, supported by reliable data with strong local institutional and individual capacity, are pillars to ensure availability.

To improve the procurement governance and process efficiency at the Ministry of Health and Family Welfare (MOHFW), MTaPS/**Bangladesh** trained 24 senior officials, including the Secretary of Health, Additional Secretary, Joint Secretary, and associated Line Directors, on public procurement management. The two-day training is expected to enhance procurement decision processes and efficiency.

MTaPS/Bangladesh contributed to the midterm review of the fourth Health Sector Program conducted by the independent review team in the area of procurement and supply chain management. MTaPS' contribution initiated a recommendation to create a separate directorate for procurement and supply management (PSM) to effectively organize, coordinate, and implement supply chain management for all commodities rather than addressing them in a fragmented manner. When and if the recommendation is approved, MTaPS will assist the MOHFW in ensuring comprehensive and integrated procurement and supply chain management organization across each level.

MTaPS/Bangladesh, in coordination with Directorate General of Family Planning (DGFP) master trainers, facilitated two sessions of training on warehouse information management systems (WIMS) and upazilla information management systems (UIMS) with the objective of continuous improvement for supply chain management of reproductive and family planning (FP) commodities. The DGFP assumed financial responsibility for the training, and MTaPS, through its regional technical advisors, organized and facilitated the training. A total of 274 supply officers and store keepers from 11 districts received the training. The training will build the capacity of supply officers and store keepers to facilitate continuous update of stock transactions using the WIMS and UIMS. During the training, MTaPS assisted participants to develop post-training action plans with performance targets to implement and monitor performance.

In mobilizing resources, MTaPS/Bangladesh assisted the NTP to prepare concept notes with funding requests for the Global Fund for 2020–2023. MTaPS continued to support the NTP in finalizing the PSM-related activities planned under both the National Strategic Plan and country concept notes for the next Global Fund grant. When the planned activities are supported through appropriate resources, it will move the NTP PSM toward sustainable organizational capacity and self-reliance. In addition, MTaPS regional technical advisers participated in TB quarterly monitoring meetings in eight districts during this quarter and participated in discussions on how to ensure IPT for child TB patients, increase new case notification, improve the performance of health workers, and ensure functioning of e-TB Manager.

In the **Philippines**, MTaPS conducted a workforce assessment for PSCM organization and related functions. The assessment was designed to review PSCM functions, related core competencies and skill sets, and human resource requirements to assist the DOH in identifying workforce requirements to fill positions. MTaPS/Philippines, in coordination with the PSCMT and other DOH stakeholders, facilitated key informant interviews and focused group discussions. A stakeholder workshop was organized on February 21, 2020, and preliminary assessment results were presented and discussed. The results of the

workforce assessment will be used to develop a workforce development plan to determine the required skill sets, workforce numbers and distribution of staff positions, and job descriptions. Possible local institutional arrangements will be made to meet the needs of the country to ensure sustainability.

In the Philippines, MTaPS assisted the Procurement and Supply Chain Management Team (PSCMT) in redefining the role it will play in supporting local government units (LGUs) in the move toward decentralizing PSCM operations to local health systems. The support was facilitated through the Strategic Commitment document review and tied to key performance indicators and milestones. The revised role will provide PSCMT the mechanism to lead, organize, coordinate, and provide policy guidance and capacity building to LGUs on PSCM system development.

Considering the new initiative to decentralize PSCM systems and operations at lower levels and pilot regional PSCM governance mechanisms, MTaPS/Philippines successfully advocated with Department of Health (DOH) Administration of the Central Visayas Region for the creation of the Central Visayas Center for Health Development Procurement and Supply Chain Management and Pharmacovigilance Committee. In addition, in collaboration with USAID's TB Innovations and ProtectHealth implementing partners, MTaPS/Philippines' advocacy efforts resulted in securing endorsement from the Mayor and Vice Mayor of Cebu City to the Service Delivery Integration Implementation Research called "Cebu City-Wide TB Elimination Campaign" to achieve the main goal of improving TB treatment outcomes. This initiative will connect the City-Wide TB Elimination Campaign with the regional PSCM governance strengthening efforts to identify effective ways to ensure uninterrupted availability of TB commodities for increased impact on service delivery integration in the cities to achieve increased TB case detection and treatment outcomes.

In the Philippines, MTaPS continued supporting the Procurement Services Unit and Pharmacy Division of the DOH in revising the Guidelines on Framework Agreement to include pooled procurement and use of international procurement mechanisms in the context of the UHC law and devolution of DOH budgets to LGUs. MTaPS assisted in the creation of a central price negotiation board, decentralized budget devolution to the LGUs, and pooled procurement mechanisms to optimize resource utilization and maximize value for money. Once finalized and approved, the Framework Agreement and the pooled procurement mechanisms with centrally negotiated prices will address procurement bottlenecks such as limited supplier, high product price, poor timely delivery, and transparency.

During this quarter, MTaPS/Philippines facilitated coordination between the DOH and the Commission on Population and Development (POPCOM) to reach agreement on responsibility and resource utilization, such as regional warehouses owned by POPCOM, for sub-national supply chain management of FP commodities. After the agreement, MTaPS supported the development supply chain management guidelines for FP and facilitated a three-day (March 9–11, 2020) training on FP commodity warehousing and inventory management for DOH and POPCOM personnel who will be assigned to manage the warehousing and distribution of FP commodities from the central and regional POPCOM offices. The guidelines and training will help POPCOM properly manage regional storage and distribution of FP commodities, which will in turn reduce the logistics burden of the DOH and utilize storage spaces optimally.

IMPROVED PATIENT SAFETY AND THERAPEUTIC EFFECTIVENESS

MTaPS/**Mozambique** assisted in conducting a three-day training for 72 HIV, PV, TB, and MCH health care workers on the protocol for actively monitoring patients on dolutegravir (DTG) for antiretroviral therapy. Participants provided inputs on data capture forms, which MTaPS revised prior to sending them to health facilities. USAID, CDC, and the National Pharmacovigilance Committee participated in the training. MTaPS/Mozambique also supported the Directorate of Pharmacy (DNF) and the HIV program in organizing an on-site trainings for actively monitoring patients on dolutegravir (DTG) for 368 health

care workers from 9 health facilities. Active PV monitoring of DTG will be led by the DNF's national PV center and national HIV and TB programs.

In **Rwanda** and **Mozambique**, MTaPS made progress in active PV monitoring through the implementation of pharmacovigilance monitoring system (PViMS), a web-based tool for monitoring the safety of medicines. MTaPS/**Mozambique** worked with a consulting firm to adapt PViMS to Mozambique context and it is currently being refined and tested for functionality. To further ensure active PV data capture at the facility level, MTaPS/Mozambique and the DNF agreed on a data capture approach for health facility focal points. MTaPS procured tablets for data entry for 10 health facilities.

Rwanda and Mozambique are using PViMS for active pharmacovigilance monitoring of on dolutegravir for antiretroviral therapy, among other medicines. This facilitates timely access to information to ensure patient safety.

MTaPS/**Rwanda** installed PViMS on the Rwanda FDA server and trained staff on its use. MTaPS and the Rwanda FDA trained health care providers from public and private health facilities, including 18 doctors, 11 nurses, and 15 pharmacist members of drug and therapeutics committees in public hospitals. This will help to monitor adverse drug reactions, primarily focusing on the ongoing Ebola immunization and the new DTG regimen for antiretroviral therapy.

In **Rwanda**, MTaPS also conducted baseline assessment data collection, which included 27 hospitals and 27 health centers. During the assessment, data collectors identified 11 health facilities medicines with suspected poor quality in storage, including discolored methyldopa 250 mg tablets. All the facilities were requested to report the issue to the Rwanda FDA, and investigations were started immediately. The results and recommendations will be used to determine where more effort is required.

MTaPS/**Philippines** conducted a workforce assessment for pharmacovigilance (PV) functions to help the Department of Health (DOH) identify and address the workforce challenges related to institutionalizing the PV systems under the Universal Health Coverage Act. MTaPS solicited information from DOH stakeholders, international organizations, and USAID implementing partners. As a result, MTaPS will develop an assessment report and collaborate with the DOH to create a PV workforce development plan that addresses the staff positions, skill sets, roles, and institutional arrangements needed.

BETTER CONTAINMENT OF ANTIMICROBIAL RESISTANCE AND INFECTION PREVENTION AND CONTROL

MTaPS/**Jordan** activities during the quarter focused on building the necessary strategic partnerships to start implementing the year 1 workplan, including USAID's formal introductory letters to primary stakeholders based on the mapping that MTaPS conducted. The Ministry of Health (MOH) gave its approval to MTaPS to conduct planned activities and assigned a focal point. MTaPS met with the head of the MOH Communicable Diseases Directorate, the national focal point for the NAP-AMR, and WHO Jordan to present program plans and agree on the next steps for collaboration in containing antimicrobial resistance (AMR).

MTaPS continued its comprehensive mapping exercise of the stakeholders involved in all aspects of AMR containment in the **Jordan**, including their roles, participation in the implementation of the national action plan for AMR (NAP-AMR), strengths and weaknesses, level of coordination with the MOH through the NAP-AMR Steering Committee, and potential interaction with MTaPS for the implementation plan. Based on the results, MTaPS and USAID Jordan met with the Royal Medical Services, the Eastern Mediterranean Public Health Network, and the Health Care Accreditation Council. It is the first-ever national mapping of AMR stakeholders in Jordan and will be continuously updated and used as a reference document for MTaPS, USAID, and the MOH. The AMR stakeholders mapping report will be finalized for dissemination next quarter.

Through coordination with the NAP-AMR focal point, MTaPS/**Jordan** met with the head of the MOH Pharmacy and Clinical Pharmacy Directorate, who is the national antimicrobial stewardship (AMS) committee focal point, and selected two pilot hospitals—Al-Bashir Hospital for Pediatrics and Gynecology and Prince Hamza Hospital—to introduce AMS programs. The practical steps to start implementing AMS activities at the hospitals were set, including the coordination process with the AMS technical sub-committee.

During this quarter, MTaPS/**Mozambique** conducted a training of trainers to give 13 MOH staff the capabilities and skills to facilitate health care worker training. MTaPS shared knowledge about foundations, theories, and principles in adult learning; participatory training methods and techniques; and the characteristics of an effective facilitator. In collaboration with the MOH Hospital Pharmacy Department (DHP), MTaPS prepared for the AMS training by providing technical support to adapt the generic MTaPS training set on AMS for the Mozambique context. Immediately following this training of trainers, a second facility-based training was held. For this, the DHP and MTaPS/Mozambique targeted seven provincial hospitals that are the primary focus to promote AMS programs and also included health care providers from the five general hospitals from Maputo, with 29 trainees in total. The WHO also participated in the training, which covered AMR and its global and country impact, the WHO AWaRe categorization, the quantity and quality of antibiotic use, and implementation of antimicrobial control interventions. The trained DHP trainers co-facilitated some of the sessions of the facility-focused training, thereby immediately building local capacity and putting it to use. Trainees also developed AMS plans for their health facilities. The new knowledge and skills related to AMS will facilitate the revitalization of the hospitals' Drug and Therapeutics Committees and their ability to develop and implement AMS activities, including conducting AMS audits.

In **Jordan**, planned activities related to multisectoral coordination (MSC), stakeholder meetings, and visits to the two hospitals have been put on hold due to the government's COVID-19 curfew. MTaPS/Jordan will continue remote contact with the AMS national focal point to share AMS-related technical materials, such as terms of reference, checklists, and workshop proceedings, to make progress until the national curfew is lifted.

In addition to AMR-related activities under Objective 5, MTaPS supports GHSA/AMR activities in **Bangladesh, Burkina Faso, Cameroon, Côte d'Ivoire, DRC, Ethiopia, Kenya, Mali, Senegal, Tanzania, and Uganda**, focusing on promoting AMS, IPC, and MSC.

For more details on GHSA portfolio progress, refer to the [GHSA section](#) of this report.

PROGRESS BY REGIONAL BUREAU PORTFOLIO

ASIA REGIONAL BUREAU

OBJECTIVE 1: CAPACITY TO CONDUCT AND USE HEALTH TECHNOLOGY ASSESSMENT TO SUPPORT THE INSTITUTIONALIZATION OF TRANSPARENT AND EVIDENCE-BASED DECISION MAKING IN ASIAN REGIONAL COUNTRIES STRENGTHENED

Activity 1.1.1: Adapt and pilot a roadmap for health technology assessment implementation in three Asian regional countries

MTaPS continued to develop the roadmap for health technology assessment (HTA) institutionalization in low- and middle-income countries (LMICs). The internal review was completed in January 2020, and the revised draft was shared with global and regional experts for their feedback in February. In consultation with USAID Asia Bureau, 27 experts were shortlisted for feedback, which included experts from HTA agencies (high-, middle-, and low-income countries), academic institutions, think tanks, World Health Organization (WHO), World Bank, global networks (INAHTA, HTAi, etc.), and organizations providing capacity strengthening support for the HTA. Out of the 27 experts contacted, 11 provided final review. The breadth of experts that provided review ensured a range of views, additional information and resources, case studies, and feedback on all topics covered in the roadmap, based on their expertise. The comments of the experts fostered dialogue and coordination of efforts. As a result, a more advanced and comprehensive version of the draft roadmap was prepared. The overall feedback on the draft was positive, reflective of its comprehensiveness, and utility of the effort.

"This is a great document . . . the report is very comprehensive . . . very rich . . . and reads very well, congrats . . . this is a very good manual for LMICs."

-Reviewer feedback on the HTA roadmap

Sharing and communicating about the roadmap by MTaPS and USAID Asia Bureau also triggered coordination among key technical assistance partners in the region. MTaPS led coordination calls with experts from the International Decision Support Initiative, which includes members, such as the Center for Global Development and Imperial College UK; Bill & Melinda Gates Foundation; and HTA focal persons from WHO. In addition, MTaPS worked closely with Asia Bureau staff to coordinate with the Government of Indonesia, which is the initial focal country for HTA technical assistance, on a regional workshop to pilot the roadmap in the region. The purpose of this coordination is to harmonize the work various partners are doing, maximize efficiency of resource use for technical assistance, avoid duplication of efforts, and avoid burdening the government with multiple partners seeking attention. The calls have led to sharing of information important for planning MTaPS HTA capacity-building activities in the region, especially for Indonesia and the Philippines. Both the countries and local USAID missions have expressed great interest in having MTaPS provide technical support in their plans for advancement and institutionalization of HTA. However, because of the COVID-19 pandemic, scoping missions and activity planning are on hold. MTaPS continues regular contact with countries and relevant stakeholders and will move forward with activities as the situation improves.

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

MTaPS Asia Bureau's activities were minimally affected this quarter by the COVID-19 pandemic. A trip planned to Indonesia was postponed and will be scheduled at a later date.

In the previous quarter, MTaPS submitted a proposal for a pre-conference workshop at the 9th HTAsiaLink Annual Conference (Bali, Indonesia) to the HTAsiaLink board, in collaboration with Indonesia's HTA Committee and the Asia Bureau. However, because of the COVID-19 pandemic, the HTAsiaLink conference has been postponed and no new date has been set. MTaPS has been evaluating options for a workshop tentatively scheduled for June 2020, contingent upon pandemic reduction and refocusing of governments on HTA efforts. Options for the tentative workshop include one focused on capacity building and action planning for HTA scale-up in Indonesia while leveraging the proposed approaches in the roadmap, or a regional workshop to share the stepwise approach for scaling up HTA from the roadmap and elicit feedback. MTaPS experts facilitating the workshop will work with focal countries in developing action plans for institutionalizing the HTA in consultation with the Asia Bureau. The focal countries for the regional workshop are India, Indonesia, Philippines, and Vietnam.

OBJECTIVE 2: CAPACITY TO DEFINE AND COST EVIDENCE-BASED PHARMACEUTICAL COVERAGE AND PROMOTE TRANSPARENCY IN PHARMACEUTICAL PRICING TO IMPROVE VALUE IN PURCHASING IN ASIAN REGIONAL COUNTRIES STRENGTHENED

Activity 2.1.1: Support the development of national processes for defining a pharmaceutical benefits package and the size and scope of coverage

MTaPS completed an analysis on how countries define pharmaceutical benefits in 12 countries in Asia. The draft report presents the analyses of financing arrangements in the selected countries to understand how they define service and pharmaceutical benefits packages, how products are purchased through these schemes, and the degree of cost sharing for covered products. It also investigated trends in public and private expenditures for medical products and results of the previous exercise that analyzed the contents of the 12 countries' EMLs. As key findings, the majority of the analyzed countries define a service benefits package but do not define an explicit set of pharmaceutical benefits, and private expenditure on medical products was the predominant source of spending, suggesting that financing arrangements in many countries do not provide adequate financial protection to medical product spending. The report will be finalized and disseminated in the next quarter to help countries streamline benefit packages to ultimately increase service coverage and access to pharmaceuticals to the population.

MTaPS is reviewing available guidelines on defining pharmaceutical benefits coverage in the Asian region. Key findings will be included in a short brief next quarter. This brief will also look closely at the Indonesian case and the package defined as part of the country's national health insurance scheme as an example to be potentially used by other countries in Asia.

Activity 2.1.2: Establish guidance for estimating financial outlays for pharmaceutical benefits packages in Asian regional countries

MTaPS completed a review of possible tools for costing a pharmaceutical benefit package. The draft report analyzed a set of criteria, including electronic vs paper-based; allows for customization and flexibility in treatment guidelines to reflect the local context; and enables forecasting and projections. The report identified the One Health tool as the most suitable to conduct pharmaceutical benefits package costing.

MTaPS is developing guidance documents to build countries' capacity to use the One Health tool for pharmaceutical benefit package costing. The implementation of these materials will better enable stakeholders to: 1) use the One Health tool to derive coverage targets, costing, and impact information; 2) use the One Health tool to assess health system strengthening activities, including medicine forecasting and to improve overall health system performance; 3) assess government contribution and financial/fiscal gap to afford the medicines needed in the country; and 4) facilitate discussions and negotiation processes for prioritization, including priority setting within each disease and adjustments to

each pharmaceutical package under each disease, intervention, or health condition. The guiding documents will be finalized and disseminated in the next quarter.

Activity 2.2.1: Promote transparency in pricing policies through development of regional pricing database

MTaPS started research on pricing policies and techniques used within countries in the Asian region. Literature review yielded 1,033 academic articles which, once screened, left 29 that were relevant to the topic. The team will be also looking in grey literature and exploring outreach to in-country contacts. The results will be summarized in a brief report next quarter.

OBJECTIVE 3: MEDICINES REGULATORY CAPACITY AND PHARMACEUTICAL SECTOR GOVERNANCE IN ASIAN REGIONAL COUNTRIES STRENGTHENED

Activity 3.1.1: Support regional and sub-regional collaboration and advocacy to advance PV for new essential medicines

MTaPS completed the mapping exercise to identify initiatives, networks, and stakeholders that support strengthening pharmaceutical regulatory systems, including PV in the Asian region. The Google form data collection tool was shared with 14 respondents (13 MTAps staff and 1 MTAps partner) to provide information for the mapping exercise. A total of 22 initiatives, networks, and stakeholders were identified. Through a prioritization exercise, the list was narrowed down to five key initiatives, networks, or stakeholders. Collection of additional information to fill in the gaps on the top five entities is underway using literature review and interaction with key informants, particularly in the WHO South East Asia Regional Office (SEARO) and the South East Asian Regulatory Network (SEARN). Meetings were held with the regional advisor, Intellectual Property Rights and Trade and Health, WHO SEARO, who expressed willingness to collaborate to support strengthening medicine regulation in SEARN, and with a member of SEARN from the Indonesian national medicines regulatory authority who provided information on the operations of the five technical working groups in SEARN. A concept note was presented to SEARO for further discussion with the SEARN steering group. MTAps continues to pursue these discussions to concretize the specific areas of interest in line with USAID's priorities.

The report will be finalized next quarter. Recommendations on possible areas for collaboration with the key entities were identified and the most relevant and feasible recommendations for the countries in the Asian region are as follows:

- Support harmonization initiatives to assist networks and countries to adopt uniform guidelines for registration
- Support countries, such as Indonesia, Sri Lanka, and Nepal, as members of SEARN to participate in the WHO collaborative registration procedure to enable them to optimize their regulatory resources
- Establish north-south collaboration between key academic/research institutions, including the RCORE–Duke NUS and University of Washington in growing the capacity of the PV workforce

Activity 3.2.1: Develop a how-to manual on managing conflict of interest

MTaPS revised the work plan to incorporate this new activity for this sub-objective and obtained COR approval. The approved sub-activities include a) collaborating with SEARO and other partners to conduct a baseline survey to identify what conflict of interest (COI) management policies are in place in the Asian region, explore if and how policies are applied, and collect copies of existing policies and examples of good practices; b) conducting literature review to identify model guidance, policies, and procedures on managing COI; c) developing and piloting of a manual that identifies model COI management policies and principles, showcases country examples and good practices for the Asian region/sub-region, and provides practical guidance to countries, particularly LMICs, on how to

implement these model policies and principles. MTaPS continued discussions with WHO headquarters and WHO SEARO to determine roles and joint deliverables for these activities and, based on these deliberations, developed a project collaboration agreement for submission to WHO for review and approval. Additionally, MTaPS submitted documentation for WHO review in accordance with the WHO Framework of Engagement with Non-State Actors (FENSA). MTaPS continued discussions with the WHO Collaborating Center for Governance, Transparency, and Accountability in the Pharmaceutical Sector to outline areas of collaboration, particularly for conducting the baseline survey and targeted literature review. The procedures and application forms for Internal Review Board (IRB) and ethical approval for the survey were obtained and the study protocol is under development. Navigating the new WHO procedures for engagement and collaboration has been the main challenge this quarter. Going forward, we anticipate longer than usual timelines for obtaining IRB and ethical approvals and for country responses to the survey because of competing priorities for managing the COVID-19 response.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
Finalize an updated draft of the roadmap for HTA institutionalization and share again with global experts for their final feedback.	April-May
Develop the schedule, proposed sessions, session content, and facilitation approach and identify facilitators for proposed regional workshop contingent upon resolution of the global COVID-19 pandemic crisis	May-June
Update roadmap document based on the final expert review and finalize for dissemination at a global level	June-July
Finalize and disseminate report on pharmaceutical benefits; complete research and compile guidance on establishing pharmaceutical benefits package into a brief	April-June
Finalize and disseminate both report on the benefits package costing and guidance for costing pharmaceutical benefits packages	April-June
Continue research on pricing policies; finalize and disseminate short report	April-June
Finalize report of mapping exercise with recommendations on areas for regional support on regulatory system strengthening, including PV in Asia Bureau	April-May
Virtual meetings with SEARN, SEARO, and ASEAN; communicate with key selected networks to concretize specific areas of support for RSS, including PV	April-May
Develop a how-to manual on managing COI - Obtain project collaboration agreement and FENSA approvals; finalize the study protocol for IRB approval and obtain ethical approval; develop data collection instruments and initiate the baseline survey; develop literature search strategy and initiate search	April-June

INTERGOVERNMENTAL AUTHORITY ON DEVELOPMENT (IGAD) AND EAST AFRICAN COMMUNITY (EAC)

OBJECTIVE 1: IMPROVE PHARMACEUTICAL-SECTOR GOVERNANCE

IGAD 1.1.1: Assist IGAD in establishing and operationalizing governance structures for pharmacovigilance (PV)

On March 2-6, 2020, the MTaPS Program, in collaboration with the IGAD secretariat and support from the World Bank, carried out a workshop of the IGAD PV Expert Working Group (EWG) for IGAD member states. The objectives of the workshop were:

- To equip experts on how to conduct PV system assessments using harmonized PV indicator-based assessment and monitoring tools
- To establish an IGAD PV-EWG with terms of reference
- Develop country plans for baseline assessment of the PV system in each member state
- Develop a harmonized IGAD PV-EWG PV plan for 2020

The workshop was attended by PV experts from Djibouti, Ethiopia, Kenya, Somalia, South Sudan, Sudan, Uganda, and the IGAD secretariat with MTaPS as the technical lead. Eritrea did not attend; 17 participants (9 female and 8 male) attended the workshop.

IGAD countries

Djibouti
Eritrea
Ethiopia
Kenya
Somalia
South Sudan
Sudan
Uganda

EAC countries

Burundi
Kenya
Rwanda
South Sudan
Tanzania
Uganda

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

The COVID-19 pandemic has had a great impact on planned MTaPS regional activities. Both the East African Community (EAC) and Intergovernmental Authority on Development (IGAD) have cancelled/suspended meetings and face-to-face activities indefinitely. Most planned activities with EAC and IGAD have now been pushed to quarters 3 or 4 and a few into next program year.

MTaPS has sought to innovate and adapt electronic-based approaches in implementing some activities, including virtual meetings and prioritizing harmonization of documents, such as developing a harmonized PV training curriculum for health care workers. MTaPS has continued to engage with the EAC secretariat and EAC partner states on the development of a harmonized PV curriculum and implementation of a PV compendium; MTaPS has also engaged the IGAD secretariat and IGAD member states on implementation of the PV system baseline assessment through emails, WebEx meetings, and phone calls.

MTaPS continued to engage with IGAD member states on the planned PV system baseline assessment, including reviewing country plans and budgets to align them with agreed timelines and budget ceiling, following up with and informing member states on the resolutions of the workshop, checking on their preparedness to undertake the activity, and implementing the developed plans.

EAC 1.1.1: Implement the EAC harmonized PV manual and tools to monitor safety and quality of registered medical products and health technologies.

MTaPS convened a meeting with the EAC secretariat and partner states on February 12, 2020, to review progress in implementing the harmonized PV manual and tools. The PV compendium was approved in March 2019 for domestication during the 18th EAC Sectoral Council of Ministers of Health ratified by the sectoral meeting on the EAC PV compendium. The compendium is to be communicated to all partner states for adoption. The meeting resolved that, with the support of MTaPS, there was a need to:

- Conduct a situational analysis to determine current status on domestication of the PV compendium in EAC partner states since various countries are at different stages of adoption
- Hold half-day, in-country stakeholder sensitizations on domestication of the PV compendium once it has been

- finalized and officially shared and communicated to partner states through the EAC secretariat
- Develop a monitoring tool on implementation and use of the PV compendium and guidelines and its impact on reporting ADRs by partner states.

Partner states were also requested to start implementing areas of the compendium that do not need legislation or long approval processes.

Thereafter, MTaPS continued to engage with the EAC secretariat, the EAC-PV EWG, and the lead country (Kenya) on the implementation and adoption of the PV compendium by EAC partner states. The team agreed that MTaPS should support the development of a harmonized SOP to implement the PV compendium.

OBJECTIVE 2: STRENGTHEN INSTITUTIONAL AND HUMAN RESOURCE CAPACITY TO MANAGE PHARMACEUTICAL SYSTEMS

IGAD 2.1.2: Support post-marketing surveillance and PV activities along IGAD cross-border points to promote patient safety

During the IGAD PV-EWG workshop held March 2-6, 2020, MTaPS, the IGAD secretariat, and IGAD member states reviewed and approved the use of a harmonized PV indicator-based assessment and monitoring tool to carry out a baseline assessment of member states' PV systems. As part of the baseline assessments, identified IGAD cross-border points were intentionally targeted for assessment to inform planning objectives to strengthen PV activities geared to promoting patient safety at these sites.

IGAD/EAC 2.1.3: Support local manufacturers in IGAD/EAC regions to better comply with regional and national pharmaceutical regulatory standards and requirements

MTaPS held a meeting with the IGAD secretariat on February 21, 2020, and discussed the possibility of holding a multisectoral meeting geared to supporting the local manufacturers in the region. The proposal was to have a workshop/meeting of local manufacturers and other stakeholders, including the various regulatory bodies drawn from IGAD member states, to learn from one another and agree on a roadmap of regulatory compliance. The meeting was penciled for August 2020.

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

IGAD/EAC 3.1.1: Strengthen and harmonize PV processes and tools in IGAD and EAC regions and support uptake by border sites and regional stakeholders

MTaPS, in collaboration with the IGAD secretariat and support from the World Bank, carried out a workshop of the IGAD PV-EWG for IGAD member states March 2-6, 2020. The workshop was attended by the member states of Djibouti, Ethiopia, Kenya, Somalia, South Sudan, Sudan, and Uganda and the IGAD secretariat with MTaPS as the technical lead. During the workshop, the member states reviewed and agreed on the components, indicators, and objectives of a harmonized PV indicator-based assessment and monitoring tool.

It was agreed that the tool shall be used by IGAD member states to carry out a baseline assessment and monitoring of the PV system in each member state with at least two IGAD cross-border areas assessed by each state. The cross-border areas are a focus because they are usually neglected, yet they are unique because of the mobility of goods, services, and populations posing a health challenge. The intention of IGAD and MTaPS is to ensure these hard-to-reach areas are strengthened to handle health system challenges and offer patient-centered quality care. The member states developed country assessment plans to implement the baseline assessments.

A harmonized IGAD PV plan was developed in the workshop and participants agreed to include sensitizing cross-border stakeholders on the importance of PV and having cross-border health facilities (public and private) trained on PV in June 2020.

MTaPS continued to engage with the IGAD secretariat after the workshop to develop regional harmonized indicators for assessing and monitoring PV systems and a user manual for member states to use during the baseline assessment. A draft manual has been developed.

During the meeting with the EAC secretariat and partner states on February 12, 2020, it was agreed that the following items be developed, with support from MTAps:

- Draft harmonized PV training curriculum for health care workers from partner states' curriculums
- Workshop to finalize the draft curriculum to be scheduled for April 26-30, 2020
- Trainer of trainers (TOTs) workshop to sensitive health care workers (from NMRA and selected border points) using the developed harmonized curriculum for May 2020

MTaPS held a meeting with the Medicines Information and Pharmacovigilance (MIPV) Directorate of the Pharmacy and Poisons Board (PPB) Kenya, on February 24, 2020. During the discussions, the PPB PV team, who are the regional lead in PV/post-marketing surveillance, agreed to spearhead the development of a harmonized PV in-service training curriculum for both the EAC and IGAD regions with technical assistance from MTAps. The development of a harmonized training curriculum is in line with EAC/IGAD and MTAps work plan priorities.

ACTIVITIES FOR NEXT QUARTER	
ACTIVITY AND DESCRIPTION	DATE (2020)
Review and compile country reports of the baseline assessment	March-April
Develop a harmonized EAC and IGAD PV training curriculum and package for training border sites in both IGAD and EAC	April
IGAD PV baseline assessment validation workshop to validate compiled country reports into regional report	May
Training PV TOTs at regional level	May
Training PV TOTs from countries, including border sites	May
Sensitization meeting with IGAD cross-border stakeholders	June
Training IGAD border facilities	June

PROGRESS BY COUNTRY

MTAPS RESPONDING TO THE COVID-19

The Directorate General of Health Services (DGHS) of the Ministry of Health and Family Welfare (MOHFW) in Bangladesh is leading public health activities for controlling the coronavirus pandemic, mainly through its Institute of Epidemiology, Diseases Control and Research (IEDCR), Directorate of Communicable Diseases Control (CDC), Directorate of Hospitals and Clinics, and Central Medical Stores Depot (CMSD). The objectives of the country's response are to prevent the unnoticed entry of patients with COVID-19 infection, identify cases early, update the country's laboratory capacity to test for COVID-19, and prepare the public health system to respond to a possible outbreak. MTaPS/Bangladesh is actively engaged in responding to the COVID-19 pandemic in collaboration with the DGHS, its key units, and other agencies.

MTaPS/Bangladesh participated in a number of meetings organized by the World Food Program to strengthen coordination among development partners. Representatives from USAID, UNICEF, WHO, IOM, UNHCR, and DFID also attended the meetings. This coordination forum is working to identify the country's needs, monitor stock status, develop emergency procurement plans, and ensure private-sector engagement for infection prevention and control (IPC) commodities.

MTaPS provided technical assistance to the DGHS in developing an online reporting mechanism to strengthen supply chain management called COVID-19 Commodities Stock Status. The main objectives of this online reporting system are to track and manage stock, receive and issue commodities, and ensure rational distribution of COVID-19-related commodities. MTaPS worked closely with the director, hospitals and clinics, and CMSD officials to develop the system as a separate module in the existing web-based platform—the Supply Chain Management Portal, which is owned by the MOHFW and hosted on the DGHS server. This module will help health managers and policy makers make decision by utilizing data and information from different health facilities to maintain adequate stock and rational distribution of COVID-19 commodities, including personal protective equipment (PPE).

BANGLADESH

MISSION-FUNDED ACTIVITIES

OBJECTIVE 1: PROCUREMENT AND SUPPLY CHAIN SYSTEMS IMPROVED AND MODERNIZED

MTaPS facilitated a two-day training on public procurement management in March 2020 for 24 senior MOHFW officials and its directorates, including the secretary, additional secretary, joint secretaries, line directors, and other senior-level officials of the health sector program, to improve procurement efficiency of the MOHFW at the national level.

MTaPS facilitated a workshop chaired by the director, hospitals and clinics, DGHS, and worked with subject-matter experts of the different disciplines at medical college hospitals to review the specifications of core medical equipment for developing a comprehensive table of organization and equipment (TOE) and price guide. The specifications were further reviewed by international consultants from the World Bank. This activity is directly linked to different procurement tools (e.g., the TOE is expected to strengthen procurement efficiency of the procuring entities under the MOHFW).

MTaPS engaged a local consultant and started updating the list of medical and surgical requisites (MSR) of the DGHS to improve procurement efficiency at the sub-national level. This activity was started late due to unavailability of the soft version of the existing MSR list. Review of the draft list by experts from different health facilities may be affected by COVID-19 activities.

Review of the standard list of medical equipment was completed this quarter as one of key components of the comprehensive TOE. The director, hospitals and clinics, DGHS, formed a working group to ensure coordination among departments and link the standard list of equipment to the needed human resources to complete the development of the TOE. This tool

will improve asset acquisition planning and procurement efficiency by reducing the procurement lead time and unnecessary procurement.

MTaPS contributed to the mid-term review of the fourth HPNSP, conducted by the independent review team (IRT), in the area of procurement and supply chain management. MTaPS provided updates to the IRT on procurement and supply management activities of the MOHFW and its directorates and recommended creating a separate directorate for procurement and supply management.

With technical assistance from MTaPS, the CMSD conducted its annual physical stock counting exercise as part of good warehousing practice. The exercise identified few undistributed medicines, and a distribution plan was quickly developed.

The MTaPS technical team worked closely with the National Electro Medical Equipment Maintenance Workshop (NEMEMW) of the MOHFW to customize the electronic asset management system (eAMS) according to its operational requirements. MTaPS attended three technical meetings organized by the NEMEMW to discuss and make decisions on the current status of repair and maintenance features, issues, and the way forward. MTaPS also facilitated issuing a government office circular on assigning focal persons in the NEMEMW to operate the eAMS. This government circular, issued by the MOHFW, will accelerate the functioning and institutionalization of the eAMS.

The Directorate General of Family Planning (DGFP) used its own financial resources under the Procurement, Storage and Supply Management-Family Planning (PSSM-FP) operational plan to organize two trainings on warehouse/store management and computerized inventory management for continuous improvement of supply chain management of reproductive health and family planning commodities. MTaPS regional technical advisers worked with DGFP master trainers to conduct these trainings for 274 participants, including supply officers and store keepers, from 11 districts. Training methodologies included PowerPoint presentations, interactive discussion, group work and exercises, and a live demonstration of the DGFP eLMIS. Participants

MTAPS RESPONDING TO THE COVID-19 PANDEMIC (CONTINUED)

MTaPS/Bangladesh, in collaboration with the CDC of DGHS, facilitated the development of the training of trainers (TOT) module on IPC national guidelines for health care providers in the context of COVID-19. Based on the TOT module, 12 batch trainings took place for 460 participants from all 64 districts and 8 designated medical college hospitals. Residential medical officers and medical officer civil surgeons offices from districts and doctors and nurses from medical college hospitals participated. These master trainers will provide basic training to health care providers at district and medical college hospitals. The line director, CDC, DGHS, is considering online training to cover the whole country based on the TOT module due to movement restriction in the country.

MTaPS/Bangladesh supported the CMSD on emergency procurement of COVID-19 medical items. MTaPS also procured some PPE, along with hand sanitizer and liquid soap, for demonstration purposes during the training. These items are in process of distribution among the master trainers, who will roll out the training in their health facilities.

MTaPS provided support to draft the SOP on triage/patient access guidance and two guidelines on IPC for cleaners and drivers, which are now in the process of being endorsed by the director, hospitals and clinics, and line director, CDC, DGHS.

In collaboration with the DGHS, MTaPS is developing a video clip to display in all district-level facilities to create awareness on the COVID-19 response, focusing on dos and don'ts.



Trainer showing how to wear PPE during the TOT. Photo credit: Md. Rezaul Karim.

developed an action plan to improve their existing storage conditions and committed to ensure close monitoring of the service delivery point stock situation to reduce the percentage of stock-outs.

MTaPS regional technical advisers attended TB quarterly monitoring meetings in eight districts during this quarter and participated in discussions on how to ensure IPT to child TB patients, increase new case notification, improve the performance of health workers, and ensure the functionality of e-TB Manager.

The National Tuberculosis Control Program (NTP), Bangladesh, completed drafting the National Strategic Plan (NSP) 2021–2025 and prepared the concept note with a funding request for a Global Fund grant for 2021–2023 to support the NSP. MTaPS continued to provide technical assistance in finalizing procurement and supply management (PSM)-related activities planned under both the NSP and the country concept note for the next Global Fund grant. During this quarter, MTaPS also provided technical assistance to the NTP PSM team in preparing quantification and submitting the final order for second-line TB drugs under the current grant (2018–2020). The assistance included reviewing quantification scenarios prepared by the NTP PSM team and providing technical guidance in planning for the phase out of injectable items and transition to all oral drug regimens for resistant TB treatment.

The meeting of the Procurement and Logistics Management Cell (PLMC) of the MOHFW could not be held this quarter because of the engagement of PLMC members in COVID-19 response activities.

OBJECTIVE 2: PHARMACEUTICAL REGULATORY SYSTEMS STRENGTHENED

MTaPS facilitated a number of small workshops to review the implementation status of the five-year strategic plan of the Directorate General of Drug Administration (DGDA), identify priority areas for improvement, and prepare a draft action plan in line with the fourth HPNSP of the MOHFW. The involvement of the DGDA and key stakeholders in the drafting process was minimal due to other priorities. The effort will continue during the next quarter to finalize the action plan. This plan will help formulate sustainable strategies to achieve the program goal of a strong pharmaceutical system and contribute to the fourth HPNSP (2017–2022) objectives and its commitment to achieving universal health coverage.

MTaPS facilitated a workshop with a technical sub-committee in the DGDA to evaluate 142 adverse drug events (ADEs) received by the DGDA in November and December 2019. The workshop did a causality assessment using the WHO-UMC method and the causality assessment scale. It will ensure effective classification of the ADE reports to improve patient safety.

In addition, MTaPS met with the pharmacovigilance (PV) focal point and ADRM cell regarding central PV software to be installed at the DGDA and to establish a PV wing in the organogram for improving current reporting and monitoring systems for ADEs. MTaPS also provided guidance to sites to facilitate workshops for scaling up targets set by the DGDA within 50 selected hospitals (≥ 100 beds) and 50 pharmaceutical companies. This approach will help increase the understanding of PV and increase the number of ADE reports in the DGDA for evaluation.

MTaPS, in collaboration with the DFID-funded Better Health in Bangladesh Project, reviewed the inspection and monitoring strategy and inspection checklist developed through a workshop with DGDA officials for a model pharmacy and model medicine shops for submission and renewal of licenses. It is now going through DGDA approval review.

OBJECTIVE 3: SYSTEMS FOR EVIDENCE-BASED DECISION MAKING INSTITUTIONALIZED

MTaPS has been conducting countrywide eAMS trainings since December 2019 in accordance with the plan approved by the MOHFW. Five trainings were held in January and February in 29 hospitals in four districts. Of the 116 individuals invited to the trainings, 115 attended, of whom 6 were female and 109 were male. The trainings will improve the efficiency of government hospitals to contribute to the

implementation of a system for cost-effective equipment management. This will contribute to the availability of equipment for diagnosis and treatment to save lives. However, due to COVID-19, additional trainings were postponed and will be rescheduled in consultation with the MOHFW at a later date.

The MTaPS Health Information System team participated in a digital health implementing partners coordination meeting coordinated and organized by the USAID Bangladesh Mission. The objectives of the meeting were to map all existing digital tools developed and maintained by all development partners, reduce duplication of digital tool development, and reuse existing tools where possible.

MTaPS provided technical assistance to develop an inventory management tool to track COVID-19 commodities, especially PPE, in the COVID-19 response for the MOHFW. The tool has been deployed to the MOHFW's existing supply chain management portal (scmpbd.org).

With technical support from USAID, the NTP organized a TB awareness raising program at the Hatirjheel amphitheater, Dhaka. This was part of a year-long TB awareness program. The Health Minister, Secretary, DGHS, NTP official, USAID representatives, and the OPHNE director were present in the event. A poster on e-TB Manager was on display in the MTaPS booth.



e-TB Manager refresher training: Staff of Narayanganj Civil Surgeon Office conducting group work during the training.

Photo credit: Mohammad Abu Shah Jamal Molla, MTaPS, MSH

As part of the countrywide roll out plan, MTaPS held a training on e-TB Manager for users at Barisal division February 29–March 12, 2020. The TB and leprosy control assistant, statisticians from public hospitals, and one representative from each TB implementing partner attended, and 158 participants (126 male; 32 female) were trained. Representatives from the NTP, Office of the Director (Health) of the division, and Civil Surgeon office served as resources during the training. Participants took part in practical exercises on data entry, fixing tags, and uploading data. In addition, MTaPS provided technical support to address internet connectivity issues using Government resources and facilitate a refresher training on e-TB Manager for officials of the Civil Surgeon, Narayanganj office, on March 15, 2020. The refresher training was requested by the Civil Surgeon of Narayanganj and aimed to improve the use of e-TB manager to ensure monitoring and timely reporting.

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

During this quarter, MTaPS facilitated a mapping exercise to assess the implementation of the NAP on AMR, with an emphasis on multisectoral coordination mechanisms. Another multisectoral coordination meeting was scheduled for March 2020 but postponed due to the COVID-19 situation. The meeting will be rescheduled in the next quarter in consultation with the line director, CDC, DGHS.

OBJECTIVE 5: PHARMACEUTICAL FINANCIAL RESOURCE ALLOCATION AND USE OPTIMIZED

A costing analysis of MSR to determine resource allocation for all health facilities is dependent on the complete MSR list, including specifications and pricing. Due to the delay in reviewing the MSR list, the activity planned under this objective has been delayed until the last quarter of this year. A local

consultant started working to facilitate the review and get the complete MSR list endorsed during this quarter.

ACTIVITIES FOR NEXT QUARTER	
ACTIVITY AND DESCRIPTION	DATE (2020)
Activity 1.1.1: Strengthen revitalized PLMC functions within MOHFW	May
Activity 1.1.3: Develop the table of organization and equipment up to tertiary-level health facilities. A training on public procurement management for 25 persons by ESCB will be held.	May
Activity 1.1.4: Review and update the list of MSR items, including specification and gender considerations. Three workshop will be organized. Two will be in small groups and the other will be the finalization workshop and will include all stakeholder representatives.	May
Activity 1.2.3: Assist the DGHS to implement manual inventory management tools in the selected districts (printing of tools; capacity building): Assist DGHS to implement manual inventory management tools in the remaining 10 districts	June
Activity 1.3.3: Enhance technical capacity of quantification cell within NTP and develop a sustainability plan: Capacity building workshop for NTP and partners	June
Activity 2.1.1: Provide technical assistance to the DGDA for strengthening good review practices (GRP) for medical product registration, including vaccines and biologicals, to contribute to improvement of maturity level in the WHO GBT <ul style="list-style-type: none"> • Course contents on GRP (drafting) • Identification and engagement of resources • Provide training on GRP for medical productions, including biologics and vaccines, for DGDA (30 per batch, two-day training) and pharmaceutical companies (40 per batch, one-day training) • Training on updated Pharmadex tool and refresher training on dossier evaluation of generic products for DGDA 	June
Activity 2.2.1: Support DGDA to improve the current reporting and monitoring system of adverse drug events using the common platform DHIS2 <ul style="list-style-type: none"> • Identify interventions to address gaps and explore improvement of digital system of reporting and monitoring (DHIS2 set up and implementation) • Workshop at DGDA 	June
Activity 2.2.2: Provide technical assistance to DGDA for scaling-up of PV program in selected sites <ul style="list-style-type: none"> • Work with DGDA to identify the means of collaboration to roll out • Readiness assessment of sites • Conduct workshops 	April-June
Activity 3.1.2: Assist MOHFW and DGHS to expand eAMS to all district hospitals <ul style="list-style-type: none"> • One batch of the eAMS training is planned • The postponed trainings of eAMS will start after the COVID-19 emergency is over 	April 16, June
Activity 3.1.5: Assist NTP to update and roll out e-TB Manager to selected sites/divisions (Mymensingh, Barishal, Khulna, and Chattogram Division): e-TB Manager roll-out in one division	June
Assist CMSD and director, hospitals and clinics, in ensuring availability of information on COVID-19 commodities and rational distribution plan	April-June

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

MTaPS, in collaboration with the CDC and DGHS, organized a joint stakeholder follow up workshop on the implementation status of the NAP on AMR with active participation of both government and development partners working on the AMR containment portfolio. The forum emphasized the development of standard treatment guidelines on infectious diseases. Periodic coordination and update sharing on AMR containment issues was also recommended for progressing the activities as per the NAP. The scheduled visit of the Technical Strategy Lead and Senior Manager during the quarter was postponed due to the COVID-19 situation.

RESULT AREA 2: INFECTION PREVENTION AND CONTROL

With the leadership of the CDC and DGHS, MTaPS facilitated the development of the national guideline on IPC for health care providers with participation from working group members from departments under the DGHS, quality improvement secretariat, IEDCR, US-CDC, icddr, NIPSOM, public medical college hospitals, private institutes and hospitals, and other stakeholders.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
Activity 1.1.2: Support quarterly joint meetings among sectors to support progress in the MSC, IPC, and AMS objectives of the NAP on AMR	April-June
Activity 2.3.1: Adaptation/customization of WHO IPC assessment tools for IPC baseline status in selected facilities	
Activity 3.3.1: Adaptation/customization of simple AMS-related checklists from QIS/DGHS, WHO, and other sources for a rapid assessment on AMS baseline status in selected facilities	

BURKINA FASO

RESULT AREA I: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

Activity 1.1.1: Provide support to the AMR-TTC to improve its organizational, governance, and practical management capacities

In collaboration with the Directorate General of Environmental Protection (DGPE), MTaPS has completed the review and dissemination of international conventions on the protection of the environment. MTaPS and the DGPE, which is part of the Ministry of Environment, Green Economy, and Climate Change, organized a national dissemination workshop on February 18, 2020, for members of parliament (MPs) who sit on the Commission on Rural Development, Economy, and Climate Change (CRDECC). The workshop aimed to increase MPs' awareness of these international conventions and their involvement in the promotion of antimicrobial stewardship (AMS) to control antimicrobial resistance (AMR), notably by strengthening the legal framework on AMR. MTaPS took this opportunity to inform workshop participants about the importance of the rational use of antimicrobials in addressing AMR. The DGPE presented and provided copies of five international conventions ratified by Burkina Faso to the 19 participants (nine parliamentarians and ten Ministry of Environment staff). The conventions included:

- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- Stockholm Convention on Persistent Organic Pollutants
- Minamata Convention on Mercury
- Vienna Convention for the Protection of the Ozone Layer

The chairman of the CRDECC made a commitment during his closing speech to create a coordination group to address AMR in Burkina Faso. This group will coordinate lobbying and awareness activities and draft legislation that address AMR in Burkina Faso and benefit the population.

Activity 3.1.1: Provide technical support to the AMR-TTC and stakeholders to develop a national plan to strengthen AMS in the human and animal health sectors

The rapid stewardship assessment is an opportunity to review the policies and regulations governing the use of antimicrobials in both the human and animal sectors, to identify the potential gaps, and to prepare for the development of Burkina Faso's national AMS plan. During the past few months, MTaPS has conducted a rapid assessment of stewardship policies, tools, and activities in the field to uncover the gaps and challenges that perpetuate poor adherence to rational antibiotic use. MTaPS, the Ministries of

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

Since the COVID-19 pandemic reached Burkina Faso on March 9, 2020, it has been one of the most affected countries in West Africa, reporting 288 cases (192 males and 96 females), 16 deaths, and 50 recoveries out of 1,215 cumulative suspected cases under investigation, by the end of March 2020. In February 2020, the government of Burkina Faso approved a COVID-19 preparedness and response plan in the amount of 11 billion CFA Francs, which needs to be quickly mobilized to face the pandemic. At the weekly government session held on April 3, 2020, the amount was revised to 177 billion CFA Francs to better respond to the situation.

MTaPS, in collaboration with the USAID Mission in Burkina Faso, has drafted a COVID-19 work plan to address key issues for controlling the spread of the disease, including infection prevention and control (IPC) management at the national, facility, and community levels; IPC guidance to patients, family members, caregivers, and visitors; and waste management. Activities are expected to begin next quarter, pending USAID approval.

Health and Animal Resources and Fishery, and the Food and Agriculture Organization of the United Nations reviewed and agreed on the assessment tool and conducted a desk review of laws, decrees, policy documents, and regulations for both the human and animal sectors. A draft report presenting the gaps and challenges to be addressed has been prepared. The report has been reviewed and will be finalized during a national multisectoral coordination workshop. Findings of this rapid assessment will be used to develop a national AMS action plan.

The Directorate of Quality of Health Services (DQSS) in Burkina Faso is one of the directorates of the Ministry of Health that monitors the quality of health services. The DQSS oversees the development of the Drugs and Therapeutic Guide (DTG), which was last updated nine years ago. To initiate the review of the DTG, MTaPS met with the DQSS and agreed on the review process, which will take place in four sequential steps: 1) elaboration; 2) finalization; 3) validation; and 4) dissemination. A meeting to agree on a timeline for implementing this process will take place next quarter.

Burkina Faso's policy is to revise its national essential medicines list (EML) every two years. Despite the policy, the last review took place in 2016. Under the leadership of the Directorate General of Pharmacy, Medicines, and Laboratories and the World Health Organization (WHO), a review of the EML began on January 28, 2020, and was completed on February 17, 2020. MTaPS participated in the planning meeting of the review and was engaged throughout the process, providing technical expertise to ensure that antibiotics are classified according to the WHO AWaRe categorization. In collaboration with the National Drug Regulatory Authority's Center for Documentation and Information on Medicines (NDRA/CEDIM) and WHO, MTaPS is planning to contribute to the printing of 2,000 copies of the EML and organize three two-day workshops to disseminate the list for wider use, down to the peripheral level.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Activity 3.5.1: Support implementation of guidelines and policies at the peripheral level

MTaPS is providing support to the Directorate of Hospital Pharmacy Management to establish DTCs in five selected health facilities to promote rational use of antimicrobials (Teaching Hospital of Bogodogo, Regional Hospital of Tenkodogo, Hospital of Boulmiougou, and Hospital of Leo, Hospital of Zorgho). A meeting with the directors of health care facilities was scheduled for March 27, 2020, to discuss and finalize the selection of the five health care facilities. Unfortunately, the measures taken for COVID-19 led to the postponement of the meeting. It will be held as soon as circumstances allow.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
Task 3.1.1.1.b: Develop a national regulatory framework for appropriate use of affordable, quality-assured antimicrobials in human and animal health sectors as part of the national AMS action plan	April
Task 3.1.1.3.a: Organize a three-day workshop (seven participants) to draft a national guideline for the use of antimicrobials in the animal sector	April
Task 3.1.1.3.b: Organize a three-day workshop to review and finalize the draft national guidelines for the use of antimicrobials in the animal sector	May
Task 3.1.1.4.a: Update the infectious diseases national standard treatment guidelines	April
Task 3.1.1.4.b: In collaboration with NDRA/CEDIM, print copies of the essential medicines list and organize three two-day workshops to disseminate the essentials medicines list	June
Task 3.5.1.a: Develop a plan to establish and strengthen Drug and Therapeutics Committees (DTCs) in health facilities in the country	April
Task 3.5.1.b: Support the Division of Quality and Patient Safety (DQSS) and the Technical Inspection of Health Services to develop tools to build capacity of DTCs	June
Task 3.5.1.d: Support the DQSS and the AMR-TTC to conduct a joint four-day induction workshop for selected staff from all five targeted facilities	May

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

Following the declaration of a novel coronavirus (COVID-19) epidemic in China earlier this year, MTaPS/Cameroon participated in preparedness activities, such as attending coordination meetings of stakeholders and partners at the Ministry of Public Health (MOPH) and continues to regularly participate. When Cameroon confirmed its first case of COVID-19 on March 6, 2020, in Yaoundé, at the request of the USAID Mission, MTaPS participated in a number of response activities, notably:

- The training of 31 health personnel from the health districts in Yaoundé on standard IPC precautions prior to their deployment to the field for contact tracing
- The training of about 45 staff from different administrations, as well as volunteers from the International Federation of Red Cross and Red Crescent Societies, on emergency rapid response

These staff were sent from different administrations to support the COVID-19 response. Prior to joining the rapid investigation and response teams (RIRT), they received training from MTaPS on standard precautions for infection prevention control (IPC).

In response to a request for human resources assistance from national stakeholders, and with the endorsement of USAID, MTaPS deployed one of its senior technical advisors (at 20% of his time) to the emergency operations center to assist in the coordination of the RIRT. The senior technical advisor assisted in the following

- Formation of RIRTs
- Briefing RIRTs on IPC
- Development of a planning roster of the RIRTs
- Deployment of RIRTs to the field after alerts are received
- Monitoring of RIRTs in the field via phone calls
- Development of a database for data entry
- Compilation of daily reports of RIRT activities

CAMEROON

RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

Activity 1.1.1: Provide technical and operational support to the AMR Technical Secretariat to improve multisectoral coordination

MTaPS supported the organization of the monthly coordination meeting of the IPC and antimicrobial stewardship (AMS) technical working groups. This meeting brought together 18 participants from different departments of the MOPH (DPS, DPML, DLMEP, LNSP, DOST), other ministries (Fishery and Animal Husbandry, Environment, and Agriculture), and partners (IDDS and WHO). During this meeting, six health facilities (five public and one private) from three regions (Centre, Littoral, and West) were selected to strengthen IPC, as well as to put in place drug and therapeutic committees (DTCs). Also, TWGs discussed the development of terms of reference for IPC committees in health facilities and decided to build on existing hygiene committees in these facilities to conduct IPC activities. It was decided by the TWG that hygiene committees' terms of reference will be updated to fit WHO's IPC committee standards.

MTaPS also participated in two monthly coordination meetings of USAID implementing partners chaired by the focal point for the global health security agenda (GHSA) at the USAID Mission in Cameroon. The first meeting, held on January 30, 2020, was hosted by the Food and Agricultural Organization and was attended by 10 participants. MTaPS hosted the second meeting on February 27, 2020, with 9 participants. During the meetings, partners were encouraged to work in synergy to avoid duplicating activities. Partners presented the activities they had conducted from their work plans, along with implementation challenges.

RESULT AREA 2: INFECTION PREVENTION AND CONTROL

Activity 2.2.1: Develop a national training package and strengthen master trainers' capacity to plan and carry out cascaded competency-based training

Following the training of 10 experts on the development of curricula adapted for adult learning, MTaPS organized two working sessions with five of these experts to finalize the macro-design and micro-design of the trainer's guide and develop the facilitator guide and participant manual on hygiene and IPC.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Activity 3.1.1: Provide technical support to the AMR-Multisectoral Coordination Committee (AMR-CCM) and stakeholders to develop a national plan to strengthen AMS in the human and animal health sectors

Following the desk review of policies and regulations on the use of antibiotics, MTaPS supported a three-day workshop of 10 experts (pharmacists and clinicians) from several departments of the MOPH to complete the AMS situational analysis in the human sector. As for the animal sector, MTaPS organized three working sessions with the Ministry of Fishery and Animal Husbandry to engage a consultant who will be responsible for conducting the same situational analysis for the animal sector. During these working sessions, MTaPS provided technical support for the development of terms of reference and the evaluation guide for the consultancy position. The consultant selection process is ongoing, and the consultancy is expected to start in mid-April at the latest.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
MTaPS will support the IPC TWG in conducting a five-day workshop for the training of trainers in IPC	April
MTaPS will support the AMR Technical Secretariat to implement the IPC program in the six selected health facilities; results from these sites will help in scaling up to other health facilities in the coming years	April-June
Once the consultant for the animal sector is selected, MTaPS will finalize the assessment of AMS policies and regulations	April
MTaPS will continue to support the organization quarterly coordination meetings of the CCM technical secretariat	April-June
MTaPS will support the IPC TWG in conducting a five-day workshop for the training of trainers in IPC	April
MTaPS will support the AMR Technical Secretariat to implement the IPC program in the six selected health facilities; results from these sites will help in scaling up to other health facilities in the coming years	April-June
Once the consultant for the animal sector is selected, MTaPS will finalize the assessment of AMS policies and regulations	April
MTaPS will continue to support the organization quarterly coordination meetings of the CCM technical secretariat	April-June

CÔTE D'IVOIRE

RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

Activity 1.1.2: Strengthen the AMR secretariat

MTaPS, through a three-day stakeholder meeting February 12–14, 2020, in Jacqueville, supported the AMR technical working group (TWG) to develop an advocacy document to accompany the printed National Action Plan on AMR (NAP-AMR), the governance handbook, and the national AMR policy document for dissemination to the Ministry of Health and Public Hygiene, Ministry of Animal and Fishery Resources, Ministry of Agriculture and Rural Development, Ministry of Research and Higher Education, and Ministry of Environment and Sustainable Development. The meeting also offered the 18 participants from the human, animal, and environmental sectors the opportunity to develop the 2019 annual activity report of the AMR-TWG and develop a procedure for document sharing (e.g., activity paperwork, report transmission) within the AMR-TWG. The meeting allowed the AMR technical working committees to review activities carried out in 2019, highlight challenges faced during the year, and discuss activities planned for 2020.

On February 27, 2020, 11 participants attended the AMS technical working group (MTC5) meeting, held at the MSH office, to review the progress of the implementation of MTC5 activities. The participants were from the AMR Secretariat/National Observatory on Antimicrobial Resistance in Côte d'Ivoire (ORMIC); Teaching Hospitals of Treichville; National Laboratory for the Support of Agricultural Development (LANADA); Oceanography Research Center (CRO); World Organisation for Animal Health (OIE); Pasteur Institute of Côte d'Ivoire; National Program for the Development of Pharmaceutical Activity (PNDAP); Ivorian Anti-Pollution Center (CIAPOL); professional associations; and Directorate of Pharmacy, Medicines, and Laboratories (DPML).

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

In Côte d'Ivoire, the government established the National Operations Center for Public Health Emergencies through an April 2019 decree. This structure is a multisectoral coordination group responsible for all public health emergencies. In response to the COVID-19 outbreak, the group is meeting weekly. This group includes stakeholders from the WHO, UNICEF, Ministries of Environment and Animal Resources, CDC, USAID, and implementing partners (i.e., MTaPS, HRH2030, Chemonics).

In addition to this group, an IPC task force on COVID-19 was established on February 17, 2020, at the MSH office in Abidjan. This task force meets twice a week and includes MTaPS and the WHO. MTaPS supported the group to develop a contingency plan as part of the national response. This support consists of providing technical contributions for the development of the contingency plan and allocating space for the meetings, which are held twice weekly.

WHO integrated surveillance, risk communications, and COVID-19-specific IPC sessions into the training-of-trainers (TOT) on IPC March 23–28, 2020, in Dabou. MTaPS' next steps include supporting a two-day onsite trainings of health care providers in the 13 sites selected by the government on COVID-19, which will be conducted by the newly trained IPC facilitators.

RESULT AREA 2: INFECTION PREVENTION AND CONTROL

Activity 2.1.1: Developing a national action plan for IPC in human and animal health sectors

On March 2, 2020, MTaPS reviewed applications for a consultant who will conduct a rapid assessment of hygiene and IPC (HIPC) conditions in the animal health sector and selected a candidate. The recruitment process is ongoing, and the consultant is expected to begin work by mid-April.

Activity 2.5.2: Strengthen capacity of health care providers to implement IPC and AMS standards

MTaPS, in collaboration with the General Directorate of Health (DGS), the Directorate of Hospital and Proximity Medicine (DMHP), the Directorate of Training and Health Research (DFRS), and the DSV, supported the Multisectoral Technical Committee in charge of IPC and sanitation (MTC4) to organize a workshop to convert the validated IPC training materials to a competency-based training package adapted for e-learning. The workshop, held January 21–25, 2020, in Dabou, was attended by MTC4 members and stakeholders and offered the opportunity for MTaPS to build the capacity of 10 MTC4 members through a training on innovative approaches to designing and implementing skills-based training programs. During the workshop, MTC4 members revised the pre-developed IPC training materials by elaborating the macro- and micro-designs of the trainer's guide as part of the IPC training curriculum.

Following the development of the macro- and micro-designs of the trainer's guide, the members of MTC4 finalized the guide and the participant handbook on hygiene and infection prevention and control in human health, in collaboration with MTaPS HQ staff.

MTaPS, in collaboration with the DGS, DMHP, and DFRS, supported the AMR-TWG to train trainers on IPC in the human health sector at a workshop in Dabou March 23–28, 2020. This TOT workshop brought together 20 people, including 12 participants, three trainers under the guidance of two facilitators (National AMR Focal Point and MTaPS IPC STA), and three staff from the WHO. During the workshop, participants were trained through 14 IPC sessions using the trainer's guide and the participant handbook in hygiene and infection prevention and control in human health. The last training day was dedicated to COVID-19 and led by the WHO. The training, which consisted of presentations, demonstrations, and role playing, made it possible to establish a pool of 12 trainers on IPC and COVID-19. These new trainers will be responsible for training on-site health workers on COVID-19 and IPC.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Activity 3.1.1: Improve the rational use of antimicrobials in the human and animal health sectors

MTaPS supported the AMR-TWG in establishing an AMS multisectoral committee in year one. The committee is coordinating stewardship activities through bi-monthly meetings and field activities. This quarter, MTaPS supported the AMR-TWG in organizing a meeting of MTC5 on February 27, 2020. The key highlights of this meeting were to:

- Validate the tool for evaluating Drug and Therapeutics Committees (DTCs).
- Discuss the development of materials to be used to train DTC members in health facilities. Eleven topics were identified and allocated to MTC5 members who will be responsible for developing slide decks. The slides will then go through the development process (macro- and micro-design, development of a facilitator guide and participant manual, and validation).
- Update MTC5 about the ongoing reorganization of the Directorate of Pharmacy and Laboratories (National Drug Authority). The National Drug Authority has been split into two entities: the Ivorian Pharmaceutical Regulation Authority and the Directorate of Pharmaceutical Laboratory Activities (DPLA). In addition, PNDAP has been closed and its responsibilities designated to the new DPLA structure.

- Update MCT5 on the progress made on the rapid assessment of stewardship policies, regulatory framework, and use of antimicrobials: the recruitment process for the two consultants to conduct the rapid assessment of AMS policies and update the national AMS plan has since been completed, and a meeting was held the following week for the consultants' orientation before they begin the rapid assessment. The two consultants started the work on March 1, 2020.
- Provide a synopsis of the stakeholders meeting that took place in Jacqueville February 12–14, 2020: a presentation was done to update participants about the stakeholder meeting held to develop the advocacy document and elaborate the annual report for the AMR-TWG.
- Develop a six-month work plan for March–September 2020.

Support the AMR Secretariat in developing/updating a policy and plan for infectious diseases in the human and animal health sectors that covers national and facility levels

MTaPS supported the AMR-TWG to recruit two consultants to conduct a rapid assessment of AMS policies and update the national AMS plan. MTC5 established a steering committee to monitor the consultancy.

Two one-day meetings of the steering committee took place with support from MTaPS on March 2 and March 18, 2020. The objective of these meetings was to monitor the progress of the rapid assessment of AMS policies and regulatory framework. These meetings confirmed that the consultants were adhering to the established timeline. Due to issues in the field related to additional data collection and interviews (difficulties related to stakeholder availability), as well as the breadth of the desk review, a delay is expected in the submission of deliverables. The calendar has been adjusted accordingly by the AMS-TWG team.

Activity 3.5.1: Establishing and/or strengthening the capacities of members of DTCs

MTaPS, in collaboration with MTC5, supported the AMR-TWG to assess the functionality and capacity of DTCs in two teaching hospitals (CHU Bouake, December 9–10, 2019, and CHU Cocody-Abidjan, December 12–13, 2019). The evaluation revealed the need for capacity building in several areas, which could include supporting the DTCs to develop and implement TOR and training DTC members to leverage their capacities to implement AMS activities.

This will require developing training materials, as no specific training materials on AMS activities have been developed by the country. To address this, MCT5 took the following steps:

- Building the capacity of members of the AMS technical working group (MTC5) responsible for antimicrobial management to strengthen their skills on the design and delivery of innovative capacity-building approaches. This was done through a two-day workshop February 27–28, 2020.
- Developing and validating training materials to train DTC members and health facility staff with the aim of building their capacity to implement AMS activities in MTaPS-supported sites. At the most recent MTC5 meeting, members identified training topics and outlined the process for development and validation of the curricula.

Highlights from the training session of MTC5 members February 27–28, 2020, include:

- 18 participants from ORMIC, Teaching Hospitals of Treichville, LANADA, CRO, OIE, Pasteur Institute of Côte d'Ivoire, PNDAP, CIAPOL, professional associations, and DPML attended this training workshop, which strengthened capacities of MTC5 members on the development of AMS training materials in line with training guidelines and standards.
- Attendees had the opportunity to learn more about innovative training methods and principles and curricula development.
- Participants had the opportunity to practice using the slides that were developed and adapted by the IPC Technical Committee.

The next steps for the AMS-TWG will consist of designing material to train health care professionals and DTC members in MTaPS-supported health facilities based on what they've learned.

ACTIVITIES FOR NEXT QUARTER	
ACTIVITY AND DESCRIPTION	DATE (2020)
Multisectoral Coordination Group (MCG) to use printed copies of the NAP-AMR for advocacy to ministries for official endorsement	May
Conduct two-day meeting to evaluate national IPC program using the WHO IPCAT tool	April 15–16
Hold five-day workshop in Dabou to validate report of the rapid assessment of HIPC conditions in the animal health sector	April 20–24
Hold five-day workshop in Jacqueville to review and validate the national IPC plan in the human health sector	May 4–8
Hold five-day workshop in Dabou to validate IPC guidelines in the animal health sector	May 18–22
Hold five-day workshop in Jacqueville to validate the national IPC plan in the animal health sector	June 1–5
Hold a five-day TOT workshop on IPC in the animal health sector, attended by 10 participants, in Dabou	June 15–19
Hold two five-day training workshops on IPC in the human health sector, attended by 20 participants per workshop, in the university teaching hospitals of Bouake and Cocody	April 6–10
Hold one-day workshop in Abidjan to validate consultancy preliminary report	April 2
Recruit national consultants for the situational analysis to support the drafting of a national AMS plan for both the human and animal health sectors, based on both the situational analysis and WHO-led assessment findings; draft national plan will be validated later with other AMS policy documents during a five-day workshop	April 15
Support the AMR-TWG in developing national AMS policy in the human and animal health sectors through a five-day workshop attended by experts from both sectors	April 15
Hold five-day workshop to develop policy that will be validated later; this policy document will be used to train members of DTCs in selected health facilities	May 10–15
Organize a workshop to develop and validate material; the validated training material will be used later to train DTC members in health facilities	May

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

The COVID-19 pandemic disrupted and slowed activity implementation in the last month of the quarter. As part of COVID-19 containment efforts, MTaPS/DRC identified and appointed a COVID-19 focal person among project staff to coordinate project efforts and interactions between MTaPS, the MOH, and other partners involved in the fight against COVID-19 in DRC.

In the first week of March 2020, MTaPS had a meeting with the National Program of Border Hygiene (PNHF), which is the country focal point for COVID-19. The purpose of this meeting was for the PNHF to share with MTaPS its needs regarding training on IPC and the supply of personal protective equipment.

On March 20, 2020, MTaPS/DRC participated in COVID-19 meetings organized by the Drug Regulatory Authority (DRA) and the National Pharmacovigilance Centre. Among other points discussed were the registration and import authorization of hydroxychloroquine for the treatment of COVID-19 in DRC and post-market surveillance to monitor adverse drug reactions once patients are put on hydroxychloroquine.

review of country progress through the AMR-TWG and help identify priorities for next steps. Country responses are used to guide follow-up actions and identify areas where technical assistance and support are required from the tripartite organizations. The TrACSS survey is conducted yearly, and a comparative analysis of the TrACSS 2019 self-assessment and the 2020 assessment reveals improvement in the area of multisectoral representation, antimicrobial use regulation, and in-service training for health care providers.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Activity 3.1.1: Support the drafting of a national strategy or plan to strengthen AMS

MTaPS is supporting the DRA (the AMR-TWG secretariat) to conduct a gap analysis of stewardship policies and legislation that promote the optimal use and good management of antimicrobials in the human and animal health sectors. During this quarter, the hiring process for a local consultant for short-term technical assistance (approximately 14 days) started, with the selection process completed and

DEMOCRATIC REPUBLIC OF CONGO

GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

Activity 1.1.1: Provide technical support to the AMR technical working group (TWG) to improve IPC and AMS coordination

From March 11-12, 2020, MTaPS supported the DRA in holding the AMR-TWG's quarterly multisectoral coordination (MSC) meeting; the meeting consisted of reviewing the AMR action plan 2019 and its implementation status, presentations on AMR issues, and preventive measures in all three sectors (human, animal, and vegetal). In addition, roadmaps of each subcommittee were presented to the national commission for adoption. Progress on the ministerial decree, which establishes and operationalizes three sub-committees within the national commission (AMS, IPC, and detection and surveillance), was also discussed. It was reported that the minister referred the decree to his legal advisor for analysis. The decree is expected to be signed after the legal advisor's review early next quarter.

In addition, MTaPS, in collaboration with the WHO, provided technical support to conduct the Tripartite (WHO, FAO, and OIE) AMR Country Self-Assessment Survey (TrACSS) 2019-2020, on March 19, 2020. The purpose of the self-assessment survey was to review and summarize country progress in implementing key actions to address AMR at the national level and to report annually at the global level. It was also intended to encourage a national-level

candidate interviews conducted. The recruitment process is expected to be completed in early April 2020, and the assessment will be completed by the end of April 2020.

MTaPS, in collaboration with the WHO, continued to support the DRA through the AMR-TWG to conduct the rapid assessment on the use and consumption of antimicrobial medicines in the human sector.

Activity 3.1.2: Integrate the WHO AWaRe classification into the revised EML and review, revise, and update the infectious disease component of the standard treatment guidelines as needed in the human health sector

Following introduction of the AWaRe classification concept to the MOH and other key stakeholders, MTaPS presented the classification protocol to the members of the AMR-TWG during the last quarterly MSC meeting March 12-13, 2020.

MTaPS also used this opportunity to introduce and explain to health care providers the need to include the AWaRe classification in the EML; the providers are from the University of Kinshasa Teaching Hospital (CUK), Saint Joseph Hospital, and Monkole Hospital, which were previously selected as pilot sites for the establishment of drug and therapeutic committees (DTCs).

Activity 3.5.1: Establish/strengthen DTCs to oversee implementation of AMS and IPC interventions

During this quarter, MTaPS started AMR sensitizations by introducing DTCs and their role in AMR containment efforts to the multidisciplinary clinical teams in the three selected health institutions. Around 200 health care workers participated in these AMR sensitization meetings, which were held on February 21, 2020 (CUK), March 5, 2020 (Saint Joseph), and March 9, 2020 (Monkole). Discussion topics included USAID support for combatting AMR through MTaPS, the antibiotic discovery gap and growth of AMR, and the role of DTCs in overseeing AMS and IPC interventions at the health-facility level.



Sensitization on DTCs at the CUK. Photo credit: Dieudonné Kupa

In addition, MTaPS collaborated with the University of Kinshasa's National Pharmacovigilance Center to finalize the DTC training modules and integrate AMS and IPC issues and considerations into the modules. To this end, a five-day workshop was organized March 19-25, 2020, to finalize the modules. These modules will be shared with all AMR-TWG members for adoption, and the DTC training is scheduled to take place early next quarter between April and May 2020.

MTaPS also worked with the DRC Red Cross to identify ways to collaborate on IPC. The DRC Red Cross expressed the need for MTaPS to provide technical assistance to continuously monitor, support, and supervise IPC committees in 21 Red Cross-supported health facilities in Kinshasa and Kongo Central Provinces. To this end, on February 14, 2020, MTaPS and the DRC Red Cross discussed the continuous quality improvement (CQI) approach that is planned for implementation to continuously support and monitor the effectiveness of these IPC committees. The CQI package includes supervision and monitoring and evaluation of 21 Red Cross-supported IPC committees (7 in Kongo Central and 14 in Kinshasa Provinces). MTaPS will implement a supervision/coaching and mentoring strategy and develop indicators for monitoring the effectiveness of these committees.

Since MTaPS does not have any distinct IPC activities in its work plan, this activity was conducted, as indicated in the work plan narrative, through the establishment or strengthening of DTCs and hospital hygiene committees at the health-facility level to oversee AMS and IPC interventions at the service delivery-point level.

ACTIVITIES FOR NEXT QUARTER	
ACTIVITY AND DESCRIPTION	DATES (2020)
Provide technical support to the AMR-TWG - Follow-up on the signing of the AMR ministerial decree by the Minister of Health	June
Conduct a rapid assessment of stewardship policies and regulations governing the management of antimicrobials - Start the desk review process and administer the questionnaire	April–May
In collaboration with WHO, conduct a rapid assessment of antimicrobial use and consumption - Hold a meeting with WHO Afro technical group to discuss the feasibility and technical consideration of the study	April–May
In collaboration with WHO, support DPM to hold a two-week workshop to revise EML with AWaRe classification	May–June
Conduct the training and establish three DTCs in Kinshasa	April–May

MATERNAL, NEWBORN, AND CHILD HEALTH ACTIVITIES

SUMMARY OF ACTIVITIES THIS QUARTER

Scoping Visits

As a prerequisite to MNCH work planning, MTaPS conducted scoping visits January 12-24, 2020, in the provinces of Nord Kivu and Ituri. During these visits, the scoping team met with members from a number of partner organizations and government counterparts to hold discussions and share knowledge and experiences on MNCH-related pharmaceutical systems activities in both provinces.

Findings/Accomplishments/Challenges

The scoping team obtained information on the structure, functioning, weaknesses, and bottlenecks in the pharmaceutical system in both provinces. Findings were categorized into technical areas of governance, institutional and individual capacity, regulatory system capacity, information for decision making, financing of the pharmaceutical system, and availability of safe, effective, affordable, and quality-assured medicines and pharmaceutical services. There are opportunities to work in stewardship of the pharmaceutical system at the provincial and zonal levels, as well as with existing community platforms to strengthen accountability, including a more active role for civil society, to improve pharmaceutical management, especially for women and children.

Across all team meetings, the issue of weaknesses in the availability, quality, visibility, and use of procurement and distribution data at all levels was mentioned. Both provinces are poised to roll out InfoMED, a logistic management information system, and MTaPS hopes to support this effort to improve decision making based on pharmaceutical and distribution data. Weaknesses were also seen in the use of

MNCH medicines at health facilities; this is an area that needs reinforcing through access to treatment protocols and other aids which exist at the national level. The team also heard about deficiencies in the order fill rate at the Regional Distribution Center (CDR) in Nord Kivu (more so than in Ituri), as well as generalized weaknesses in quantification and ordering practices, resulting in stock-outs at the Provincial Health Division (DPS) and health zone and facility levels. Inventory management and storage conditions were also noted to be weak in facilities. In terms of oversight and regulation of the pharmaceutical system in both provinces, the team noted a lack of clarity on the roles of the Provincial Health Inspection or Inspection de la Santé (IPS) and DPS in ensuring quality of medicines, given that DPS and IPS are relatively recent.

The team also explored possible options for office space and gathered information on the security situation and security measures to put in place once staff begin work in the two provinces. No security issues were encountered. Infection control measures were observed at the national airports and at each partner meeting; body temperatures were taken, no handshakes, and handwashing to prevent Ebola infection.

The team debriefed the USAID Mission on January 24 on progress on recruitment, preliminary findings, and potential activities for the first year of the MNCH work, as well as second- and third-year activities, as funding is available. This provides a roadmap toward a sustainable and effective pharmaceutical system that will have better MNCH outcomes.

After the scoping visits, MTaPS finalized the MNCH work plan, which was submitted to USAID on February 28, 2020. The team is awaiting feedback from USAID before finalizing the work plan and submitting for approval from the MTaPS COR team.

MTAPS/ MNCH STAFFING:

The recruitment process has been completed for all MNCH staff positions. The MNCH senior technical advisor and the operation advisor started, respectively, on March 26 and 30, 2020, in the Kinshasa office. The two technical advisors (one in Goma and one in Bunia) will start in early April 2020.

ACTIVITIES FOR NEXT QUARTER	
ACTIVITY AND DESCRIPTION	DATE (2020)
Organize the orientation session for newly appointed staff	April
Introduce the MNCH staff to the USAID local mission in Kinshasa and to DPS in Nord Kivu and Ituri Provinces	April-May
Conduct a desk review of MNCH commodity registration processes to map the barriers and constraints to take appropriate actions to improve availability of and accessibility to MNCH commodities	April-May
Start implementation of planned activities as per the approved work plan	April-June

ETHIOPIA

RESULT AREA I: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

Activity 1.1.1: Work with the MOH and RHBs to get the national action plan (NAP) for AMR approved and mobilize stakeholders to support its implementation

MTaPS, in collaboration with the Amhara Regional Health Bureau (ARHB) and Amhara Public Health Institute (APHI), conducted a consultative workshop on January 1-2, 2020, with the aim of establishing partnerships among ARHB, APHI, designated hospitals in Amhara Regional State, and MTaPS to tackle antimicrobial resistance (AMR). Forty-three participants attended the workshop, of whom six were female. Heads of ARHB and APHI, chief executive officers, and health professionals of seven hospitals attended the workshop. The workshop addressed different aspects of AMR, including surveillance, governance, IPC, and AMS. At the end of the workshop, the ARHB, APHI, and participating hospitals drafted AMR action plans to be implemented between January 1 and June 30, 2020. AMR focal persons were selected at regional and facility levels and given the responsibility of following implementation of the action plans.

During the quarter, MTaPS, in collaboration with the MOH/Pharmaceuticals and Medical Equipment Directorate (MOH/PMED), conducted a consultative workshop with RHBs to review the status of implementing the NAP for AMR. Twenty-five participants, of whom five were female, representing RHBs and regulatory authorities from seven regions and two city administrations, attended the workshop. Representatives of each RHB presented an overview of their region's efforts to prevent and control AMR. Preparation of alcohol-based hand rub to prevent health care-associated infections and classification of antibiotics by access, watch, and reserve (AWaRe) categories were discussed. At the end of the workshop, each region revised their respective action plan for the remaining implementation period (up to June 2020). As a follow-up activity, each region has agreed to assign an AMR focal person to coordinate implementation of the region's AMR action plan.

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

MTaPS/Ethiopia received funding from USAID to provide urgent technical assistance to the Government of Ethiopia in its response to the COVID-19 global pandemic. The assistance will be provided with the help of four consultants who will be working alongside the Emergency Operation Center for COVID-19 at the Ethiopian Public Health Institute (EPHI).

The major objective of this consultancy is to provide technical assistance to the Ministry of Health (MOH), the EPHI, regional health bureaus (RHBs), selected health facilities, and the COVID-19 isolation centers so that these facilities meet WHO and national infection prevention and Control (IPC) standards required for facilities and health care workers providing COVID-19 services. The consultants will work on IPC in close collaboration with and under the guidance of the MOH and the national Emergency Operation Center for COVID-19; they will also work in consultation with MTaPS/Ethiopia.

Key IPC elements for the COVID-19 response include IPC program management, triage for acute respiratory infection patients, early recognition of cases, source control (isolation), application of standard and additional (contact, droplet, and airborne) precautions, IPC guidance, facility access, just-in-time training strategy, surge capacity, fatality management, waste management, and health care worker safety assurance, including the proper use and disposal of PPE and COVID-19 prevention and control at points of entry, focusing on formal and informal land crossings and movements of people.

Activity 1.2.1: Support PMED in organizing effective multisectoral coordination through regular meetings of AMR stakeholders, including animal health and environmental protection

During the quarter, MTaPS provided technical support to PMED to conduct the one National AMR Advisory Committee (NAMRAC) review meeting. The meeting was held on January 23, 2020, and 25 AMR advisory committee members attended the meeting, of whom five were female. During the meeting, representatives from the Ministries of Agriculture, the Environment, and Health presented their six-month performance report and plans for AMR for the next six months (January– June 2020). In addition, the NAMRAC recommended to start revision of the NAP AMR (for the next 10 years), along with the country's second Health Sector Transformation Plan. The second NAP AMR ends in 2020. The secretariat of NAMRAC has been entrusted with coordinating the revision process.

MTaPS provided technical support to the national multisector group comprised of the human health, veterinary, and environmental sectors who conducted the fourth Tripartite AMR Country Self-Assessment Survey (TrACSS). TrACSS is a component of the global monitoring and evaluation framework that monitors implementation status of the NAP AMR. The results are expected to help refine global strategies and provide a consolidated response approved by all relevant sectors. MTaPS supported the national AMR focal point (PMED) by compiling reports from the three sectors and preparing the first draft of the document. The final self-assessment document was then submitted to the tripartite group (Food and Agricultural Organization of the United Nations [FAO], World Organization for Animal Health [OIE], and WHO).

Results of the assessment revealed that the multisectoral working group was functional, with clear terms of reference (TOR), regular meetings, and funding for working groups with activities and reporting/accountability arrangements defined. It was also found that the NAP AMR was approved by the government and reflects global action plan objectives, with a budgeted operational plan and monitoring arrangements. The assessment further showed that nationwide, government-supported AMR awareness campaigns targeting priority stakeholder groups was conducted based on stakeholder analysis, utilizing targeted messaging. The assessment will help provide a picture of the stage the country has reached in building an effective and sustainable multisectoral response to AMR.

MTaPS provided technical and financial support to PMED and actively participated in the preparation of a concept note for the AMR Multi-Partner Trust Fund (MPTF). The AMR MPTF is founded on the long-standing partnership, combined technical knowledge, and global convening power of the three organizations, namely FAO, OIE, and WHO. The AMR MPTF provides an opportunity for the MOH to address AMR through a One Health approach at the national, regional, and global levels. The funding envelope for this call is up to USD \$1 million over a period of 18 months. To respond to this request, MTaPS and the MOH hosted a one-day concept note preparation workshop in Addis Ababa. Ten professionals from the health, agriculture, and environmental sectors participated in the workshop and drafted the concept note, which was submitted to the MPTF on February 17, 2020.

RESULT AREA 2: INFECTION PREVENTION AND CONTROL

Activity 2.3.2: Monitor IPC improvement in selected health care facilities using IPCAF

MTaPS supported two hospitals in Addis Ababa (Yekatit 12 Medical College and Menilik II Referral Hospital) in using the Infection Prevention and Control Assessment Framework (IPCAF) tool to assess their IPC capabilities. According to the results of the assessment, Yekatit 12 was classified as intermediate and Menilik II as basic. So far, 20 (18 public and 2 private) hospitals out of the 30 identified for support by MTaPS have conducted IPC self-assessment using IPCAF. This support contributes to the hospitals' efforts to identify precise areas requiring additional activities to improve or put in place additional IPC core components and to guide the development of a detailed improvement plan of action.

Activity 2.5.1: Scale up IPC guideline/action plan design and implementation in health facilities

During the quarter, MTaPS supported the Addis Ababa City Administration Health Bureau (AACAHB) to conduct two rounds of basic IPC training to IPC committee members and coordinating professionals drawn from 25 hospitals (19 public and 6 private). The purpose of the eight-day training was to build the capacity of IPC committee members so that they could effectively implement IPC activities. The training consisted of theoretical and practical sessions, with a one-day site visit to Bishoftu Hospital to observe how staff practice IPC. During the training, six hospitals presented their draft IPC action plans, which were discussed and feedback was provided. Following the training, MTaPS and AACAHB made frequent follow-up and supportive supervision visits to the trained professionals to get their hospital IPC action plan endorsed by their respective hospital management. Accordingly, IPC action plans of all six facilities have been endorsed by their respective management, and implementation of the planned activities has started.

During the reporting period, MTaPS received a request from AACAHB for support to train health professionals who will be working in public COVID-19-suspect isolation centers in Addis Ababa. Accordingly, basic IPC training was provided to 33 health professionals (physicians, field epidemiologists, nurses, and environmental health professionals), of whom 13 were female. A half-day COVID-19 module was incorporated into the basic training.

Activity 2.5.1a: Support IPC guideline/action plan design and implementation in health facilities

Following the series of IPC trainings that were previously conducted, one private and five public hospitals were supported technically and financially to conduct IPC assessments and develop hospital-specific IPC action plans based on the findings of the assessments. This brings the total number of hospitals that developed an IPC action plan to 16. These are major hospitals in the country in terms of hospital bed capacity and outpatient visits.

As a strategy to improve IPC practices throughout the hospitals, a technical working group (TWG) for IPC has been established under the umbrella of the NAMRAC. The team is comprised of several institutions who have a stake in IPC. MTaPS is a member of the IPC TWG and serves as its secretary. The first meeting of the TWG was held at the MOH on January 17, 2020, and MTaPS provided technical support in reviewing the draft TOR for the TWG. This TWG is expected to propose and develop annual operational and strategic plans and programmatic focus areas. It will also proactively participate in implementing operational and strategic plans, in addition to monitoring and evaluating the interventions. The TWG is also linked with NAMRAC.

In the reporting quarter, MTaPS drafted a supportive supervision checklist to monitor implementation of IPC activities of designated health facilities. The checklist includes recommendations from the revised national IPC guidelines and core components of IPC activities in health facilities. The draft checklist was shared with AACAHB and MOH for review, and MTaPS is waiting for their input. Following their input, a consultative meeting will be organized with the relevant Government of Ethiopia stakeholders (MOH, RHBs, and hospitals) and the national IPC TWG to further refine and endorse the checklist before it is distributed for use. Once this standard checklist is in place, joint supportive supervision will be carried out at the designated hospitals to supervise and monitor implementation of IPC action plans and provide technical support as required.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Activity 3.2.1: Build the capacity of journalists and civil society groups (including the Ethiopian Pharmaceutical Association) to raise awareness of AMR initiatives and issues

MTaPS, in collaboration with the Ethiopian Pharmaceutical Association, conducted training on AMR prevention and containment for community pharmacy practitioners in Addis Ababa. The main objective was to build their knowledge and skills to improve the use of antimicrobials in the community; 29 participants (16 female, 13 male) from 25 community pharmacies participated in the six-day training.

In addition, MTaPS initiated and facilitated trainings on AMR prevention and containment for the Ethiopian Youth and Women Federation. The purpose of this training was to capacitate youth and women volunteers on AMR so that they could create awareness among the community where they are already engaged in promoting sanitation, hygiene, and maternal and child health. After the training, participants developed action plans for AMR work in their community; 29 volunteers (21 female, 8 male) from the federation participated in the three-day training (January 10-12, 2020).

Activity 3.5.1: Support AMS implementation in health facilities

MTaPS collaborated with the MOH to conduct the second round of training on prospective audit and feedback and AWARe classification. Like the training conducted in the previous quarter, the main objective was to build the knowledge and skills of AMS team members to conduct prospective audit and feedback interventions at their respective hospitals as recommended by the national practice guide on AMS; 36 health professionals (26 male, 10 female) from 15 MTaPS-supported hospitals (10 public and 5 private) were trained. Trainees practiced how to use the audit and feedback tool using real case scenarios while reviewing medical charts. In addition, the AWARe categorization for antibiotics and actions required for its implementation were discussed. Following the training, the respective hospitals are expected to establish AMS program teams, develop facility-specific action plans, and implement prospective audit and feedback interventions.

In addition, MTaPS supported PMED/MOH in conducting baseline assessment on drug and therapeutic committee (DTC) functionality and core elements of AMS programs during the quarter. The assessment was conducted in the second batch of 16 hospitals (11 public and 5 private) in 4 regions (Addis Ababa, Amhara, SNNP, and Harari). The assessment examined DTC functionality and core elements of AMS programs. Results of the assessment revealed that of the 16 newly enrolled hospitals, DTCs were available in 14 hospitals, IPC activities in 15, and AMS programs in only 4 hospitals. Only 6 of the 16 hospitals have microbiology laboratories. Of the existing DTCs and AMS programs, only 41.8% and 10.4% were functional, respectively. The assessment will serve as a critical reference point for planning, monitoring, and evaluating framework development for the new batch of hospitals when implementing AMS. In addition, the assessment will help both MOH and MTaPS identify major gaps and guide possible areas of interventions.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
Support PMED in organizing effective multisectoral coordination through regular meetings of AMR stakeholders, including animal health and environmental protection	May
Monitor IPC in selected health care facilities using IPCAF	April-June
Support IPC action plan design and implementation in health facilities	April-June
Support revision of the national essential medicines list to incorporate AWaRe groupings	April-June
Support updating standard treatment guidelines that reflect AWaRe categorization of antibiotics and promote their appropriate use	April-June
Support AMS practice implementation in health facilities	April-June
Conduct rapid assessment of IPC for COVID-19 capacity	April
Provide various trainings, such as screening travelers at points of entry, standard precautions, managing sudden influx of patients, transmission-based precaution, and waste management, using existing training packages for COVID-19, including e-learning	April-May
Adapt/draft regulatory support documentation for implementing COVID-19 response based on WHO COVID-19 guidance	April

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

The USAID Mission requested that MTaPS/Jordan join the national response and focus on infection prevention and control (IPC) activities. The MTaPS team will be developing a dedicated work plan for further discussion and approval early next quarter. All other activities are on hold until the COVID-19 pandemic slows down and the national curfew is lifted.

JORDAN

OBJECTIVE 5: PHARMACEUTICAL FINANCIAL RESOURCE ALLOCATION AND USE OPTIMIZED

Activities focused on building the necessary strategic partnerships for MTaPS to start implementing the year 1 work plan. Continuing the program kickoff, MTaPS followed up on the formal introductory letters sent by USAID Mission to the main stakeholders. MTaPS obtained the Ministry of Health's (MOH) approval to conduct planned activities and an MOH focal point was assigned. Along with the USAID Mission staff, MTaPS held

introductory meetings with the head of the MOH Communicable Diseases Directorate (CDD), the national focal point for the National Action Plan against Antimicrobial Resistance (NAP-AMR), and WHO Jordan to present program objectives and the annual work plan and to agree on the next steps for collaboration to contain the spread of AMR. Planned activities related to the multisectoral coordination (MSC) were put on hold until further notice due to the COVID-19 pandemic curfew as government officials are not allowed to meet and the steering committee (SC) or technical sub-committee (TC) meetings were suspended.

MTaPS continued the comprehensive mapping exercise of the stakeholders involved in all aspects of AMR containment, including their roles, participation in implementation of the NAP-AMR, strengths and weaknesses, their level of coordination with the MOH through the NAP-AMR SC, and potential interaction with MTaPS for implementation planning. The USAID Mission sent additional introductory letters to key partners identified through the stakeholder mapping. MTaPS followed up and meetings were held with the USAID Mission, Royal Medical Services, Eastern Mediterranean Public Health Network, and Health Care Accreditation Council. The relevance of MTaPS/Jordan's scope of work and planned activities and willingness of partners to support the program were confirmed during the meetings. Scheduled meetings with other partners were postponed due to COVID-19 pandemic crisis. It is the first-ever national mapping of AMR stakeholders in Jordan, which will be used as a reference document for MTaPS, USAID, and MOH moving forward and will be continuously updated. The AMR stakeholders mapping was updated and reviewed to be finalized for dissemination in the next quarter.

Through coordination with the NAP-AMR focal point, MTaPS held meetings with the head of the MOH Pharmacy and Clinical Pharmacy Directorate who is also the national antimicrobial stewardship (AMS) committee focal point. On the basis of technical and feasibility criteria, the two pilot hospitals for the expedited model introduction of the AMS program under MTaPS support were selected, the Al-Bashir Hospital for Pediatrics and Gynecology and the Prince Hamza Hospital. The practical steps to start implementing AMS program activities at the selected hospitals were agreed upon, including coordination processes with the AMS TC of the NAP-AMR SC. Because of the COVID-19 pandemic situation, the planned visits to start working directly with the staff at the two selected hospitals (where COVID-19 patients are being treated or quarantined) were postponed. Alternatively, MTaPS is planning to continue remote contact with the AMS national focal point during the COVID-19 crisis to potentially share AMS technical materials, such as terms of reference, checklists, and workshop proceedings and thus advance the activity until the pandemic slows down and the national curfew is lifted.

The MOH, USAID Mission, and MTaPS discussed and agreed on MTaPS' monitoring, evaluation, and learning (MEL) plan for Jordan. In February 2020, MTaPS conducted the baseline data collection at the national level and at the two hospitals selected for piloting. MTaPS finalized the country baseline

assessment report to be included as part of the global baseline report and submitted it for USAID approval in the next quarter.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE
Support country response to COVID-19: IPC strengthening (work plan under development)	April-June 2020

KENYA

RESULT AREA I: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

Activity 1.1.1: Strengthen the capacity of National Antimicrobial Stewardship Interagency Committee (NASIC) as a leadership, governance, and oversight body for One Health implementation in Kenya

High-Level Communique on AMR

MTaPS continued to disseminate copies of its high-level communique on AMR in various forums and platforms in Nairobi, Nyeri, and Kisumu counties. These forums and platforms included IPC/AMS supportive supervision activities, an in-service AMS curriculum development workshop, and the Kenyatta National Hospital (KNH) formulary workshop.

NASIC'S IPC and AMS Technical Working Groups

The IPC and AMS technical working groups' (TWGs) terms of references (TORs) and work plans that were developed in 2019 were to be fine-tuned, but this did not take place due to urgent COVID-19 activities. This will be done in the third quarter of year 2.

In support of implementing the national policy on preventing and containing AMR, the surveillance TWG coordinated the drafting of a multidisciplinary AMR surveillance-training curriculum. MTaPS participated in a one-day stakeholders meeting on January 24, 2020, to review and validate the draft national AMR surveillance training curriculum.

MTaPS, in collaboration with the national AMR secretariat, held the second review meeting on the IPC strategic plan and IPC policy February 13-14, 2020, which was attended by TWG members. The team identified the strategic priorities for IPC initiatives in the health sector and incorporated and consolidated inputs from stakeholders into the IPC policy and strategic plan.

NIPCP and Guidelines

MTaPS attended an occupational safety and health (OSH) meeting on January 24, 2020. The aim of the meeting was to identify areas of collaboration in OSH between MOH and MTaPS-supported counties.

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

MTaPS/Kenya has received specific funding to support the country's response to the pandemic. In line with this, MTaPS attended a series of COVID-19 national task force meetings where updates on the current status of the outbreak were shared and strategies drawn for strengthening response to the disease. MTaPS is a member of the case management, IPC, and risk communication sub-committees.

MTaPS, in collaboration with the Ministry of Health (MOH), held a two-day training of trainers (TOTs) on COVID-19 on March 19-20. The training was attended by 60 participants of various health care cadres, including medical officers, clinical officers, nurses, laboratory scientists, public health officers, surveillance officers, and pharmacists among others. The TOTs were conducted so as to roll out similar trainings countrywide targeting 33 counties.

MTaPS in collaboration with MOH held three-day trainings on COVID-19 in eight regions in Kenya covering 33 counties. A total of 266 participants were trained in all the eight regions. Trained participants from each county are expected to further conduct in-county capacity development sessions for health care workers on managing COVID-19.

Importantly, MTaPS/Kenya is working within the guidance and confines of the national emergency plan as established by the Government of Kenya; guidance issued by the USAID Mission in Kenya; and guidance issued by the MTaPS US office.

The meeting was attended by eight officers. The officials were from the national OSH unit at the MOH and the Directorate of Occupational Safety and Health.

MTaPS held an engagement meeting with the National Occupational Health and Safety division head and committee members on February 12, 2020, to review the division's OSH work plan and to identify areas to incorporate into the IPC health facility-based work plans in Nyeri and Kisumu Counties. MTaPS, thereafter, liaised with the IPC committee members in the two counties to incorporate OSH components into the ongoing IPC interventions to address OSH challenges/gaps identified during the IPC baseline assessments.

RESULT AREA 2: IPC

Activity 2.2.1 - Technical assistance to develop a continuing professional development (CPD) and relicensure-linked in-service IPC training course for delivery through professional associations

On January 20, MTaPS in collaboration with the national AMR secretariat, convened a half-day IPC and AMS professional association sensitization meeting on the development of CPD curricula for the two focus areas. The meeting was attended by 29 representatives (17 females, 12 males) from 12 professional associations, NGOs, MOH, and a training institution. Support was garnered from the participants for developing a CPD- and relicensure-linked in-service IPC/AMS training course for delivery through professional associations.

Activity 2.5.1 - Support to county, sub-county, and facility-level IPC activities

Nyeri

MTaPS continued to conduct IPC and AMS work plan follow-ups and mentorship site visits in eight MTaPS-supported health facilities and one community pharmacy January 13-17, 2020.

MTaPS held an MTaPS/MOH dissemination meeting of IPC/AMS baseline assessment results targeting the County Infection Prevention and Control Advisory Committee (CIPCAC) and county MTC on January 17, 2020; 15 people (9 females, 6 males) attended the meeting.

MTaPS engaged and collaborated with health professional associations in developing health care workers' competencies in IPC and AMS. To this end, MTaPS coordinated and supported a half-day IPC and AMS professional association sensitization meeting held on January 20, 2020. The meeting was attended by 29 representatives (17 females, 12 males) from 12 professional associations, NGOs, the MOH and a training institution to garner support in the development of a CPD- and relicensure-linked in-service IPC/AMS training course for delivery through professional associations.

MTaPS, in collaboration with the National Nursing Association of Kenya (NNAK) and the national AMR secretariat, held a one-day meeting on February 6, 2020, for 14 members (11 females, 3 males) of the

NNAK education team and professional associations to spearhead development of the CPD- and relicensure-linked in-service IPC training course for delivery through professional associations. During the meeting, the team identified the modules to include in the CPD course, CPD allocation criteria, and road map for the development process.

MTaPS provided technical assistance and guidance to health facility IPC TOTs at



National IPC policy planning review meeting. Photo credit: MTaPS/Kenya

Nyeri County Referral Hospital (NCRH) during a facility-based IPC training for 96 county casual workers (temporary staff) on February 12-13, 2020. The training was fully financially sponsored by NCRH.

MTaPS continued to do follow-ups on the implementation of medicines and therapeutics committees (MTCs), AMS and IPC activities in health care facilities.

MTaPS supported and provided technical assistance during two IPC orientation meetings targeting IPC committee members from eight MTaPS-supported facilities. The facility-based orientations were held at Outspan Hospital (Nyeri) and Karatina Sub-County Hospital (Karatina) for 17 (10 males, 7 females) committee members in Karatina and 32 (12 males, 20 females) in Nyeri. They reviewed and updated their facility-based IPC work plans.

Kisumu

MTaPS held an IPC/AMS feedback dissemination meeting targeting the CIPCAC and county MTC on January 17, 2020; 15 people attended the meeting.

MTaPS conducted IPC and AMS work plan follow-up and mentorship site visits at eight MTaPS-supported health facilities and one community pharmacy from January 27-30, 2020.

MTaPS held an IPC/AMS feedback dissemination meeting targeting the Kisumu County health management team (CHMT) on January 31, 2020; 21 county leads attended the meeting.

MTaPS continued to do follow-ups on the implementation of IPC and MTC/AMS activities in health care facilities.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Activity 3.1.1 - Support the development and implementation of national AMS guidelines

The cabinet secretary, MOH, signed the national AMS guidelines for health care settings. Seed (advance) copies of the guidelines were to be printed, and the guidelines launched during the third quarter, but COVID-19 activities took precedence. As a result, soft copies of the guidelines will be disseminated to county health departments and health care facilities countrywide via electronic mail in Q3.

Activity 3.1.2 - Support to revise the Kenya Essential Medicines List (KEML) and classify EML antibiotics into access, watch, and reserve (AWaRe) categories

Seed (advance) copies of the revised KEML were to be printed and launched during the second quarter, but COVID-19 activities took precedence. In addition, MOH delayed in identifying a date for the launch. As a result, soft copies of the revised KEML were disseminated to the counties countrywide via electronic mail. In addition, the revised KEML 2019 is now available and can be downloaded from the MOH website (www.health.go.ke).

Activity 3.2.1 - Support the University of Nairobi/School of Pharmacy to reform the pre-service curriculum to integrate AMS-related topics of practical importance

A pre-service AMS training needs assessment concluded on January 10; 129 participants were surveyed.

MTaPS, in collaboration with the AMS team at the University of Nairobi/School of Pharmacy (UON/SOP) held a meeting on February 5 to review the results of the AMS training needs assessment, which was attended by 13 participants. The results informed the meeting on development of the AMS pre-service curriculum held the following week.

MTaPS, in collaboration with the UON/SOP's AMS team, held a three-day workshop February 12-14 to develop a pre-service AMS curriculum and course content (PowerPoint slides) for undergraduate and postgraduate students. The workshop had 10 participants (5 males, 5 females), comprising pharmacy

lecturers, AMS practitioners, and MTaPS staff. The curriculum content and trainers guide will be finalized in the third quarter of year 2.

Activity 3.2.2 - Technical assistance to develop a CPD and relicensure-linked in-service AMS training course for delivery through professional associations

MTaPS coordinated and supported a half-day meeting held on January 20, 2020, to sensitize representatives of health professional associations on the need for IPC and AMS CPD programs for their members as a strategy to combat AMR. The meeting was attended by 29 members (17 females, 12 males) from 12 professional associations, NGOs, MOH, and a training institution to garner support for developing a CPD- and relicensure-linked in-service IPC/AMS training course for delivery through professional associations. This was the first meeting held in the country to bring professional associations together to discuss issues of AMS and IPC.



Members of various health professional associations developing the AMS CPD curriculum. Photo credit: MTaPS/Kenya.

An AMS CPD training needs assessment was finalized and circulated among various health care professionals.

MTaPS, together with the Pharmaceutical Society of Kenya (PSK) and representatives of other health professional associations, held a two-day workshop March 9-10, 2020, to develop an in-service curriculum and content for AMS in health care settings and the community. The workshop was attended by 12 participants (8 males, 4 females).

Activity 3.5.1 - Support to counties, sub-counties, and facility-level AMS activities

MTaPS continued to do follow-ups on implementation of MTCs and AMS activities at health care facilities in Nyeri and Kisumu Counties.

Kisumu

MTaPS conducted an AMS work plan follow-up and mentorship site visits at eight MTaPS-supported health facilities and one community pharmacy January 27-30, 2020. At the end of the mentorship activity, a feedback dissemination meeting was held with the Kisumu CHMT on January 31, 2020; 21 county leads (11 females, 10 males) attended the meeting.

Nyeri

MTaPS conducted AMS work plan follow-up and mentorship site visits to eight MTaPS-supported health facilities and one community pharmacy January 13-17, 2020. At the end of the mentorship exercise, a feedback meeting was held on January 17, 2020, with the CIPCAC and county MTC; 15 people (9 females, 6 males) attended the meeting.

Nairobi

Kenyatta National Hospital

MTaPS attended a planning meeting with KNH counterparts on January 21, 2020, to discuss activities to be implemented focusing on strengthening their MTC and AMS programs. A work plan was developed, and implementation begun even as the partnership agreement was being finalized and signed by both parties.

MTaPS, together with the KNH formulary team, held a two-day workshop March 11-12, 2020, to finalize the hospital's medicine formulary list as a tool to promote appropriate prescribing of medicines, including antimicrobials. The workshop was attended by 10 participants (6 males, 4 females).

Gertrude's Children's Hospital

MTaPS, in collaboration with Gertrude's Children's Hospital, held a one-day workshop on January 31 on AMS for its prescribers. These were pediatricians, medical officers, one laboratory scientist, and two pharmacists (20 females, 7 males). Correct management of common infectious diseases in hospitals was discussed.

ACTIVITIES FOR NEXT QUARTER	
ACTIVITY AND DESCRIPTION	DATE (2020)
Activity 1.1.1 - NASIC's IPC and AMS TWGs	
<ul style="list-style-type: none"> Review of NASIC's IPC and AMS TWGs, TORs Review action plans of NASIC's IPC and AMS TWGs Participation in quarterly meetings to support technical advice in implementing work plans 	April
Activity 1.1.1 - NIPCP and guidelines	
<ul style="list-style-type: none"> Validation of national IPC strategic plan, policy, and guidelines Official launch of national IPC policy and guidelines Validation of national IPC training curriculum and resources 	May
Activity 1.1.1 - Monitoring and evaluation framework for AMR NAP	
<ul style="list-style-type: none"> Develop M&E framework for AMR NAP Validation of M&E framework for AMR NAP 	May
Activity 2.2.1 - Technical assistance to develop a CPD relicensure-linked, in-service IPC training course for delivery through professional associations	
<ul style="list-style-type: none"> Review/update existing IPC in-service training materials for CPD-linked delivery for health professionals Application of updated IPC/CPD materials in target CPD sessions eLearning course development and piloting 	May-June
Activity 2.5.1 - Support to county, sub-county, and facility-level IPC activities	
<ul style="list-style-type: none"> Technical supportive supervision in implementing county and health facility IPC interventions – Nyeri Technical supportive supervision in implementing county and health facility IPC interventions – Kisumu 	April
Activity 3.1.1 - Support the development and implementation of national AMS guidelines	May

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
<ul style="list-style-type: none"> Final MOH signatures, printing of seed copies, and official launch of national AMS guidelines for health care facilities 	
Activity 3.1.2 - Support revision of KEML and classification of EML antibiotics into AVaRe categories	May
<ul style="list-style-type: none"> Print seed copies and official launch of KEML 2019 	
Activity 3.2.1 - Support UON/SOP to reform pre-service curriculum to integrate AMS-related topics of practical importance	April-June
<ul style="list-style-type: none"> Finalize AMS content PowerPoint slides and trainer's guide 	
Activity 3.2.2 - Provide technical assistance to develop a CPD- and relicensure-linked in-service AMS course for delivery through professional associations	April-June
<ul style="list-style-type: none"> Validation of AMS CPD curriculum for health professionals Application of AMS CPD resources in target CPD sessions 	
Activity 3.5.1 - Support to county, sub-county, and facility-level AMS activities	April-May
<ul style="list-style-type: none"> Supportive supervision in implementing county and health facility AMS interventions – Nyeri Supportive supervision in implementing county and health facility IPC interventions – Kisumu 	

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

This quarter, the MTaPS team attended a meeting of the One Health platform focused on COVID-19; it was recommended to hold weekly meetings. MTaPS also participated in a meeting organized by USAID, during which the Mission team requested that the GHSA implementing partners review their work plans to reallocate a part of current funding to the COVID-19 response. A proposal has been submitted to the Mission in that regard.

involvement of key stakeholders is necessary for advocacy with the Minister of Health for political adoption of the NAP AMR.

A meeting was held with the WHO focal person for AMR and the Infectious Disease Detection and Surveillance (IDDS) chief of party to discuss both planned and implemented activities in the different organizations' work plans. This will prevent duplicating activities and optimize the use of financial resources for AMR activities.

The MTaPS team and a small group of GCMN-RAM members discussed preparations for the next quarterly meeting, which was scheduled for the last week of March 2020. However, it was postponed due to the unavailability of the national focal point who is heavily involved in the fight against COVID-19.

RESULT AREA 2: INFECTION PREVENTION AND CONTROL

MTaPS supported GCMN and the Hygiene Sub-Directorate of the General Directorate of Health (DGS) in validating the human health sector IPC guidelines that were revised in November 2019. Among the invited technical persons, 32 (6 females and 26 males) were present, including all the heads of hygiene and sanitation divisions in the 10 regions of Mali. A working session was held with a small group to incorporate inputs from the technical validation into the IPC guidelines to prepare the document for its political adoption. The document has been finalized.

MTaPS provided technical support to design and implement capacity-building and e-learning activities. A competency-based workshop was conducted to strengthen the skills of the GCMN-RAM (including DGS) on the design and delivery of innovative capacity-building approaches, including both implementation and monitoring and evaluation. A total of 30 DTC members (27 males and 3 females) from both the human and animal health sectors attended the workshop and were equipped with skills on the design and delivery of IPC training materials following standard training guidelines and adult learning principles. At the end of the workshop, participants were able to produce a competency-based curriculum consisting of a facilitator guide that explains how to lead the training program; a timed agenda for face-to-face training sessions; a participant guide based on IPC guidelines for learners to use during the classroom training session; and PowerPoint slides covering 20 sessions. Currently, a toolkit that includes IPC guidelines, curriculum, and jobs aids is available. The next steps are the validation of the toolkit content and using it in trainings.

As part of capacity building for health professionals and students, MTaPS carried out, in collaboration with the GCMN, site visits related to the establishment of the IPC/AMS e-learning platform. These visits

MALI

RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

To strengthen the implementation of activity 1.1.1, the MTaPS team met this quarter with the president of the African Association for Antimicrobial Resistance Research and Control (Association africaine pour la recherche et le contrôle de la résistance aux antimicrobiens) to introduce MTaPS' objectives and engage the association in coordination activities. This association is one of the key members of the national multisectoral committee on AMR (GCMN-RAM) but has not yet participated in a quarterly meeting. The

involved the DGS, the Faculties of Medicine and Pharmacy from the University of Sciences, Techniques, and Technologies of Bamako (Université des Sciences, des Techniques et des Technologies de Bamako), the National Training Institute in Health Sciences, and the Kankou Moussa Private University of Medicine and Pharmacy. As a result, the Institut National de Formation en Sciences de la Santé and the Direction Générale de la Santé et de l'Hygiène Publique platforms were identified for the continuing education of health professionals, and the Faculties of Medicine's and Pharmacy's platform was identified for training students.

MTaPS worked with the AMR national focal point and DGS to assess IPC core components at the central level by using the WHO IPCAT2 tool (see Table 3). Only one component, the IPC guidelines, has a satisfactory score. Thus, it is necessary to consolidate achievements and to improve the score of the other five core components. Using IPC assessment tools (IPCAT) to assess the core components of IPC programs at the national (IPCAT2) and facility (IPCAF) levels and to identify specific areas/core components requiring action is part of the benchmark actions to increase Mali's joint external evaluation score. An assessment using IPCAF at the facility level is planned for next quarter.

Table 3. Score from IPCAT2 Tool

IPC COMPONENT	SCORE (%)
IPC programs	43
IPC guidelines	81
IPC education and training	38
Hospital-acquired infection surveillance	13
Multimodal strategies	25
Monitoring/audit of IPC practices, feedback, and control activities	6

MTaPS provided support to the IPC TWG to draft the terms of reference (TORs) for establishing IPC committees at the five pilot sites. The TOR for local IPC committees at the district and/or facility level will complete one of the benchmark actions for limited capacity (level 2). The TOR will be validated next quarter.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

To advance implementation of activity 3.1.I, MTAps supported a rapid assessment of stewardship policies and regulations and a rapid assessment of the supply chain management of antimicrobials in the human and animal health sectors. Data collection was completed for the human sector, and the draft version of the report is available. MTAps supported the Direction nationale des Services vétérinaires in selecting a consultant to conduct the same rapid assessment for the animal sector, and data collection is ongoing. The next steps are: 1) supporting the consultant to complete data collection, analyze the data, and develop an assessment report; 2) organizing workshops to share the results of the evaluation and identifying the axes of the AMS plan.

This assessment is one of the benchmark actions for limited capacity (level 2) concerning indicator 3.4, optimize use of antimicrobial medicines in human and animal health and agriculture.

Regarding treatment guidelines for the management of common infectious diseases, several meetings were held to collect data and documents for primary analysis on infectious diseases treated in facilities. A workshop will be held to develop guidelines.

MTaPS, in collaboration with the Direction de la Pharmacie et du médicament (DPM) team and the AMS TWG of the GCMN-RAM, conducted facility visits to the five selected sites to discuss the establishment of DTCs and AMS activities assessment using the WHO tool. The visits revealed that the five sites did not have DTCs, nor were there guidelines for setting up DTCs. TOR and training materials based on

national guidelines and protocols need to be developed to improve the capacity of DTCs to oversee AMS activities.

ACTIVITIES FOR NEXT QUARTER	
ACTIVITY AND DESCRIPTION	DATE (2020)
Provide technical and logistical support for organizing quarterly GCMN-RAM meetings to review NAP AMR activities supporting the International Health Regulations (2005)	April
Work with two of the six GCMN-RAM TWGs (AMS and IPC) to support related interventions; TWG IPC will work on COVID-19 coordination activities	April-June
Provide technical and logistical support to facilitate organization of the biannual workshop	April
Support the AMR and TWG focal points to prepare reports and presentations for these meetings (focused on COVID-19 coordination activities)	April
Conduct a rapid assessment of practices in the animal health sector	April-May
Produce an implementation/dissemination toolkit for IPC guidelines for human health with feedback from local subject matter experts and in collaboration with the GCMN-RAM; the toolkit will be disseminated after its validation	April-May
Develop national guidelines for IPC in animal health	May-June
Support the General Directorate of Health and Public Hygiene and the GCMN-RAM in:	
<ul style="list-style-type: none"> Conducting a joint 4-day resource induction workshop for 5 human health facilities (focused on COVID-19) Implementing IPC guidelines in 5 facilities 	April-June
Conduct a rapid assessment of stewardship policies and regulations and a rapid assessment of the supply chain management of antimicrobials in the human and animal sectors	April
Develop the NAP for AMS and develop AMS guidelines in the human sector	May
Assist the DPM and GCMN-RAM with grouping antibiotics on the essential medicines list into AWaRe categories	April-June
Support the GCMN, DPM, and the Agence nationale d'évaluation des hôpitaux to establish DTCs in the previously mentioned five selected sites	April- June

MOZAMBIQUE

OBJECTIVE 1: PHARMACEUTICAL SECTOR GOVERNANCE STRENGTHENED

MTaPS/Mozambique drafted the scope of work for a short-term technical assistance (STTA) to be done by a consultant to build the capacity of the National Directorate of Pharmacy (DNF) legal and technical staff to draft new regulations and review existing regulations and guidelines.

The consultant will also mentor DNF staff on the methodology to develop a robust legal framework in accordance with good legislative practices, including laws, regulations, guidelines, policies, norms, and technical norms, and to conduct stakeholder consultations, following good regulatory practice principles.

This STTA will contribute to operationalizing regulatory systems at the DNF in the National Medicine Regulatory Authority (ANARME). It will also contribute to effective pharmaceutical governance and a robust legal framework so the medicine regulatory authority can ensure increased availability of and access to safe, efficacious, and quality-assured medicines.

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

MTaPS/Mozambique continued with the process of contracting an IT company to provide essential and limited support to the DNF in ensuring that Pharmadex, a tool for medicine registration, is functional. MTaPS/Mozambique launched the process of procurement and clarified questions from vendors to ensure that vendor proposals are complete.

The IT company will provide technical services, including maintaining the DNF Pharmadex computer network, providing technical support, and ensuring that DNF IT systems are running smoothly. They will monitor and maintain DNF computer systems, install Pharmadex software upgrades, resolve technical problems, and train DNF, Ministerio da Saude (MISAU), and MTaPS staff on Pharmadex network maintenance, so they can solve small issues that may arise.

MTaPS/Mozambique continued to collect information to complete the business process of the import function of Pharmadex. MTaPS collected requirements about the documents to be generated by the system and functions to be refined on the basis of user suggestions and documentation shared. MTaPS also implanted the changes needed to improve the tool based on DNF's SOPs and the requirements collated.

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

During the COVID-19 epidemic, MTaPS is focused on keeping the staff and stakeholders safe and healthy, while continuing our important work. In this context, MTaPS developed:

- A COVID-19 country action plan
- Detailed tasks to support the Mozambique mitigation plan and innovative work approaches
- A COVID-19 mitigation plan
- Updates for USAID about the COVID-19 situation and actions implemented by stakeholders

Next Steps:

- Update COVID-19 Mozambique action plan
- Continue to provide critical country updates about COVID-19 in Mozambique and actions implemented by stakeholders to the home office
- Update the detailed tasks to perform during the COVID-19 period and support Mozambique's mitigation plan and work approach decisions
- Update the country security manual
- Develop a protocol document for monitoring staff health, project operation status, and local epidemic updates

Pharmadex's medicine importation module will allow applicants to ask for import authorization via online and to print import authorization documents that will reduce DNF's paperwork and workload to produce statistical reports.

MTaPS/Mozambique, continued working with DNF counterparts to install the online version of Pharmadex. MTaPS:

- Shared the online Pharmadex test version with the DNF medicine registration section and collected their inputs for improving the online medicine registration module
- Assessed the current internet conditions at DNF to ensure successful installation
- Advised DNF on cloud-based solutions to install the online version of Pharmadex
- Provided Amazon Web Services (AWS) as an option to host the Pharmadex database in the cloud

Cloud hosting will offer DNF advantages in terms of solution performance, lower internet costs, and higher data security—conditions that make this solution the most compatible with the current state of the infrastructure and internet at DNF.

With the deployment of this new version of Pharmadex, pharmaceutical companies can submit applications for marketing authorization of medicines online. This enhancement is intended to improve speed and quality of the medicine registration process, reduce the clerical workload, and improve customer service and efficiency.

MTaPS/Mozambique held meetings with the DNF's Regulation Department to discuss the scope of work for the STTA for establishing a quality management system (QMS) for the DNF; discussions focused on prioritizing specific areas of MTaPS support for the QMS and agreeing on the activities to be accomplished during the STTA. MTaPS agreed with DNF on the following activities:

- Organize a workshop for drafting the QMS manual
- Facilitate and provide technical input for reviewing the draft QMS manual
- Perform a literature review: ISO 9001, internal audit, risk management, training
- Elaborate a process for mapping all regulatory functions, including registration, inspection, and pharmacovigilance (PV)
- Perform an internal audit at DNF to be ready for an external audit and elaborate a gap analysis

MTaPS/Mozambique support in this activity will deliver a reviewed quality policy (quality manual) for the DNF that will contribute to standardized DNF operational regulatory processes and improving the DNF maturity level according to the WHO GBT.

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

With technical assistance from MTaPS/Mozambique, DNF and the national HIV program conducted a three-day training to orient health care workers on the protocol for actively monitoring patients on dolutegravir (DTG), including the implementation plan, responsibilities, and follow-up. The training was broken down into 1 day for 14 provincial focal persons (10 males, 4 females) for HIV and pharmacovigilance (PV), followed by two days for 58 health care providers (29 males, 29 females) from the HIV, PV, and TB programs and the MCH focal person from the facility level.

During the training, participants gave significant inputs on forms A, B, and C that will be used to capture active monitoring data. As a result, MTaPS/Mozambique participated in revising the forms, printed them, and helped send them to the provinces and respective facilities. During the training and group discussions, USAID, CDC, and the National Pharmacovigilance Committee participated.

MTaPS/Mozambique supported the DNF and the HIV program in organizing on-site training to sensitize more staff at participating facilities about the activity to secure their cooperation. The two and half days

of on-site training for health facility providers was conducted for almost all facilities (368 health providers from 9 health facilities; 115 males, 253 females). The 13 health providers from Polana Caniço General Hospital were not trained because the facility is one of those that will be providing services for patients with COVID-19.

The training will allow the establishment of a system for active PV, led by the DNF's national PV center with activities conducted by the national HIV and TB programs.

This quarter, MTaPS/Mozambique and the DNF discussed a data capture approach to implement the electronic PViMS and agreed on data entry through the health facility focal points. MTaPS/Mozambique also defined PViMS equipment specifications and procured tablets to be used in 10 health facilities for data entry.

MTaPS/Mozambique in conjunction with Columbus Consulting, adapted the PViMS tool to Mozambique context, based on the data collected on forms A, B, and C for active monitoring of patients on DTG. The adapted tool was presented to DNF and MTaPS teams that provided inputs to improve the tool. MTaPS and Columbus Consulting also started refining the adapted version based on the inputs provided and testing the installation and system operation on the tablets that will be used for data capture.

MTaPS/Mozambique worked with MOH's Hospital Pharmacy Department (HPD) to prepare for and implement the training on AMS for health providers to equip them with knowledge to understand the importance of antimicrobial control and good governance processes to reduce the emergence and control the spread of AMR.



Group work activity related to root cause analysis (implementation of AMS interventions in a health unit Photo credit: Eunice Seni

The MTaPS team provided technical support to review and adapt the training materials for the in-service AMS training of health providers. Before the training, MTaPS/Mozambique conducted a TOT to provide the MOH staff (DNF and the National Directorate of Medical Assistance [13 participants; 6 males, 7 females]) with capabilities and skills for facilitating the health workers' training. MTaPS/Mozambique shared knowledge about foundations, theories, and principles in adult learning; participatory training methods and techniques; and characteristics of an effective facilitator and their importance in designing training sessions.

For the health workers' training, MTaPS/Mozambique and the HPD targeted the seven provincial hospitals (Pemba, Lichinga,

Chimoio, Tete, Inhambane, Xai-Xai, and Matola) that are the primary focus of promoting AMS programs and also included health providers from the general hospitals in Maputo (Mavalane, Polana Caniço, José Macamo, Chamanculo, and the psychiatric hospital); 29 health providers (17 males, 12 females) were trained from the provincial and general hospitals.

During the AMS training, the 29 health providers received knowledge and competencies on AMR and its global and country impact; AWWaRe categorization; quantity and quality of antibiotic use; and implementation of antimicrobial control interventions, and later they developed AMS plans for their health facilities.

The knowledge and skills acquired in training will allow re-establishment and revitalization of the DTCs' functionality, implementation of AMS activities, and targeted health facilities to conduct AMS audits.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
<p>Protocol for implementing active surveillance of patients on DTG</p> <ul style="list-style-type: none"> Start enrolment of HIV/TB patients Agreed with DNF and HIV program on the remote site and follow-up of implementation for active monitoring and supporting DNF and HIV program follow-up Agreed with DNF and HIV program about the approach that will be used for provincial monthly supervision on site 	April-May
<p>Training report and materials</p> <ul style="list-style-type: none"> Update AMS training materials for TOT and health facilities Produce AMS TOT and health facilities' training report 	April-May
Review and document AMS action plans developed by seven health facilities during the AMS training	April-May
<p>Health facilities report template</p> <ul style="list-style-type: none"> Support DFH on the report template and follow the elaboration of monthly reports by health facilities on AMS implementation Receive, review, and document monthly reports done by health facilities on AMS implementation 	April-May
Produce report on implementation of agreed-upon AMS activities for the NAP for AMR	April-May
<p>Hire IT company</p> <ul style="list-style-type: none"> Finish the selection process Prepare and sign contract with the successful company 	April and June
<p>Obtain agreement with DNF to deploy new version of Pharmadex using a cloud solution</p> <ul style="list-style-type: none"> Test new version of Pharmadex using cloud solution Deploy new version of Pharmadex using cloud solution Compare cloud solution performance/new Pharmadex server and document the results 	April-June
<p>Support drafting and reviewing regulations to be approved</p> <ul style="list-style-type: none"> STTA in conjunction with MTaPS team to start reviewing draft regulations agreed with DNF Start developing new regulation drafts agreed with DNF Develop training materials to train legal staff based on the areas agreed with DNF 	April-June

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
<p data-bbox="203 407 1105 436">Adapt PViMS to Mozambique context and train DNF staff and data collectors on using PViMS</p> <ul data-bbox="235 470 1227 699" style="list-style-type: none"><li data-bbox="235 470 1227 520">• Complete the changes requested in the PViMS to finalize the development of Mozambique version 1.0<li data-bbox="235 527 1154 556">• Complete user manual with forms, components and sync functions, and changes completed<li data-bbox="235 562 1203 613">• Continue to prepare the conditions to deploy the adapted PViMS for use by DNF for data entry and management<li data-bbox="235 619 643 648">• Install PViMS in the cloud AWS server<li data-bbox="235 655 837 684">• Setup users, health facilities, and master data in the tablets<li data-bbox="235 690 873 699">• Discuss new training dates and approach for PViMS with DNF	April–May

NEPAL

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

MTaPS Nepal work plan contingency plan for COVID-19 response was developed and submitted to MTaPS HQ. MTaPS Nepal team members have started working from home but will be attending critical meetings at the DDA, including virtual meetings, as needed. Security, safety, and specific COVID-19 related messages are shared frequently with the team. Meetings with USAID will start occurring remotely, and other meetings and domestic travel have been temporarily suspended. MTaPS planned provincial consultative meetings have been put on hold and almost all planned activities involving an international consultant visit have been postponed.

At the end of the quarter, USAID asked MTaPS to assist DDA in the COVID-19 preparedness effort. In response, MTaPS assisted in the creation and deployment of an electronic Google-based data collection system to monitor stock status of selected medicines by the MOHP Nepal COVID-19 Taskforce. The system provides early warning stock-out alerts for selected products and will help DDA and the MOHP ensure continued availability of quality vital medicines to treat COVID-19 patients.



MTaPS working with the DDA to implement a data collection system to update Nepal's COVID-19 taskforce on stock status and early warning stock-out alerts of selected medicines. Photo credit: Birna Trap

OBJECTIVE 1: PHARMACEUTICAL SECTOR GOVERNANCE STRENGTHENED

The MTaPS core partner International Law Institute Uganda-African Center for Legal Excellence (ILI-ACLE) drafted the gap analysis report of Nepal's legal and regulatory framework for medicines and supplies. The report, along with examples of recently updated medicine laws from other MTaPS countries, were shared with the Department of Drug Administration (DDA) in support of the ongoing development of the zero draft of an updated Nepal drug law. MTaPS participated in a planning meeting with the DDA and the Nepal Law Commission and will be supporting provincial consultative meetings for the zero-draft drug law. An ILI-ACLE expert planned to visit Nepal to assist in the revision during the quarter; however, this visit, as well as the seven provincial consultative meetings, are postponed due to COVID-19. The Nepal medicines policy is part of its overall health national policy, which the government has not yet committed to update; however, MTaPS made the case for the importance of updating the medicine policy in conjunction with updating the law, and so the Nepal Law Commission and MOHP decided to revisit their commitment. MTaPS will support the medicine policy review as needed.

The reconfiguring of the DDA's organizational structure depends on the decentralization of roles and responsibilities related to regulatory oversight of the pharmaceutical sector and revising and optimizing of the DDA work processes. The new roles and responsibilities are closely linked to the legislative revision, which will depend on the outcomes of the consultative provincial meetings. The scope of work for the reorganization was finalized in collaboration with the DDA, and an international consultant has been identified to support the reconfiguring of the DDA; however, the timing for the country visit will depend on COVID-19 developments. The possibility of remote support from the international consultant combined with support from MTaPS staff and local consultants has been considered.

OBJECTIVE 2: INSTITUTIONAL AND HUMAN RESOURCE CAPACITY TO REGULATE MEDICINES, FAMILY PLANNING COMMODITIES, AND HEALTH TECHNOLOGIES INCREASED

The terms of reference to strengthen the national regulatory system were finalized through several consultative telephone conferences with the Coalition of Interested Parties, i.e., WHO, MTaPS, PQM+ and DDA. It was done based on the DDA's interim self-assessment using the WHO's Global Benchmarking Tool (GBT). Participants agreed on roles and responsibilities and identified trained/certified assessors to support the GBT assessment by the end of the quarter. MTaPS was assigned to provide support on market surveillance and control and registration and marketing authorization. However, due to COVID-19 and the current global travel restrictions, the assessment was postponed and replaced by a desk verification of the GBT self-assessment that was completed in August 2019. The verification will be conducted through teleconferences and will be the basis for the technical working group led by the DDA to update the Institutional Development Plan (IDP) in the next quarter. The IDP will identify the gaps and key functions requiring technical support to increase the maturity level of the regulatory system from level 1 to create a well-functioning and efficient drug regulatory system in the coming years. Moreover, the IDP will guide MTaPS' support to the DDA in next year's work plans.

The development of a quality management system (QMS) covering the DDA's key regulatory functions is a requirement for obtaining an ISO 9001:2015 certification. MTaPS' global partner Celsian has been contracted to provide technical support to DDA. Starting next quarter, Celsian experts will be undertaking a situation analysis remotely in collaboration with the DDA and MTaPS staff to identify gaps and opportunities as part of the initial process to improve and set up the QMS.

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

MTaPS supported the DDA on mapping the workflows for registration of new generic or analogue medicines and renewals and initiated discussions on optimizing work processes. Simultaneously, MTaPS continued drafting systems (hardware and software) requirements and specifications for a DDA electronic regulatory management information system. MTaPS has been gathering information and user knowledge and perspectives on the existing drug administration and management software system (DAMS), as well as compiling similar information on other regulatory systems. Later, MTaPS will compare the pros and cons of DAMS and other existing systems and hold these up against the developed system requirements and specifications, initially for registration, followed by inspection and other DDA key functions. The efforts to optimize work processes and data requirements will continue next quarter.

During this quarter, MTaPS also assisted the National Medicines Laboratory, a separate division under the DDA, tasked with ensuring medicine quality and control. MTaPS provided technical support to ensure the functioning and start of using the Laboratory Management Information System (LMIS) developed in 2017. MTaPS finalized the LMIS, installed and configured it into the local server and LAN to build capacity for 14 staff from the National Medicines Laboratory. The LMIS allows for entry of samples received from inspectors (post-marketing surveillance) and generates test and analysis reports.

OTHER ACTIVITIES

Program Management

At the end of January, the MTaPS country program director (CPD) started work in Nepal by registering and establishing the MTaPS Nepal office and recruiting a Senior Technical Adviser-Pharmaceutical Management Information Systems (STA-PMIS) in early February. The STA-Regulatory System Strengthening (STA-RSS) recruited will be joining the team next quarter. MTaPS had introductory meetings at the USAID Mission, Ministry of Health and Population (MOHP), and World Health Organization (WHO) and presented the MTaPS annual work plan to the Department of Drug Administration (DDA). The team has since held regular meetings with USAID and DDA and has provided regular activity reports and updates. As MTaPS and Promoting the Quality of Medicines Plus (PQM+) Programs collaborate closely and will be co-locating, it was agreed to arrange a new office space close to the DDA. The leasing contract was signed, and the refurbishment and moving are planned for next quarter. The DDA has allocated space at its offices for the two STAs and eventually the CPD to work with her team in full collaboration with the DDA staff.

Program Monitoring, Evaluation, and Learning

MTaPS finalized the country baseline assessment report to be included as part of the global baseline report and submitted it for USAID approval by next quarter. The MTaPS Nepal team also drafted the country monitoring, evaluation, and learning (MEL) plan following guidance and inputs from the USAID Mission's monitoring and evaluation (M&E) advisor, DDA, and MSH home office MEL team. The country MEL plan is comprised of 17 revised indicators related to MTaPS Nepal objectives, including all baseline indicators (except two considered not relevant to Nepal); new indicators to assess performance in patient care measured through pharmacy and drug outlet inspections; and Good Pharmacy Practice (GPP) indicators proposed to be part of the revised DDA inspection tool. The country MEL plan is aligned with the PQM+ Program indicators and work plan. The draft plan will be shared for further comments and approvals in the next quarter.

Maternal, Newborn, and Child Health

Nepal was one of nine MTaPS countries selected for an assessment on registration of maternal, newborn, and child health (MNCH)-related medicines and technologies. MTaPS and DDA teams collected data and submitted the country technical report this quarter. MTaPS' MNCH team at headquarters will share the global report's findings and recommendations.

A representative from USAID's Washington MNCH Division visited Nepal for the assessment, and MTaPS organized meetings with DDA, a manufacturer of MNCH medicines, and a wholesaler. The visit was a good opportunity for the USAID representative to learn about challenges faced by the private sector in the country, the important role wholesalers play in the pharmaceutical supply chain, and how critically important it is to implement good manufacturing practices and good dispensing practices in Nepal.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATES (2020)
Review draft amendments to the Drug Act and map and assess current rules and codes <ul style="list-style-type: none"> Organize provincial consultative meetings and finalize the zero draft of the medicines law (Drug Act) Translation of the draft Drug Act ILI-ACLE expert to travel to Nepal for discussion with the Nepal Law Commission and DDA, provide inputs to the zero draft, and finalize the technical report with recommendations on suggested rules, codes, and legislative framework for DDA Initiate the revision of guidelines, rules, and regulations 	May-June June End of June End of June
Review the organizational structure of DDA, considering the decentralization policy <ul style="list-style-type: none"> Clarify roles and responsibilities for the decentralization of medicines regulation during the provincial consultative meetings Consultant and MTaPS experts to review DDA organizational structure & provide draft technical report 	May-June June-July
Conduct external GBT assessment <ul style="list-style-type: none"> Support the verification of GBT self-assessment (August 2019) and develop the IDP 	April
Assist DDA in developing a QMS <ul style="list-style-type: none"> Celsian consultant to conduct a situation analysis to identify gaps and opportunities for QMS improvement prior to visiting Nepal 	May-June
Develop the system requirements and specifications for an integrated regulatory management information system <ul style="list-style-type: none"> Finalize mapping of all workflows and hold discussions for optimization; develop data flows for workflows 	April-June
Work planning <ul style="list-style-type: none"> Draft/develop next year's work plan in collaboration with DDA and other key stakeholders with inputs from IDP 	May-June 2020

THE PHILIPPINES

OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED

PSCM Governance

MTaPS continues working with Procurement and Supply Chain Management Team (PSCMT) and Public Health Support Team of the DOH to clarify their roles and responsibilities at the central, regional, and local government unit (LGU) levels in catalyzing local health systems for PSCM in preparation for the implementation of universal health coverage (UHC). This support is targeted to the DOH's recent strategic focus on strengthening local health systems. MTaPS assisted the PSCMT to redefine its role from operational management of procurement and supply chain to providing leadership, policies, guidance, and capacity building support to LGUs. MTaPS also supported the PSCMT to articulate its refined roles in the form of a "Strategic Commitment" document with key performance indicators and milestones. The revisited role of the PSCMT will provide much needed leadership and coordination to organize PSCM systems and contribute to moving from the current centralized and fragmented status to a decentralized and organized condition. As a result, the performance of the overall PSCM system is expected to improve over time, allowing sustainable access to safe, effective, and quality-assured medical products and pharmaceutical services to the population.

Piloting Regional Governance Mechanism for PSCM

MTaPS supported the Central Visayas Region in the creation of the Central Visayas Center for Health Development Procurement and Supply Chain Management and Pharmacovigilance Committee. Together with USAID's TB Innovations and ProtectHealth projects, MTaPS secured support from the Mayor and Vice Mayor of Cebu City for the Service Delivery Integration Implementation Research (IR) called "Cebu City-Wide TB Elimination Campaign" to achieve the goal of improving TB treatment outcomes. MTaPS and other projects are jointly connecting the IR with regional PSCM governance strengthening efforts for

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

Following the WHO declaration of the 2019 Coronavirus Disease (COVID-19) outbreak as a Public Health Emergency of International Concern on January 30, 2020, USAID tasked MTaPS to provide technical assistance to the government of the Philippines in response to the COVID-19 pandemic on infection prevention and control (IPC) and COVID-19-related emergency supply chain management. MTaPS conducted a rapid scoping of COVID-19-related work from February 24 to March 4, 2020.

To support the country's COVID-19 response, MTaPS/Philippines was assigned to support health facilities likely to receive COVID-19 cases to strengthen IPC; health care waste management (HCWM) capabilities; and procurement, distribution, and management of COVID-19-related supplies and commodities. MTaPS selected 40 public- and private-sector hospitals based on their COVID-19 expected case load and risk profile in the National Capital Region, Region III, and Region IV-A.

MTaPS quickly hired national consultants and field response teams dedicated to COVID-19 activities, which are working with the DOH, WHO, UNICEF, and other USAID implementing partners to prepare training materials for IPC, HCWM, and supply chain management and make plans to conduct capacity building through online platforms. MTaPS is supporting emergency supply chain response systems at the DOH central level to ensure that personal protective equipment stocks are quantified and distributed quickly to the points of care where they are needed and keep track of stock throughout the country.

MTaPS will start the online training during the first week of April 2020 at selected hospitals in the three regions. After a quick compliance assessment using standard health facility IPC assessment tools and checklists, consultants will provide continuous remote support with possible site visits, if permitted, to hospital staff to ensure their compliance and enhance their capacity in IPC, HCWM, and supply chain management, which will be critical for containing COVID-19 transmission and preventing its further spread.

increased impact on service delivery integration provincewide and citywide to achieve increased TB case detection and treatment outcomes countrywide.

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

PSCM and PV Workforce Assessment

MTaPS conducted a workforce assessment for PSCM and PV structures, functions, and skill set requirements to help the DOH identify and address the workforce challenges related to institutionalizing the PSCM and PV systems in the Philippines, especially in the changing context of the devolving health systems and Universal Health Coverage (UHC) Act implementation. From February 10 to 21, 2020, key informant interviews and facilitated group discussions were conducted among DOH stakeholders, international organizations, and USAID implementing partners to understand PSCM and PV workforce needs related to adequacy, distribution, and skill set requirements. A workshop was organized on February 21, 2020, to share and discuss preliminary findings of the assessment and gather additional input from stakeholders and in-country experts. As a result, MTaPS will develop an assessment report and collaborate with the DOH to create a PSCM and PV workforce development plan to determine the required number and distribution of related staff positions, their roles, required skill sets, and possible institutional arrangements to meet the needs of the country to ensure appropriate use of safe, effective, quality-assured, and affordable essential medical products.

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

Electronic Logistics Management Information System

MTaPS supported the DOH to finalize the electronic logistics management information system (eLMIS) technical specifications and terms of reference (TOR) required for procurement processes and vendor evaluation. MTaPS continues assisting the DOH by hiring a local IT expert to support the identification of technological, system, and business process specifications required for eLMIS and respond to technical clarification questions from vendors. MTaPS provided technical assistance to the DOH in ensuring the approval of the TOR by addressing comments from internal reviews and following all steps of the procurement process. The DOH posted the invitation for expression of interest to participate in the eLMIS procurement project on February 19, 2020. However, a planned reposting was delayed due to the COVID-19 pandemic emergency situation. The DOH confirmed that the eLMIS procurement would still happen this year, although with anticipated delays due to COVID-19 emergency response. MTaPS will continue to support the DOH in its preparation for procuring, planning, and deploying a suitable and feasible end-to-end eLMIS solution. Once a vendor is selected, MTaPS will engage in codesigning the eLMIS implementation roadmap to address data visibility and logistics management issues across the supply chain in the Philippines. Monitoring, tracking, and early warning alerts for critical commodities are expected to improve countrywide once the new eLMIS is fully deployed, minimizing stock disruptions in the supply chain and increasing the availability of medical products for the population.

Data Collection for Couple Years of Protection for Family Planning (FP) Program

MTaPS supported the requirements from USAID and the DOH for data collection and reporting of the FP indicator couple years of protection (CYP). MTaPS engaged its partner IQVIA to collect FP commodity distribution and consumption data from the public and private sectors. IQVIA presented the CYP report to national stakeholders on March 17, 2020. The CYP report includes a comprehensive and evidence-based CYP analysis in the Philippines and helped the country to fulfil its commitment to the Family Planning 2020 goals to address unmet needs for FP commodities in the country.

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

Framework Agreement

MTaPS continues supporting the Procurement Services Unit and Pharmacy Division of the DOH in revising the Guidelines on Framework Agreement to include pooled procurement and use of international procurement mechanisms in the context of UHC law implementation and devolution of DOH budgets to LGUs. MTaPS assisted the DOH to connect the framework agreement mechanism with the overall strategic procurement objectives of the country. It includes the creation of a central price negotiation board; the decentralized budget devolution to LGUs; and pooled procurement to maximize value for money and address procurement-related bottlenecks, such as limited supplier, high product price, and poor timely delivery.

MTaPS organized a process mapping workshop with DOH stakeholders involved in the PSCM processes on February 17, 2020, to identify the bottlenecks and challenges in the current procurement practices and recommend actions to overcome them. It was agreed that the Framework Agreement, along with effective functioning of the national price negotiation board and the pooled procurement mechanism, will be an important instrument to address the identified issues. MTaPS is a member of the Technical Working Group for the Philippines National Price Negotiation Board and will continue working with the Board, Pharmacy Division, Procurement Services, and Government Procurement Policy Board to finalize the Administrative Order to institutionalize the Framework Agreement. Once finalized and approved,



Process Mapping Workshop. Photo credit: MTaPS/Philippines

the framework is expected to enable an efficient mechanism for procurement of medicines, medical devices, and supplies in compliance with the UHC Law and help to address current bottlenecks associated with rigid fixed quantity and fiscal year-based procurement policy. Ultimately, this will help reduce unit costs, process lead time, and workload in executing procurement packages, resulting in more affordable products, less PSCM disruption, and increased availability and access for Filipinos.

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

Regional Supply Chain Management of FP Commodities

MTaPS supported the DOH and the Commission on Population and Development (POPCOM) on reaching an agreement for sub-national supply chain management of FP commodities by using underutilized warehouses owned by POPCOM. MTaPS supported POPCOM in developing logistics and supply chain management guidelines for FP commodities. MTaPS also facilitated a training workshop March 9–11, 2020, on inventory management and warehousing for DOH and POPCOM personnel who will be assigned to manage the warehousing and distribution of FP commodities from the central and regional POPCOM offices. The guidelines and training will help POPCOM



Inventory Management and Warehousing Training Workshop. Photo credit: MTaPS/Philippines

properly manage regional storage and distribution of FP commodities, which will in turn reduce the logistics burden of the DOH and free up the limited space in DOH warehouses.

Scoping of Antimicrobial Resistance

MTaPS has been designated by USAID to provide support to several USAID focus countries in the area of the Global Health Security Agenda and particularly antimicrobial resistance (AMR) containment. MTaPS conducted a scoping visit February 24–March 4, 2020, to identify the current status of AMR response mechanisms in the country following the 2018 International Health Regulations Joint External Evaluation (JEE). A SWOT analysis was performed according to the JEE outputs and the key components of multisectoral coordination, surveillance, IPC, and antimicrobial stewardship. The situation analysis report on the current structure, policies, and practices in place and recommendations for pharmaceutical system strengthening interventions to address the gaps, particularly in the context of TB, will be finalized and disseminated next quarter.

ACTIVITIES FOR NEXT QUARTER	
ACTIVITY AND DESCRIPTION	DATE (2020)
Activity 1.1.1: Support DOH to have PSCM governance and coordination mechanisms functioning at central and regional level: Develop and share interim advisory to clarify PSCMT role during COVID-19 emergency response	April
Activity 1.2.1: Support DOH to professionalize PSCM and PV workforce: Finalize and share PSCM and PV workforce assessment report	June
Activity 1.2.2: Build capacity of DOH and PPPI on strategic sourcing and appropriate procurement: Support DOH to develop and circulate simplified instructions for hospitals and LGUs for emergency procurement of COVID-19 commodities	May
Activity 1.5.2: Support DOH to institutionalize a practice of annual quantification and periodic review of TB and FP commodity needs to inform procurement: Conduct a national quantification of TB Preventive Treatment (TPT) and develop a transition plan for introducing 3HP regimen	May/June

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

In the face of the COVID-19 global pandemic, both working style and life have changed, including ways of doing business. The field office in Rwanda is working within the guidance and confines of the national emergency plan as established by the Government of Rwanda, in addition to the overall guidance issued by the MTaPS home office.

The Government of Rwanda and MTaPS are concerned with the effect of the COVID-19 pandemic on the general population and staff. Emergency preparedness and mitigation plans have been put in place to ensure the safety of the population.

The measures by the Government of Rwanda to combat the spread of COVID-19 among the general population include:

- Restricting unnecessary travel
- Closing nonessential businesses and services for 14 days starting on March 20, 2020
- Restricting any social gatherings and events that bring crowds together (e.g., schools, festivals, games, places of worship) starting on March 14, 2020

MTaPS has provided clear instructions and guidance on how field staff should handle and respond to the COVID-19 global pandemic, with updates as needed. Guidance to the field office includes preparation of a COVID-19 contingency preparedness plan at the country level, which was completed and submitted on March 20, 2020. In view of minimizing risks, staff were advised to work from home. On March 25, 2020, the Rwanda team submitted its MTaPS Rwanda COVID-19 Mitigation Plan.

B. Guidelines for:

- Submission of documentation for registration of human medicines
- Variation of registered human medicines
- Registration of pharmaceuticals products (abridged guidelines)
- Registration of biosimilars
- The classification of medical devices

RWANDA

OBJECTIVE I: IMPROVE PHARMACEUTICAL-SECTOR GOVERNANCE

The Rwanda Food and Drug Administration (FDA) has a goal to reach maturity level three of the WHO's Global Benchmarking Tool (GBT) before the end of 2021, and MTaPS has taken the necessary steps to help it achieve its intended goals.

It is against this background that MTaPS is engaging a consultant to support the Rwanda FDA to develop and implement a quality management system (QMS) that will ensure streamlined and improved regulatory functions through appropriate documentation by implementing well designed procedures.

The consultant was anticipated to be in the country by the end March 2020, but due to the COVID-19 pandemic this is no longer possible, and the completion time frame might be affected.

In addition, working with the Rwanda FDA, MTaPS participated in a workshop where five regulations and eight guidelines for the Rwanda FDA were validated. The workshop was funded by GHSC-PSM, and MTaPS provided technical input on the drafted regulatory documents. As part of our support, MTaPS contributed to and participated in the review and updating of the list of authorized human medicines, which will be used as a reference document for importation into the country while the registration proceeds.

The documents validated during the February 17–21, 2020 workshop are:

- A. Regulations:
 - Governing registration of medicinal products
 - On the classification of medical devices
 - Controlling pesticides and household chemicals
 - Governing the control of cosmetics
 - Governing the registration of pesticides, chemicals, and poisons

- Registration of veterinary products
- Documents for submission of registration of household chemicals and pesticides
- Submission of documentation for registration of medicated cosmetics

C. Validated lists of medicines and cosmetics

- Rwanda FDA authorized human medicines list
- Rwanda FDA list of authorized veterinary medicines
- Rwanda FDA authorized list of medicated cosmetics

MTaPS supported the development of the Rwanda FDA Institutional Development Plan, which was used as guidance during the Coalition of interested Partners workshop, held January 22–23, 2020, and organized with support from the World Health Organization.

OBJECTIVE 2: STRENGTHEN GOVERNMENT CAPACITY TO MANAGE PHARMACEUTICAL SYSTEMS

MTaPS supported the Ministry of Health (MOH) to develop pharmaceutical standards for accreditation as part of the comprehensive quality assurance framework for rating, monitoring, and evaluating and for improving the quality of services offered to patients in Rwanda.

These standards were submitted to the MOH and are awaiting senior management approval for publishing and implementation. A draft implementation plan has been developed by MTaPS that will guide implementation of those standards once approved.

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

MTaPS installed the pharmacovigilance monitoring system (PViMS), a web-based tool for monitoring the safety of medicines, on the Rwanda FDA server. The Rwanda FDA, with support from MTaPS, organized training on pharmacovigilance and PViMS for new Rwanda FDA staff and health care service providers from public and private health facilities. These included 18 doctors, 11 nurses, and 15 pharmacist members of the Drug and Therapeutics Committee in public hospitals (30 males and 14 females). The training was conducted January 20–22, 2020, in the Nyamata/Bugesera district Eastern Province of Rwanda. The report is being reviewed and will be finalized next quarter. PViMS and this training will help to monitor adverse drug reactions, primarily focusing on the ongoing Ebola immunization and the new dolutegravir regimen for antiretroviral therapy.

MTaPS conducted baseline assessment data collection that covered 27 hospitals and 27 health centers across Rwanda. During the field visits, data for 22 indicators set by the MOH were collected. During the assessment, data collectors identified 11 health facilities storing medicines with suspected poor quality, including discolored methyldopa 250 mg tablets. All the facilities were requested to report the issue to the Rwanda FDA, and investigations were started immediately. The results and recommendations will be used to determine where more effort is required.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATES (2020)
<p>Strengthen capacity of the Rwanda FDA in regulating pharmaceuticals used in HIV/AIDS, MNCH, and FP/RH programs:</p> <ul style="list-style-type: none"> Finalize review of Rwanda FDA draft five-year strategic plan by April 30 Drafting: <ul style="list-style-type: none"> Guidelines for renewal of registered products by April 30 Review regulation on licensing of premises for medical products to incorporate component of technology transfer by May 15 Guidelines for technology transfer of pharmaceutical products and medical devices by May 30 Guidelines for quality audit of medical devices manufacturers by June 30 Finalize recruitment process of a QMS consultant by April 30 Support phased documentation and implementation of a QMS at Rwanda FDA for effective medicines regulation by June 30 	April-June
<p>Strengthen delivery of high-quality patient-centered pharmaceutical care through the development of pharmacy service standards aligned to Rwanda health care quality and accreditation system</p> <ul style="list-style-type: none"> Draft plan for implementation of pharmacy standards at health facilities in Rwanda, including tools to operationalize the standards 	April
<p>Improve facility-level storage and use of quality medicines for pre-eclampsia, eclampsia, and postpartum hemorrhage</p> <ul style="list-style-type: none"> Draft guidelines and procedures on oxytocin storage 	April
<p>Support establishment of a system for actively monitoring and reporting adverse events related to patients' use of tenofovir/lamivudine/dolutegravir (TLD)</p> <ul style="list-style-type: none"> Activate the pharmacovigilance module of PRIMS (if available) or facilitate linking or integration of the existing PVIMS with PRIMS to manage safety data obtained from the active monitoring system Develop a framework for active surveillance of new dolutegravir-based ARV regimens Draft user manual for PV module in PRIMS 	April June June

SENEGAL

RESULT AREA I: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

Activity 1: Strengthen the functionality of One Health Permanent Secretary and its AMR technical working group by supporting effective coordination through regular meetings

The One Health platform was inactive following the dissolution of the prime minister's office in the Senegalese government on May 14, 2019. It has since been revitalized and was reorganized during the first quarter of fiscal year 2020 (FY20) under the auspices of the General Secretariat of the Government.

MTaPS provided technical and financial support for several meetings organized by the One Health Permanent Secretariat with the aim to establish all required technical working groups (TWGs), starting with the antimicrobial resistance (AMR) TWG.

On January 22 and 23, 2020, MTaPS and FAO's Emergency Centre for Transboundary Animal Diseases (ECTAD) jointly provided technical and financial support for the first AMR TWG meeting. In addition to naming the TWG PREVENTION, the outcomes of the two-day meeting included:

- 1) Appointing government institutions for:
 - The PREVENTION TWG chair: The Head of the Ministry of Health's (MOH) Directorate of Laboratories and the Head of the National Agency of Biosafety and Biosecurity
 - The focal points of the PREVENTION TWG:
 - AMR focal point: The Head of the Directorate of Pharmacy and Medicines
 - Food health security: The Head of the National Committee of Codex Alimentarius
 - Biosecurity and biosafety focal point: The Head of the National Laboratory of Livestock and Veterinary Research
 - Zoonoses focal point: The Head of the Directorate of Veterinary Services
 - Immunization focal point: The Head of MOH Directorate of Prevention
- 2) Elaborating a roadmap to finalize the 2020 work plan of the PREVENTION TWG that was to be shared and adopted in February 2020 by the One

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

During the pandemic preparedness phase, MTaPS provided technical support to the Ministry of Health (MOH) to elaborate the country action plan. MTaPS assisted the Directorate of Quality, Security, and Hospital Hygiene (DQSHH) in charge of infection prevention and control (IPC) at the MOH in planning IPC activities for the 48 selected priority health districts.

Since February 3, MTaPS has participated in weekly meetings of the National Pandemic Management Committee; meetings have been held twice weekly since March 2. During these meetings, the MTaPS Senior Technical Advisor provides technical contributions in the areas of epidemic preparedness and response and implementation planning, while the Technical Advisor contributes in the areas of IPC needs assessment and planning.

MTaPS also organized site visits at USAID's request to two of the three selected hospitals MTaPS supports (Mame Abdoul Aziz Sy District Hospital of Tivaouane and Hôpital Général Idrissa Pouye tertiary hospital of Dakar) to assess their level of IPC preparedness for the COVID-19 pandemic threat.

Senegal registered its first confirmed COVID-19 case on March 2, 2020, which led to the activation of the Health Emergency Operations Center (HEOC). To compensate for the lack of technical human resources for managing the response and at the request of HEOC leadership, MTaPS provided additional technical support to the Planning and Operations sections. This involved providing guidance on implementing monitoring activities (contact tracing); coordinating the response (i.e., development of technical tools for monitoring resources intended for the response, documentation of the epidemic, situational awareness); and implementing health facility IPC practice improvement strategies.

MTaPS participated in technical and financial partner group meetings and other stakeholder debriefing meetings held regularly at the MOH. MTaPS also provided technical support to the MOH-led process of developing the national contingency and budget plans in close collaboration with WHO, donors, and other stakeholders.

Health Secretariat. However, due to COVID-19 gathering restrictions, the 2020 work plan has not been finalized and adopted as planned.

On February 13–14, 2020, MTaPS provided technical support to the One Health Permanent Secretariat to organize another workshop for the validation of the One Health AMR action plan under the facilitation of the Directorate of Laboratories. The outcomes were:

- The review and finalization of the AMR annual action plan
- The elaboration of the national concept note for the tripartite (FAO-OIM-OIE) One Health AMR funding

As a next step, the One Health Permanent Secretariat requested that all of the government's directorates involved in the annual AMR action plan must internally finalize and validate their priority activities for 2020–2021. MTaPS and the One Health Secretariat will discuss the options for organizing the validation session of the AMR annual workplan through virtual meetings.

RESULT AREA 2: INFECTION PREVENTION AND CONTROL

Activity 2: Strengthen the capacity of health facilities to implement IPC programs

From February 5–7, 2020, MTaPS provided support to the DQSHH to organize a workshop to finalize and technically validate the national IPC policy document. During the workshop, MTaPS, in collaboration with the DQSHH, WHO, and the IPC national steering committee, evaluated the IPC strategy at the national level using the WHO IPCAT2 (infection prevention and control assessment tool, 2017 version) and elaborated the first draft of the national IPC action plan for 2020. The next step is for the DQSHH to finalize the action plan with the related budget and present it to IPC stakeholders and the national IPC TWG for validation during a workshop tentatively planned for next quarter.



An IPC training at Hôpital Général Idrissa Pouye in Dakar.
Photo credit: MTaPS/Senegal

As agreed with the DQSHH, MTaPS has been working on supporting a set of trainings for each targeted hospital on the IPC core component modules, the continuous quality improvement (CQI) approach, and the WHO multimodal approach. Prior to the trainings, MTaPS began the recruitment process for local consultants who will conduct a training of trainers for 15 members of the Infection Control Committees (ICCs) in all three selected hospitals (three from the district hospital [EPS1], four from the secondary hospital [EPS2], and eight from the tertiary hospital [EPS3]). These 15 trainers will then train all other staff from their respective hospitals. MTaPS and the DQSHH worked

together to select the two IPC consultants, and the recruitment process was finalized on March 17, 2020.

Following the technical orientation from the HQ Principal Technical Advisor on MTaPS' capacity-building approach, which was conducted virtually on March 26, 2020, the consultants started with the elaboration of the training package, which will include a trainer's guide, a trainee's guide, and the training manual. The consultants will also develop evaluation tools for pre- and post-training. Due to COVID-19 containment measures, MTaPS and the DQSHH have cancelled the initial training of hospitals' trainers. Instead, consultants will conduct on-the-job trainings on the IPC core components in each hospital. MTaPS will equip the consultants with personal protective equipment as part of the mandatory training tools and with supplies to ensure that effective safety measures are enforced during and after each training session.

With the COVID-19 pandemic situation, the DQSHH requested that MTaPS begin implementing some IPC priority activities from the hospitals' action plans while the recruitment of the consultants was finalized. On March 3–5, 2020, MTaPS supported a training session at the level 3 Hôpital Général Idrissa Pouye in Dakar. The training focused on hand hygiene, waste management, and prevention of cross-infection transmission using complementary precautions in hospital care. An on-the-job training approach was used. It emphasized identifying the hospital's gaps on IPC recommended practices and developing an action plan to address them. A total of 25 health care workers were trained. They applied the acquired IPC skills in their respective units and identified gaps and corrective actions that they will address. These actions are included in the hospital's ICC action plan. MTaPS will continue supporting the ICC during the implementation of its action plan to ensure that IPC activities are continuously implemented and supported by a culture of quality improvement.

The same training session was planned the following week (March 10–12) at the level I Mame Abdoul Aziz Sy District Hospital in Tivaouane but was postponed because the sole IPC trainer available at the MOH was needed at the central level to help with the HEOC response plan after Senegal declared its first COVID-19 case. This training session is now included in the consultants' training package for hospitals.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Activity 3: Provide technical support to formulate a national antimicrobial stewardship (AMS) plan and help improve prescribing adherence to treatment guidelines

During this quarter, MTaPS/Senegal team members continued working with and monitoring the National Committee for Antibiotic Treatment (NCAT) sub-groups in the revision process of the antibiotic standard treatment guidelines (STGs), which take into account the AWWaRe categorization. On January 8, 2020, MTaPS supported the NCAT to organize a one-day technical meeting for the four TWG sub-groups (antibiotic therapy policy, antibiotic therapy for adults and children community infections, antibiotic for health care-acquired infections, and antibiotic prophylaxis) to present the updated STGs. Each TWG proposed a draft that takes into account WHO's AWWaRe categorization. At the end of the meeting, the NCAT proposed that the antibiotic therapy guidelines validation workshop be tentatively planned for March 2020. However, with the COVID-19 outbreak response measures enforced by the government, the validation workshop has been postponed.

Activity 4: Incorporation of IPC and AMS topics as components of safe, effective, and quality care in leadership and management training modules for policy and decision makers

On February 4, 2020, MTaPS provided technical support to the DQSHH to conduct a meeting for final review and approval of the IPC training modules that were uploaded to the eLearning platform in January. During the meeting, the emphasis was on the final evaluation for the learning courses. The DQSHH has developed videos of hand hygiene, bio cleaning, and waste management practices to add as training support for IPC eLearning. The eLearning content was finalized with the DQSHH, and the videos will be shared with SNEIPS for formatting into MOH standards before uploading them to the eLearning platform. On March 20, 2020, MTaPS facilitated a second meeting with the DQSHH and the information technology unit of the MOH to test the presentation of the modules on the platform and review the tests uploaded for the trainees. Several issues were detected during the testing. MTaPS will provide technical and financial support to organize another workshop to review the parameter settings, ensure that the andragogic and competency-based approach is included, and select participants from the three selected hospitals supported by MTaPS for the pilot phase before launching the platform for public use.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
Continue providing technical support to MOH's planning and coordination efforts to SARS-CoV-2 outbreak response through meetings, information and knowledge sharing, developing tools, etc.	April–June
Organize IPC on-the-job trainings sessions in three targeted hospitals that will comprise IPC core components, CQI, and WHO multimodal approaches.	
Provide technical support to DQSHH and the Informatics Unit to review and troubleshoot the eLearning platform for the customized IPC modules already uploaded and ensure that the andragogic and competency-based approach is included	
Conduct the situation analysis of the country AMS regulation and activities as the first step toward developing the draft national AMS plan. Once ready, the latter will be submitted to the AMS technical committee and the stakeholder audience for comments prior institutional validation.	
Provide financial and technical support to the NCAT to organize the workshop for validation of the antibiotic therapy STGs.	

TANZANIA

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

MTaPS /Tanzania is in constant virtual communication with Ministry of Health, Community Development, Gender, Elderly, and Children (MOHCDGEC) counterparts on how to re-strategize activities during this pandemic. MTaPS Tanzania established a COVID-19 task force to play an advisory role to staff on matters relating to COVID-19. The task force developed the COVID-19 strategy, which guides the project and ensures constant communication with the MSH HQ COVID-19 task force.

Some activities are postponed due to COVID-19:

- AMS mentorship visits to the supported MTCs and IPC mentorship
- The signing of the AMS policy guidelines and AMR communication strategy, since the Chairperson of the MCC, the Chief Medical Officer, is heavily involved in coordinating the country's response to COVID-19

RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

Activity 1.1.1: Enhance multisectoral coordination to improve AMR containment (corresponds to result 1.1 in portfolio framework)

MTaPS/Tanzania supported and participated in the first meeting of the Infection Prevention and Control Technical Working Group (IPC-TWG) of the Multisectoral Coordination Committee (MCC) on antimicrobial resistance (AMR). It was the first meeting since members were selected by the MCC. MTaPS conducted the following:

- Advised the content of the terms of reference (TOR) for the IPC-TWG
- Assisted the MCC to develop key national IPC indicators
- Assisted the MCC to develop a strategy to oversee and monitor IPC implementation at health facilities

RESULT AREA 2: INFECTION PREVENTION AND CONTROL

Activity 2.2.1: Strengthen institutional capacity to host and manage eLearning platforms for in-service capacity building for IPC, including updating IPC training materials (corresponds to result 2.2.1 in portfolio framework)

MTaPS/Tanzania continued to convert the IPC training materials into an eLearning format to be used by the Centre for Distance Education for online training. So far, eight sessions have been converted.

Activity 2.2.2: Support pre-service curricula reform to ensure that latest IPC approaches are included, particularly for higher levels of nursing education (corresponds to result 2.2.1 in portfolio framework)

MTaPS/Tanzania conducted IPC training to 61 trainers (20 males, 41 females) from various health training institutions, including Muhimbili University, Kamapala International University, and Kilimanjaro Christian Medical Center. Participants included tutors who are medical laboratory scientists, nurses, doctors, pharmacists, and environmental specialists. The training was participatory, utilizing focused group discussions and demonstrations of various IPC skills such as procedures in donning and doffing personal protective equipment. These tutors were trained on current IPC guidelines and teaching methodologies. This will help tutors to teach pre-service students on current IPC practices as required and produce new health care workers who have basic IPC knowledge and skills. IPC guidelines and a training of trainers (TOT) tool kit were provided to participants. The activity will increase the number of health care workers in Tanzania who have updated knowledge and skill on basic IPC practices.



IPC training to tutors from health training institutions.
Photo credit: Dr. Jackson Ilangali



A demonstration during a training of updated IPC guidelines to tutors from health training colleges in the country. Photo credit: Dr. Jackson Ilangali

Activity 2.2.3: Promote a self-improvement culture through local teams that use continuous quality improvement (CQI) methodologies for IPC (corresponds to result 2.2.2 in portfolio framework)

MTaPS conducted an IPC baseline assessment using the World Health Organization (WHO) Infection Prevention and Control Assessment Framework tool in six hospitals: Mbeya Zonal Referral Hospital, Benjamin Mkapa Zonal Hospital, Kagera Regional Hospitals (Kagera), Maweni Regional Hospital (Kigoma), Seko Toure Regional Hospital (Mwanza), and Temeke Regional Hospital (Dar es Salaam). The aim was to assess whether key IPC practices are performed according to WHO standards.

Eight components were assessed and scored: IPC program; IPC guidelines; IPC education and training; health care-associated infection surveillance and audit of IPC practices; multimodal strategies; monitoring of IPC practices and feedback; workload staffing and bed occupancy; and built environment, materials, and equipment for IPC. The presence of guidelines scored relatively high in all hospitals because MTaPS had already trained staff and distributed the guidelines to the facilities prior to this assessment. Health care-associated infection surveillance and audit of IPC practices scored low in almost all hospitals.

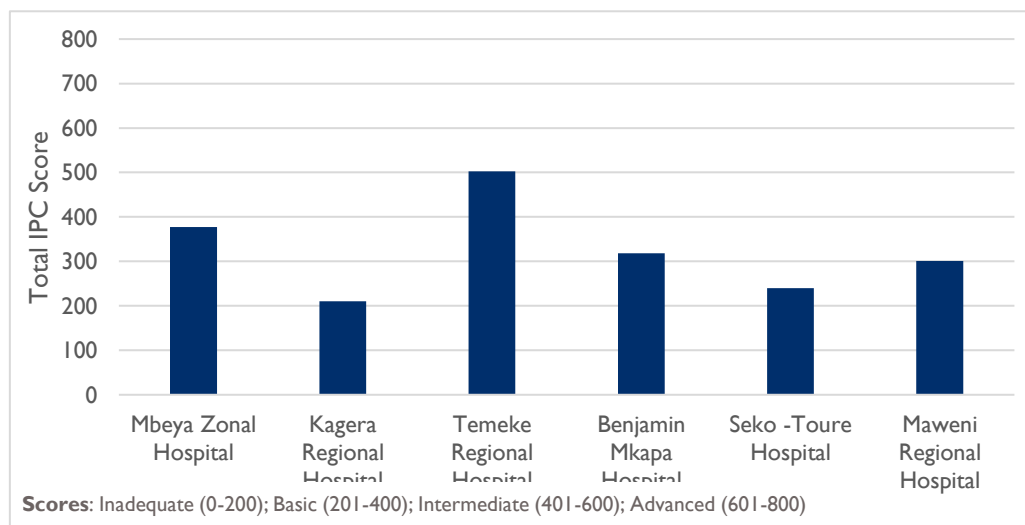


Figure 1. Overall MTaPS-supported hospital IPC baseline assessment scores in

Feedback was provided and action plans for the identified gaps were developed for implementation. Mentorship to health service providers on the identified gaps will follow to increase their capacity and strengthen the IPC programs in those facilities.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Activity 1.3.1: Support the development of AMS policies and guidelines, including action plans and implementation plans, in collaboration with WHO (corresponds to result 1.3 in portfolio framework)

MTaPS/Tanzania supported the MOHCDGEC to finalize the development of the policy guidelines on implementing the antimicrobial stewardship (AMS) program in the country. The document was approved by the MCC on February 13, 2020, and is currently awaiting the signature of the chairperson before being operationalized. The document is expected to guide stakeholders implementing AMS-related activities in the country.

Activity 2.3.1: Strengthen the capacity of the national MTC and public and private facilities to carry out AMS activities (corresponds to result 2.3 in portfolio framework)

MTaPS/Tanzania adapted generic MTA PS training materials on AMR/AMS and supported review of generic AMR/AMS training materials to suit the Tanzanian context. Using the locally adapted AMS training materials, MTA PS conducted training for 27 newly appointed National Medicines and Therapeutic Committee (NMTTC) members (16 males, 11 females) to build their capacity on how to appropriately coordinate and oversee AMR/AMS-related activities in the country.

Activity 3.3.1: Conduct antimicrobial utilization survey to inform interventions to improve compliance with AMS guidelines (corresponds to result 3.3 in portfolio framework)

In January 2020, MTA PS/Tanzania supported the finalization of the data collection activity for national antimicrobial consumption (AMC) where a team from the MOHCDGEC, the Tanzania Medicines and Medical Devices Authority, and the Medical Stores Department visited two pharmaceutical industries in Dar es Salaam and Mwanza to collect data to be analyzed to estimate AMC in the private sector. The collected data were extracted using WHO-recommended tools and cleaned up for analysis and interpretation. Data analysis and interpretation started in February 2020 with a joint team from MTA PS, MTA PS partner, the University of Washington, the MOHCDGEC, and a locally experienced pharmaceutical systems leader from St. John's University. The team engaged in a series of discussions on what parameters should be considered during data analysis and interpretation. The data analysis continued throughout March and included aspects that have implications for recommended policy change on antimicrobial use. The team will produce a report to share with the MOHCDGEC to help it make informed decisions on how antimicrobials should be used in the country. In addition, the team will compile a manuscript for the purpose of sharing key findings, recommendations, and the program's experience through different scientific journals.

In parallel, the team performed data cleaning of collected hospital antimicrobial use data for the Point Prevalence Survey (PPS). The data analysis and interpretation are still in progress and being led by a locally identified champion from the Catholic University of Health and Allied Sciences, who is also a member of the MCC's AMS working group. The activity is expected to provide insight on how antimicrobials are being used at the health facility level and to inform the MOHCDGEC and health

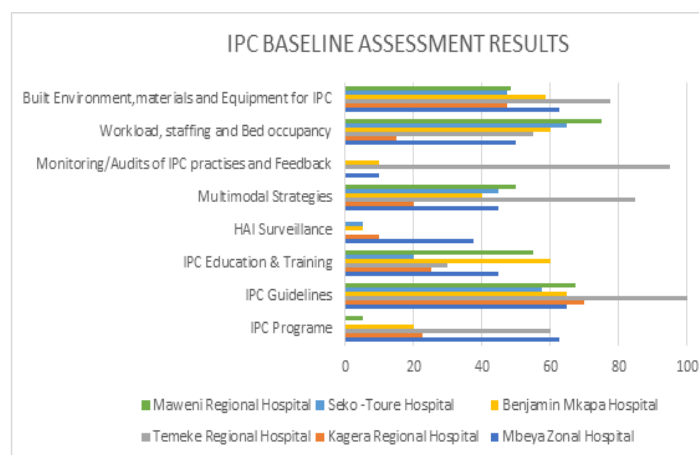


Figure 2. Hospital IPC baseline assessment scores by IPC component

facilities on AMS interventions to be implemented to improve antimicrobial prescribing, dispensation, and use.

Activity 5.3.1: Promote community awareness and preparedness through IEC/behavior change communication activities on IPC/AMS for patients and the public (corresponds to result 5.3.1 in portfolio framework)

MTaPS/Tanzania worked closely with the MOHCDGEC and other partners to finalize development of the AMR communication strategy by conducting a small group technical meeting to review the draft submitted by MTaPS core partner Overseas Strategic Consulting. The document was submitted and approved by the MCC on February 12, 2020, and is now waiting for signature by the Chief Medical Officer of the MOHCDGEC before printing and dissemination. The strategy will help stakeholders efficiently implement AMR-related interventions by guiding them to convey appropriate AMR messages while implementing their activities.

ACTIVITIES FOR NEXT QUARTER	
ACTIVITY AND DESCRIPTION	DATE (2020)
IPC mentorship to MTaPS-supported facilities	April–June
Mentorship to MTCs on AMS in MTaPS-supported facilities	TBD
Printing and dissemination of the AMR communication strategy	April
Printing and dissemination of the AMS policy guidelines	April
Report writing and manuscript development for the conducted DDD and PPS surveys	April–May

UGANDA

RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

Activity 1.1.1: Work with Ugandan National AMR Sub-Committee (NAMRsC) to set up IPC and AMS technical working committees

During this quarter, the MTaPS team coordinated with the NAMRsC, the Ministry of Health (MOH), and the Uganda Wildlife Authority to approve terms of reference (TOR) for the Infection Prevention and Control (IPC) Technical Working Committee (TWC). This included sharing the draft TOR and presenting them to the One Health platform and chairperson of the NAMRsC.

MTaPS also worked with the NAMRsC to appoint members to the IPC and AMS TWCs. Members were appointed and issued appointment letters and TOR. MTaPS senior technical advisors were also appointed as members of the national IPC and AMS TWCs.

MTaPS participated in the quarterly NAMRsC AMS TWC meeting, updating them on the support MTaPS provided to health facilities and the Appropriate Medicines Use Unit (AMU) of the MOH. In addition, the MTaPS team supported the MOH in developing a roadmap for revising the 2013 national IPC guidelines, which are now outdated. MTaPS was requested to lead the session on review of evidence during a planned one-day workshop intended to develop an outline for the national IPC guidelines.

MTaPS made progress in developing an information exchange platform for the NAMRsC. The draft platform was presented to the chairperson of the NAMRsC for input. Following the meeting, MTaPS proposed improvements to the platform developer. These were forwarded to the HQ management information system (MIS) team and are currently being incorporated into the draft. A list of national-level prospective users has also been shared with the MIS team and user accounts created accordingly. Subsequently, MTaPS secured the services of a consultant who had previously worked for the MSH-implemented Uganda Health Supply Chain Program at the MOH to coordinate stakeholder requirements for the platform and make the suggested improvements. Discussions about presenting the platform to the e-Health TWC at the MOH have been initiated and a meeting is planned for a later date.

MTAPS RESPONDING TO THE COVID-19 PANDEMIC

The country is currently responding to the COVID-19 pandemic, which has hampered implementation of some activities. The country team is currently working from home to support partners and consultants to deliver on planned activities. A detailed country contingency plan has been developed and is currently undergoing an internal review. Uganda did not receive COVID-19 funding and is not expected to use GHSA funds for COVID-19 activities without prior approval.

RESULT AREA 2: INFECTION PREVENTION AND CONTROL

Activity 2.5.1: Identify gaps in IPC implementation at select referral hospitals and implement action plans

During this quarter, MTaPS completed the reports from the baseline IPC surveys. The surveys were conducted using the IPC Assessment Framework (IPCAF) at seven regional referral hospitals (RRHs); continuous quality improvement action plans were also drafted. These reports were shared with and approved by the seven health facilities MTaPS supported during the previous quarter.

MTaPS also supported the health facilities to implement CQI action plans for IPC. The scope of support included:

- Developing draft TOR for hospital IPC committees
- Proposing memberships for the IPC committees and IPC teams
- Prioritizing activities for early implementation
- Printing and disseminating IPC reference documents
- Prioritizing lower health facilities to receive support supervision by the RRHs
- Completing a baseline IPC survey for an additional health facility (Nagalama Hospital)

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

Activity 3.1.1: Work with the national drug authority and Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF) to update the EML for veterinary use and develop guidelines on using antimicrobials in the animal sector

MTaPS held meetings between the consultants recruited by MTAps and MAAIF to develop strategies to expedite completion of this activity. The consultants were to provide regular updates on activity implementation to MAAIF and MTAps. Because of the challenges experienced with timely completion of this activity, MTAps and the consultants revised the contract to ensure that timelines for completion of deliverables were realistic. The consultants subsequently submitted deliverables under this activity including a draft EML for veterinary use and guidelines for using antimicrobials in the animal sector.

MTaPS undertook a technical review of the documents with support of the animal health specialist, and comments were shared with the consultants. As a next step for activity completion, MTAps plans to facilitate a national and sub-national stakeholder (regional and district veterinary officers, veterinary practitioners, farmers and veterinary drug sellers) consultation of the draft veterinary EML and guidelines for using antimicrobials in the animal sector. Unfortunately, this process has been put on hold because of the current COVID-19 pandemic.

Activity 3.2.1: Set up centers of excellence for AMS in select referral hospitals

During this quarter, MTAps completed the AMS baseline survey report and hospital AMS improvement plans, which are currently undergoing editorial review.

MTaPS continued to support the health facilities in implementing the plans of action. Between February 22 and March 13, 2020, MTAps visited the six RRHs to support the operationalization of their AMS and IPC committees as described in activity 2.5.1. The objective of the support visit was to ensure that the hospital AMS and IPC teams and committees understood their roles and had specific TOR and formal appointment letters signed by the hospital director. Having these teams/committees constituted and aware of their mandate will serve as a precursor of the planned trainings and future support to the hospital AMS activities. The scope of support provided by MTAps included:

- Developing draft TOR for the hospital MTCs (where not available) and for the AMS teams
- Proposing memberships for the AMS teams
- Prioritizing AMS activities for early implementation
- Printing and disseminating AMS reference documents
- Prioritizing lower health facilities for receiving support supervision by the RRHs under the center of excellence model
- Completing a baseline AMS survey for Nagalama Hospital
- Developing a support supervision plan for lower health facilities

MTaPS held technical discussions with the MOH's Pharmacy Department to identify and prioritize activities for implementation to build the country's JEE-2 AMR capacity. During these discussions, three priority activities were identified:

- 1) Undertake an assessment of stewardship policies and activities, including regulatory framework and supply chain management of antimicrobials, using a multisectoral approach
- 2) Review the EML and clinical guidelines to promote appropriate use and incorporate the WHO AWaRe classification
- 3) Develop a draft national AMS plan or strategy and national legislation that regulate use, availability, and quality of antimicrobials

The discussions ended with a request that MTaPS support activities 1 and 3. MTaPS will prioritize these activities for national-level support in subsequent work plan development.

MTaPS also held a meeting with the Pharmacy Department and the Infectious Diseases Institute (another implementing partner supporting AMS activities in Uganda) to discuss areas of collaboration. During this meeting, MTaPS was requested to conduct a mapping of partners working in the AMR technical area and to review the human resource structure of the AMU (AMS secretariat) at the MOH.

Activity 3.3.1: Work with the National Drug Authority (NDA) to establish the data and information platform for national-level activities aimed at monitoring the use of antimicrobials

In March 2020, MTaPS received a dataset extracted from the NDA MIS to facilitate the identification and standardization of the dataset that subsequently will be used to monitor the number of antibiotics imported into and manufactured in Uganda. The MTaPS team has analyzed the dataset and is writing a technical report highlighting gaps and strengths of the current system to monitor volumes of antibiotic imported and manufactured in the country. The report will be shared with NDA to inform the next steps of activity implementation. The proposed next step is to use the report to inform the development of a data sharing framework and standard operating procedures for data sharing.

During this quarter, the NDA and MTaPS held a meeting to discuss progress on activity implementation and forge a way forward. During the meeting, the NDA appreciated the initiative taken by MTaPS to support the country in monitoring data on importation and local manufacture of antibiotics. The meeting made a resolution for MTaPS to organize frequent meetings to monitor progress of activity implementation and agree on areas of support by the NDA.

Activity 3.5.1: Increase AMR awareness in the animal sector

MTaPS supported a consultant in holding meetings between the MAAIF and other partners working in the agricultural sector. Additional stakeholders were identified during this meeting and consulted on the approach to activity implementation. Subsequently, draft key messages have been developed and will be presented to MAAIF for review and approval. This activity is planned for this quarter.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
IPC training for IPC committee members at supported health facilities	April
MTaPS MIS team will incorporate all changes and suggestions for improvement of the platform; technical team will share relevant documents and datasets	April–May
Working with consultants, MTAps will conduct consultative meetings at national and sub-national level (district and regional veterinary practitioners, including farmers and drug sellers)	April–May
Working with a consultant, MTAps will submit the draft EML and guidelines on use of antibiotics to the MAAIF and present these to senior management for final consideration	May
Support supervision of IPC work being done at MTAps supported health facilities	March
Working with a consultant, MTAps will share the final AMR messages with MAAIF and disseminate these to stakeholders	March
Stewardship training for facility MTCs/AMS teams	May
Conduct support supervision to monitor progress on facility improvement plans	June
Support the quarterly NAMRsC meeting of the One Health platform	June
Support the quarterly AMS TWC meeting	June
Support the quarterly IPC TWC meeting	June

**A contingency plan was developed as part of the response to COVID-19. Depending on the situation, activities will be implemented per the contingency plan.

MONITORING, EVALUATION, AND LEARNING

INDICATOR APPROVAL AND MAPPING

The revised MTaPS indicators, including indicators to measure Global Health Security Agenda (GHSA) activities, and performance indicator reference sheets (PIRS) were approved by USAID in February. An indicator mapping was done to map previous indicators to revised indicators and to create a complete set of indicators being measured in each country. Some gaps were identified in the indicators included in countries' work plans, including several indicators not being measured in any MTaPS countries despite being relevant to the country work plans. A technical review of indicators and how they are being used in each country is planned for next quarter. Following the review with the MTaPS HQ technical team, the MEL team will work with the regional and field offices to support them to integrate relevant indicators into their MEL plans and to report on those indicators.

BASELINE ASSESSMENTS

Baseline data collection took place in Jordan and Rwanda this quarter. All 16 individual country baseline reports were internally reviewed for inclusion in the global baseline report. The global baseline report was drafted and underwent two rounds of internal technical review and will be finalized and submitted in April.

QUARTERLY AND SEMI-ANNUAL DATA REPORTING

MTaPS country teams were supported to collect and report on the quarterly and semi-annual indicators included in their work plans. Data were reported to the HQ MEL team by MTaPS country teams using Excel-based data reporting forms. Data were cleaned and collated for reporting to USAID. Cleaning included logic and consistency checking, as well as completeness checking.

MTAPS DATA COLLECTION, MANAGEMENT, AND ANALYTICS PLATFORM DEVELOPMENT

The MTaPS SurveyCTO server was purchased and its programming started. All approved indicators were added to the data collection form on the server. Indicator country mapping, indicator source, and reporting period were configured in the server so that once a country and reporting period are selected, the relevant indicators are listed for selection and data entry. Indicator data collection questions and formulae from the PIRS were programmed in the server, including relevant range and data type checks. The electronic system will be finalized and deployed next quarter, with the plan to have field offices use the system for all subsequent data reporting.

KNOWLEDGE MANAGEMENT

LESSONS LEARNED PRACTICAL APPLICATION

The KM advisor rolled out lessons learned practical application (LLPA) training for staff and implementing partners in this quarter. Country teams, HQ staff, and implementing partners were trained in the practical application of lessons learned—a step-by-step process developed by MTaPS to collect, review, and use lessons for continuous learning and adaptive management. The training covered the LLPA system and process MTaPS put in place to capture, analyze, synthesize, and apply lessons from implementation to improve current or future performance. Trainees received the lessons learned practical application how-to guide, and were provided with a Google form to submit lessons learned for reporting to USAID. Following the training, MTaPS staff used the Google sheet to document lessons

learned from program implementation this quarter. Beginning next quarter, the KM advisor will use the program's electronic data collection and management system, which is currently in development, to collect and analyze lessons learned from implementation for quarterly reporting.

TECHNICAL DOCUMENTATION

The KM team rolled out technical documentation training for HQ and country teams on how to plan and develop high-quality technical documentation to showcase the program's technical interventions, implementation experiences, results, and lessons consistently and efficiently. Trainees learned about the types of technical documents MTaPS will produce, the process of technical documentation, quality standards for technical documentation, and elements to be included in technical documents. The purpose of the training is to ensure that, before developing technical documents, staff identify the purpose or use of technical documents, including the intended users; ensure they have the requisite capacity to undertake documentation; allocate adequate human and financial resources for documentation; understand the technical quality standards that need to be met; ensure compliance with MTaPS branding and marking requirements; and plan for strategic dissemination of technical documents via MTaPS and USAID external and internal knowledge sharing networks and communication channels. Trainees received a technical documentation guide, documentation templates, and a quality review checklist for use by authors and reviewers of technical documents. Following the training, staff are working with the KM advisor and research advisor to develop technical briefs and manuscripts for submission to peer reviewed publications, in adherence to the project's standardized process and quality standards.

KNOWLEDGE SHARING

The KM advisor, in coordination with the research and communication advisors, convened an internal documentation and evidence technical working group (TWG) in the first quarter of fiscal year 2020 (FY20) to guide the implementation of the KM plan. This quarter, the TWG met monthly to coordinate research, KM, and communications activities and to plan and execute lessons learned capture, technical documentation, and internal and external knowledge sharing activities. The TWG kicked off an internal brown bag series for knowledge sharing between MTaPS global staff and partners. At the first brown bag in February, attendees learned about the development and planned national roll-out of an electronic asset management system in Bangladesh. For more information on this activity, refer to [the Cross Bureau section](#) of this report.

In April, MTaPS will hold an external brown bag for USAID staff on the WHO's Global Benchmarking Tool (GBT) —the first globally agreed-upon framework—for charting a course to strengthen medical product regulatory systems. MTaPS is supporting Bangladesh, Nepal, the Philippines, Rwanda, and Mozambique to deploy the GBT and implement their institutional development plans.

LEARNING HIGHLIGHTS

This quarter, MTaPS spearheaded several learning activities aimed at increasing pharmaceutical systems awareness and visibility and at establishing USAID's thought leadership in the PSS space through MTaPS' work.

- To increase pharmaceutical system awareness and visibility, MTaPS developed a PSS 101 training course for USAID staff and refined course content based on feedback gathered from the first face-to-face training session in November 2019. Plans to train a second cohort in March 2020 did not materialize due to the travel restrictions resulting from the COVID-19 pandemic. MTaPS uploaded training materials to a shared Google drive for USAID staff to access and learn at their own pace.

- To complement the PSS 101 training course, MTaPS is developing a series of microlearning videos that will be completed next quarter to raise awareness and promote understanding of why strengthening the pharmaceutical system is important for maternal, newborn, and child health outcomes.
- MTaPS' efforts to streamline the PSS Insight tool indicators resulted in a significant reduction of indicators, from 117 to 38. This exercise took into account and included complementary indicators from WHO's benchmarking tool for pharmaceutical systems.
- In coordination with the Joint Learning Network, MTaPS planned a learning exchange with Boston University School of Public Health (BUSPH) to engage countries on issues around medicines pricing. MTaPS and BUSPH will hold two webinars in Q3 and Q4.
- MTaPS convened a virtual meeting with the Pharmaceutical Systems Strengthening Technical Advisory Group (PSS TAG) to discuss a series of editorials to be published in the *Journal of Pharmaceutical Policy and Practice* and to plan a speaker series, where TAG members and invited guests will speak on PSS topics.
- MTaPS launched "Pharmaceutical Systems in Practice"—a knowledge sharing brown bag series to share program experience and knowledge from implementing PSS interventions in supported countries.

Lessons Learned Highlights

This quarter, MTaPS began systematically documenting lessons learned from implementing pharmaceutical system strengthening activities. These lessons are synthesized below.

Collaborating and coordinating with governments and stakeholders

- Host country governments need to consistently feel affirmed and empowered, even if they are the direct recipients of technical support, as this is the cornerstone for executing strong, sustainable activities and strengthening relationships with the MOH and other key partners. These partners should be treated as peers and counterparts and, in Jordan, the MOH focal point expressed great satisfaction with the collaboration and the technical support from MTaPS.
- It is critical to involve the partner/member states in the planning, execution, and implementation of activities at the regional level. The regional IGAD workshop and other EAC meetings had to be postponed since most partner/member states had other time commitments. Early engagement with partner/member states and the EAC/IGAD secretariat and making a concerted effort to factor in regional work plans in activity planning would have mitigated this issue.
- Responding to the COVID-19 health emergency while balancing and implementing ongoing approved FY20 work plan activities requires collaborative planning; adaptive management; and close communication, coordination, and cooperation with host country governments, USAID/Washington, and Missions.
- Partner relations are critical for multisectoral coordination on AMR. There is a strong need for governance instruments to enable interactions among stakeholders and for governments to be committed to ensure successful implementation of multisectoral AMR activities. Furthermore, it is critical to use the One Health approach among enabling sectors (human, animal, environmental, agricultural, and research) to bring stakeholders together for consensus and a way forward. Regular and ongoing communication and meetings with multisectoral representation from One Health sectors provides a platform for discussion and learning exchange, thereby strengthening multisectoral coordination and trust among stakeholders, which is key to AMR containment efforts.

Technical implementation

- Having the AWARe categorization in treatment guidelines can help prescribers optimize the use of antibiotics and contribute to lowering AMR. Countries will need to make provisions to enable a period systematic review of the essential medicines list. In Cameroon, MTaPS will advocate for a formal budget to lead the review of the essential medicines list every three years, including the AWARe classification for improved use of antibiotics.
- There is great value in integrating new emergency crisis response initiatives into existing TWGs to maximize overall benefit, as recommended by MTaPS. For example, the existing IPC TWG for AMR can be used as an entry point to support COVID-19 emergency preparedness. Building on an existing TWG reduces start-up time and provides a solid foundation to enhance coordination and implementation of COVID-19 activities.
- Using an inclusive approach to assess the national IPC program has the potential to guarantee national ownership in identifying and addressing critical gaps toward improving its performance. The WHO IPCAF tool can help identify the priorities of the IPC national program in an unbiased, transparent, and systematic manner to elaborate a consensual action plan for the program. It is also important that national IPC assessment tools align with the WHO IPCAT. Conducting an IPC assessment through a national assessment that is not cross-checked with the WHO IPCAF can lead to discrepancies in scoring and evaluation as the national assessment tool may be missing a component included in the IPCAF.
- Proper documentation improves collaboration and efficiency in developing technical materials, such as strategies, guides, and implementation plans. With proper documentation of all stakeholder meetings, changes made to draft technical materials, such as the MTaPS Tanzania Multisectoral AMR Communications Strategy, were clear, transparent and agreed upon by all stakeholders. Through transcriptions and recordings of discussions and written exchanges to stakeholders after a meeting, all participants were updated on expectations and changes to the timeline for finalizing the strategy.
- When conducting training of trainers from health training institutions, it is necessary to include pedagogical methodology sessions in the training curricula, as all trainees should have a sound knowledge of and expertise in curriculum design and the latest approaches to training and adult learning principles. Comprehensive training in both technical content and pedagogical skills will enable participants to develop curricula that meet quality standards.

ACTIVITIES FOR NEXT QUARTER

ACTIVITY AND DESCRIPTION	DATE (2020)
Indicator Review – Undertake a technical review of MTaPS indicators	April
Country MEL Plans – Support country teams to finalize MEL plans	May
M&E Trainings – Facilitate M&E trainings for MTaPS country teams	June
MTaPS Data System – Finalize testing and deploy	June
MTaPS Data System –Training of data entrants and data reviewers; User Training	June
CLA and KM Trainings – Facilitate CLA and KM trainings for country teams	June
Lessons Learned – Capture and analyze lessons learned from implementation	June
Technical Documentation – Support country teams to develop technical documents	June

ANNEX I. MTAPS INDICATOR TRACKING TABLE

Code	Performance Indicator	Reporting Frequency	Baseline Value	LOP Target	FY20 Target	FY20Q1 Result	FY20Q2 Result	FY20 Cumulative Result		
	Objective 1: Pharmaceutical-Sector Governance Strengthened									
	Sub-Objective 1.2: Evidence-Based Medicines Policies, Laws, Regulations, Guidelines, Norms, and Standards Improved and Enforced									
MT 1.2.2	# of pharmaceutical regulatory enforcement mechanisms established	Semi-annually	0	TBD	TBD	0		0		
	Bangladesh		0	TBD	TBD	0		0		
	Mozambique		0	TBD	TBD	0		0		
	Rwanda		0	TBD	TBD	0		0		
MT 1.2.3	% of established pharmaceutical regulatory enforcement mechanisms that are functional	Semi-annually	0	TBD	TBD	0% (0/0)		0% (0/0)		
	Bangladesh		0	TBD	TBD	0% (0/0)		0% (0/0)		
	Mozambique		0	TBD	TBD	0% (0/0)		0% (0/0)		
	Rwanda		0	TBD	TBD	0% (0/0)		0% (0/0)		
	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									
MT 2.1.2	# of MTaPS-supported health professional training curricula developed or revised to address pharmaceutical management topics	Semi-annually	0	TBD	TBD	2		2		
	Bangladesh		0	TBD	TBD	2		2		
	Sub-Objective 2.2: Capacity of Government to Manage Pharmaceutical Systems Strengthened									
MT 2.2.2	# of persons trained in pharmaceutical management	Quarterly	0	TBD	TBD	F 174	M 417	F 67	M 347	1,005
	Bangladesh		0	TBD	TBD	F 174	M 417	F 55	M 315	961
	Mozambique		0	TBD	TBD	F 0	M 0	F 0	M 0	0
	Rwanda		0	TBD	TBD	F 0	M 0	F 12	M 32	44
			0	TBD	TBD	F 0	M 0	F 12	M 32	0

Code	Performance Indicator	Reporting Frequency	Baseline Value	LOP Target	FY20 Target	FY20Q1 Result		FY20Q2 Result		FY20 Cumulative Result
MT 2.2.4	# of people successfully completing MTaPS-developed eLearning courses					0	0	0	0	
	Mozambique		0	TBD	TBD	F	M	F	M	0
						0	0	0	0	
	Rwanda		0	TBD	TBD	F	M	F	M	0
	0	0				0	0			
	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									
MT 3.1.1	# and % of MTaPS-supported health facilities that have implemented pharmaceutical management information systems (PMIS) to document specific components of the pharmaceutical system for analysis and reporting	Semi-annually				63% (1,059/1,693)				63% (1,059/1,693)
	Bangladesh		90% (104/115)	TBD	TBD	90% (37/41)				90% (37/41)
	Mozambique		62% (1,022 /1,652)	TBD	TBD	62% (1,022/1,652)				62% (1,022/1,652)
	Rwanda		TBD	TBD	TBD	0% (0/0)				0% (0/0)
MT 3.1.2	# and % of MTaPS-supported health facilities using interoperable PMIS tools	Semi-annually	TBD	TBD	TBD	0				0
	Bangladesh		61% (70 /115)	TBD	TBD	94% (3,827/4,291)				94% (3,827/4,291)
	Mozambique		TBD	TBD	TBD	0				0
	Objective 3: Availability and Use of Pharmaceutical Information for Decision Making Increased and Global Learning Agenda Advanced									
	Sub-Objective 3.2: Information on Pharmaceutical Systems Available and Used									
MT 3.2.1	# and % of MTaPS-supported health facilities that complete and submit an LMIS report on time for the most recent reporting period	Quarterly	TBD	TBD	TBD	98% (500/509)		92% (4,184/ 4,545)		92% (4,184/ 4,545)
	Bangladesh		74.3% (84/ 115)	TBD	TBD	98% (500/509)		92% (4,184/ 4,545)		92% (4,184/ 4,545)

Code	Performance Indicator	Reporting Frequency	Baseline Value	LOP Target	FY20 Target	FY20Q1 Result	FY20Q2 Result	FY20 Cumulative Result
	Objective 4: Pharmaceutical-Sector Financing, Including Resource Allocation and Use, Optimized							
	Sub-Objective 4.2: Evidence-Based Medicines Strategies and Pharmacy Benefits Programs Developed and Implemented							
MT 4.2.3	# of strategic plans developed or updated to address pharmaceutical costs and financing	Semi-annually	0	TBD	TBD	2	2	
	Bangladesh		0	TBD	TBD	2	2	
	Objective 5: Pharmaceutical Services, Including Product Availability and Patient-Centered Care, to Achieve Health Outcomes Improved							
	Sub-Objective 5.1: Increased Availability of Essential Medicines and other Health Technologies							
MT 5.1.2	% of tracer products stocked according to plan	Semi-annually	TBD	TBD	TBD			
	Bangladesh		TBD	TBD	TBD	Male Condom: 100% (27,851/27,851)	Male Condom: 100% (27,851/27,851)	
						Oral Pills: 99% (27,878/27,886)	Oral Pills: 99% (27,878/27,886)	
						Injectables: 99% (27,394/27,405)	Injectables: 99% (27,394/27,405)	
						IUD: 99% (5,203/5,212)	IUD: 99% (5,203/5,212)	
						Implant: 99% (801/813)	Implant: 99% (801/813)	
Sub-Objective 5.3: Patient Safety and Therapeutic Effectiveness Ensured								
MT 5.3.1	% of MTaPS-supported health facilities that have implemented medicines safety activities	Quarterly	TBD	TBD	TBD	31% (31/100)	53% (35/66)	53% (35/66)
	Bangladesh		TBD	TBD	TBD	31% (31/100)	Data not available	
	Mozambique		TBD	TBD	TBD	0% (0/0)	90% (9/10)	90% (9/10)
	Rwanda		TBD	TBD	TBD	0% (0/0)	46% (26/56)	46% (26/56)
MT 5.3.2	% of adverse drug events reported and reviewed in MTaPS-supported health facilities	Semi-annually	TBD	TBD	TBD	68% (95/139)	68% (95/139)	
	Bangladesh		TBD	TBD	TBD	68% (95/139)	68% (95/139)	

Code	Performance Indicator	Reporting Frequency	Baseline Value	LOP Target	FY20 Target	FY20Q1 Result	FY20Q2 Result	FY20 Cumulative Result
	Mozambique		TBD	TBD	TBD	Data not available for this period		
	Rwanda		TBD	TBD	TBD	Data not available for this period		
	Sub-Objective 5.4: Antimicrobial Resistance Containment Supported							
MT 5.4.2	% of MTaPS-supported health facilities implementing locally identified and prioritized core elements of infection prevention and control activities	Semi-annually	TBD	TBD	TBD	0% (0/0)		0% (0/0)
	Mozambique		TBD	TBD	TBD	0% (0/0)		0% (0/0)
MT 5.4.3	# of AMR-related in-country meetings or activities conducted with multisectoral participation	Quarterly	TBD	TBD	TBD	1	2	3
	Bangladesh		TBD	TBD	TBD	1	0	0
	Mozambique		TBD	TBD	TBD	0	2	2
	MTaPS Global Health Security Agenda (GHSA) Indicators							
	Result Area 1: Effective Multisectoral Coordination on AMR							
	Result 1.1: Governance for Multisectoral Coordination (MSC) Strengthened							
MSC 1	# of AMR-related in-country meetings or activities conducted with multisectoral participation	Quarterly	TBD	TBD	TBD	38	25	63
	Burkina Faso		TBD	TBD	TBD	1	1	2
	Cameroon		TBD	TBD	TBD	3	1	4
	Côte d'Ivoire		TBD	TBD	TBD	4	5	9
	DRC		TBD	TBD	TBD	1	1	2
	Ethiopia		TBD	TBD	TBD	3	3	6
	Jordan		TBD	TBD	TBD	0	0	0
	Kenya		TBD	TBD	TBD	14	7	21
	Mali		TBD	TBD	TBD	7	1	8
	Senegal		TBD	TBD	TBD	1	2	3
	Tanzania		TBD	TBD	TBD	1	1	2
	Uganda		TBD	TBD	TBD	3	3	6

Code	Performance Indicator	Reporting Frequency	Baseline Value	LOP Target	FY20 Target	FY20Q1 Result	FY20Q2 Result	FY20 Cumulative Result		
MSC 2	# and % of female participants in meetings or other events organized by the multisectoral body on AMR	Semi-annually	TBD	TBD	TBD	35% (256/725)		35% (256/725)		
	Burkina Faso		18% (3/17)	TBD	TBD	22% (6/27)		22% (6/27)		
	Cameroon		50% (2/4)	TBD	TBD	39% (39/101)		39% (39/101)		
	Côte d'Ivoire		37% (21/55)	TBD	TBD	38% (21/55)		38% (21/55)		
	DRC		34% (14/41)	TBD	TBD	35% (31/88)		35% (31/88)		
	Ethiopia		24% (7/31)	TBD	TBD	17% (16/93)		17% (16/93)		
	Kenya		66% (28/44)	TBD	TBD	54% (66/123)		54% (66/123)		
	Mali		15% (3/20)	TBD	TBD	16% (20/124)		16% (20/124)		
	Senegal		TBD	TBD	TBD	58% (54/93)		58% (54/93)		
	Tanzania		14% (3/21)	TBD	TBD	14% (3/21)		14% (3/21)		
Result 1.2: Capacity for Multisectoral Coordination on Antimicrobial Resistance (AMR) Increased										
MSC 5	# of persons trained in AMR topics	Quarterly	0	TBD	TBD	F 10	M 30	F 54	M 94	188
	Côte d'Ivoire		0	TBD	TBD	F 0	M 0	F 4	M 20	24
	Ethiopia		0	TBD	TBD	F 10	M 30	F 47	M 47	134
	Mali		0	TBD	TBD	F 0	M 0	F 3	M 27	30
Result Area 2: Infection Prevention and Control Improved and Functional										
Result 2.2: Institutional and HR Capacity to Manage IPC Strengthened										
IP 2	# of persons trained in IPC	Quarterly	0	TBD	TBD	F 175	M 131	F 91	M 66	463
					F	M	F	M		

Code	Performance Indicator	Reporting Frequency	Baseline Value	LOP Target	FY20 Target	FY20Q1 Result		FY20Q2 Result		FY20 Cumulative Result
	Cameroon		0	TBD	TBD	5	5	0	0	10
	Kenya		0	TBD	TBD	F 40	M 26	F 50	M 46	162
	Tanzania		0	TBD	TBD	F 130	M 100	F 41	M 20	291
	Result 2.3: IPC-Related Information Available and Used for Decision Making and Global Learning Agenda Advanced									
IP 3	# and % of MTaPS-supported health facilities that are using standardized tools for monitoring IPC and informing programmatic improvement	Quarterly	TBD	TBD	TBD	13% (5/40)		63% (25/40)		63% (25/40)
	Ethiopia		TBD	TBD	TBD	0% (0/31)		52% (16/31)		52% (16/31)
	Senegal		TBD	TBD	TBD	100% (3/3)		100% (3/3)		100% (3/3)
	Tanzania		TBD	TBD	TBD	33% (2/6)		100% (6/6)		100% (6/6)
	Result 2.5: IPC Practices and Services Improved									
IP 5	# and % of MTaPS-supported health facilities implementing continuous quality improvement (CQI) to improve IPC	Quarterly	TBD	TBD	TBD	10% (41/405)		10% (41/411)		10% (41/411)
	Cameroon		TBD	TBD	TBD	0% (0/0)		0% (0/6)		0% (0/6)
	Côte d'Ivoire		TBD	TBD	TBD	50% (2/4)		50% (2/4)		50% (2/4)
	Ethiopia		68% (21/31)	TBD	TBD	68% (21/31)		68% (21/31)		68% (21/31)
	Kenya		0% (0/16)	TBD	TBD	100% (16/16)		100% (16/16)		100% (16/16)
	Mali		TBD	TBD	TBD	0% (0/5)		0% (0/5)		0% (0/5)
	Senegal		TBD	TBD	TBD	0% (0/3)		0% (0/3)		0% (0/3)
	Tanzania		TBD	TBD	TBD	33% (2/6)		33% (2/6)		33% (2/6)
	Uganda		TBD	TBD	TBD	0% (0/340)		0% (0/340)		0% (0/340)
IP 6	# and % of MTaPS-supported health facilities with functional IPC committees	Quarterly	TBD	TBD	TBD	11% (45/405)		14% (58/411)		14% (58/411)
	Cameroon		TBD	TBD	TBD	0% (0/0)		0% (0/6)		0% (0/6)

Code	Performance Indicator	Reporting Frequency	Baseline Value	LOP Target	FY20 Target	FY20Q1 Result	FY20Q2 Result	FY20 Cumulative Result		
	Côte d'Ivoire		TBD	TBD	TBD	100% (4/4)	100% (4/4)	100% (4/4)		
	Ethiopia		97% (30/31)	TBD	TBD	68% (21/31)	87% (27/31)	87% (27/31)		
	Kenya		0% (0/16)	TBD	TBD	100% (16/16)	100% (16/16)	100% (16/16)		
	Mali		TBD	TBD	TBD	0% (0/5)	0% (0/5)	0% (0/5)		
	Senegal		TBD	TBD	TBD	100% (3/3)	100% (3/3)	100% (3/3)		
	Tanzania		TBD	TBD	TBD	17% (1/6)	17% (1/6)	17% (1/6)		
	Uganda		TBD	TBD	TBD	0% (0/340)	2% (7/340)	2% (7/340)		
	Result Area 3: Use of Antimicrobial Medicines Is Optimized									
	Result 3.2: Institutional and HR Capacity to Manage AMS Strengthened									
AS 2	# and % of health facilities' MTC/AMS committees or other relevant groups that implemented AMS improvement plans and/or monitoring framework in the reporting period	Quarterly	TBD	TBD	TBD	5% (19/362)		6% (23/364)	6% (23/364)	
	Jordan		TBD	TBD	TBD	0% (0/0)		0% (0/2)	0% (0/2)	
	Kenya		6% (1/16)	TBD	TBD	100% (16/16)		100% (16/16)	100% (16/16)	
	Tanzania		TBD	TBD	TBD	0% (0/6)		0% (0/6)	0% (0/6)	
	Uganda		TBD	TBD	TBD	0.8% (3/340)		2% (7/340)	2% (7/340)	
AS 3	# of persons trained in AMS topics	Quarterly	0	TBD	TBD	F 49	M 50	F 31	M 23	153
	Côte d'Ivoire		0	TBD	TBD	F 0	M 0	F 0	M 0	0
	Kenya		0	TBD	TBD	F 49	M 50	F 20	M 7	126
	Tanzania		0	TBD	TBD	F 0	M 0	F 11	M 16	27
	Uganda		0	TBD	TBD	F	M	F	M	0

Code	Performance Indicator	Reporting Frequency	Baseline Value	LOP Target	FY20 Target	FY20Q1 Result		FY20Q2 Result		FY20 Cumulative Result
						0	0	0	0	
	Result 3.5: Practices and Services for AMS Improved									
AS 4	# and % of MTaPS-supported health facilities implementing continuous CQI to improve AMS in the reporting period	Quarterly	TBD	TBD	TBD	6% (25/403)	9% (39/414)	9% (39/414)		
	Burkina Faso		TBD	TBD	TBD	0% (0/0)	100% (4/4)	100% (4/4)		
	Cameroon		TBD	TBD	TBD	0% (0/0)	0% (0/6)	0% (0/6)		
	Côte d'Ivoire		TBD	TBD	TBD	0% (0/0)	0% (0/0)	0% (0/0)		
	DRC		TBD	TBD	TBD	0% (0/0)	100% (1/1)	100% (1/1)		
	Ethiopia		16% (5/31)	TBD	TBD	3% (1/31)	13% (4/31)	13% (4/31)		
	Kenya		6% (1/16)	TBD	TBD	100% (18/18)	100% (18/18)	100% (18/18)		
	Mali		TBD	TBD	TBD	0% (0/5)	100% (5/5)	100% (5/5)		
	Senegal		TBD	TBD	TBD	0% (0/3)	0% (0/3)	0% (0/3)		
	Tanzania		TBD	TBD	TBD	0% (0/6)	0% (0/6)	0% (0/6)		
	Uganda		TBD	TBD	TBD	2% (6/340)	2% (7/340)	2% (7/340)		
	Jordan Custom Indicators									
JD 2	% of MTaPS-supported facilities that develop, adopt, and implement AMS-related services standards	Quarterly	0	TBD	TBD	0% (0/0)		0% (0/2)		0% (0/2)
	Philippines Custom Indicators									
PP 1	% of service delivery points with stock out of FP, TB, and HIV-AIDS tracer commodities	Quarterly								
	First-Line TB Meds (4 FDC)		40.5%	TBD	TBD	0% (0/0)	69% (1,386/2,016)	69% (1,386/2,016)		
	TB Pediatric Med (4 FDC)		90.6%	TBD	TBD	0% (0/0)	100% (155/155)	100% (155/155)		
	TB Preventive Treatment (for children)		63.8%	TBD	TBD	0% (0/0)	100% (518/518)	100% (518/518)		

Code	Performance Indicator	Reporting Frequency	Baseline Value	LOP Target	FY20 Target	FY20Q1 Result	FY20Q2 Result	FY20 Cumulative Result		
	TB Second-Line Drug (Levofloxacin 500mg)		TBD	TBD	TBD	0% (0/0)	75% (149/199)	75% (149/199)		
	TB Second-Line Drug (Moxifloxacin 400mg)		TBD	TBD	TBD	0% (0/0)	95% (190/199)	95% (190/199)		
	TB Second-Line Drug (Linezolid 600mg)		TBD	TBD	TBD	0% (0/0)	83% (165/199)	83% (165/199)		
	TB Second-Line Drug (Bedaquiline)		TBD	TBD	TBD	0% (0/0)	83% (164/199)	83% (164/199)		
	FP Injectable		30.2%	TBD	TBD	0% (0/0)	44% (713/1,631)	44% (713/1,631)		
	FP Implant		52.7%	TBD	TBD	0% (0/0)	89% (875/984)	89% (875/984)		
	FP Oral COC		25.6%	TBD	TBD	0% (0/0)	42% (693/1,633)	42% (693/1,633)		
	FP Oral POP		69.3%	TBD	TBD	0% (0/0)	83% (923/1,118)	83% (923/1,118)		
	IUD		36.7%	TBD	TBD	0% (0/0)	50% (477/962)	50% (477/962)		
	Male Condom		38.9%	TBD	TBD	0% (0/0)	52% (825/1,578)	52% (825/1,578)		
PP 5	% of PSCM workforce in the public sector (DOH and LGUs) certified in supply chain management	Quarterly	0%	TBD	TBD	0% (0/0)	0% (0/0)	0% (0/0)		
PP 6	% of USG-supported sites using eLMIS for procurement and supply chain management	Quarterly	0%	TBD	TBD	0% (0/0)	0% (0/0)	0% (0/0)		
PP 11	% of storage facilities inspected in the USG-supported sites that met minimum requirements for good storage practice for TB, FP, and HIV-AIDS tracer products	Quarterly	TBD	TBD	TBD	0% (0/0)	0% (0/0)	0% (0/0)		
PP 14	% of PSCM and PV health workers who received in-service training using non-traditional learning platforms for CPD on PSCM and PV	Quarterly	Not available	TBD	TBD	0% (0/0)	0% (0/0)	0% (0/0)		
PP 15	% of selected facilities using PVIMS for active surveillance of TB commodities	Quarterly	0%	TBD	TBD	0% (0/0)	0% (0/0)	0% (0/0)		
	Rwanda Custom Indicators									
RW 1	% of applicants for registration and premises licensing who, prior to submitting their application, already know about the existence of the regulatory framework for medicine registration and premises licensing.	Semi-annually	TBD	TBD	TBD	Data are not available for this period				
RW 4		Quarterly	0	TBD	TBD	F	M	F	M	6

Code	Performance Indicator	Reporting Frequency	Baseline Value	LOP Target	FY20 Target	FY20Q1 Result		FY20Q2 Result		FY20 Cumulative Result
	# of FDA staff trained on causality assessment, data management, and analysis					0	0	2	4	
	MTaPS Multi-Country Custom Indicators									
MCC 1	% of MTaPS-supported health facilities with activities that support locally identified and prioritized elements of antimicrobial stewardship	Semi-annually	TBD	TBD	TBD	100% (7/7)		100% (7/7)		
	<i>Mozambique</i>		TBD	TBD	TBD	100% (7/7)		100% (7/7)		
MCC 3	Country has documented progress in the Maturity Level of the Medicine Regulatory Agency since last assessment using the WHO Global Benchmarking Tool (% increase since last assessment)	Semi-annually	TBD	TBD	TBD					
	<i>Mozambique</i>		TBD	TBD	TBD	<i>No assessment this period</i>				
	<i>Rwanda</i>		TBD	TBD	TBD	<i>No assessment this period</i>				
MCC 4	% of health facilities that implemented non-PMIS web-based/electronic or mobile technology to document, analyze, and/or report on specific components of the pharmaceutical system, including logistic and patient data	Semi-annually	TBD	TBD	TBD	53% (26/56)		53% (26/56)		
	<i>Mozambique</i>		TBD	TBD	TBD	0% (0/0)		0% (0/0)		
	<i>Rwanda</i>		TBD	TBD	TBD	53% (26/56)		53% (26/56)		