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

Improved Access. Improved Services. Better Health Outcomes.



PHOTO CREDIT: WARREN ZELMAN

FISCAL YEAR 2019 QUARTER 3 REPORT

April-June 2019



FISCAL YEAR 2019 QUARTER 3 REPORT

April-June 2019

TABLE OF CONTENTS

PROJECT OVERVIEW	II
ACRONYMS AND ABBREVIATIONS	Ш
INTRODUCTION	I
PROGRESS BY CORE-FUNDED PORTFOLIO Global Health Security Agenda (GHSA) Maternal, Newborn, and Child Health Office of Health Systems, Cross Bureau Funding	3 3 5 8
PROGRESS BY REGIONAL BUREAU PORTFOLIO Asia Regional Bureau Intergovernmental Authority on Development and East African Community	
PROGRESS TOWARD OBJECTIVES Objective 1: Pharmaceutical sector governance strengthened Objective 2: Institutional and human resource capacity for pharmaceutical management and servincreased, including regulation of medical products Objective 3: Availability and use of pharmaceutical information for decision making increased an learning agenda advanced Objective 4: Pharmaceutical sector financing, including resource allocation and use, optimized Objective 5: Pharmaceutical services, including product availability and patient-centered care to desired health outcomes, improved	17 nd globa 19 20
PROGRESS BY COUNTRY Bangladesh Burkina Faso Cameroon Cote d'Ivoire Democratic Republic of Congo Ethiopia Kenya Mali Mozambique Nepal The Philippines Rwanda Senegal Tanzania Uganda	23 23 27 28 29 32 33 35 38 40 42 43 45 46 49 51
MONITORING, EVALUATION, AND LEARNING	53

i

PROJECT OVERVIEW

Program Name:		USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program	
Reporting Period:		Fiscal year (FY) 2019, Quarter 3 (April–June 2019)	
Activity Start Date and End Date:		September 20, 2018 – September 19, 2023	
Name of Prime Implen	nenting Partner:	Management Sciences for Health	
Contract Number:		7200AA18C00074	
	Core Partners:	Boston University, FHI360, Overseas Strategic Consulting, Results for Development, International Law Institute-Africa Centre for Legal Excellence, NEPAD	
USAID MTaPS	Global Expert Partners:	Brandeis University, Celsian Consulting, Deloitte USA, Duke- National University of Singapore, El Instituto de Evaluacion Technologica en Salud, ePath, IC Consultants, MedSource, IQVIA, University of Washington	
Partners:	Capacity Resource Partners:	African Health Economics and Policy Association, Ecumenical Pharmaceutical Network, U3 SystemsWork, University of Ibadan, WHO's 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 USAID MTaPS. Please use the following citation.

2019. USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program: Quarterly Report Fiscal Year 2019, Quarter 3 (April-June 2019). 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

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
AMS asset management system

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

ECOWAS Economic Community of West African States

EDT electronic dispensing tool

eLMIS electronic logistics management information system 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
IPC infection prevention and control

JAG joint action groups
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

MOHSS Ministry of Health and Social Services
MOU memorandum of understanding
MSH Management Sciences for Health

NEPAD New Partnership for Africa's Development

NGO nongovernmental organization
NTP national tuberculosis program

PEPFAR US President's Emergency Plan for AIDS Relief
PMIS pharmaceutical management information system

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
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

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 led by Management Sciences for Health (MSH), the purpose of the five-year USAID 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).

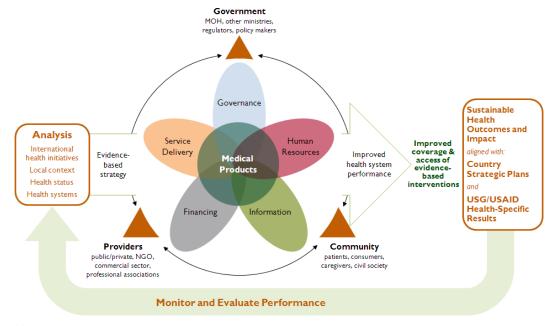


Figure 1. USAID MTaPS' pharmaceutical systems strengthening approach

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

PROGRAM PROGRESS SUMMARY

MTaPS continues to transition from start-up to the implementation phase. MTaPS has now completed scoping visits to the 15 program-supported countries, with one visit this quarter to Nepal. The program submitted 9 work plans this quarter (I field buy-in, 2 regional-funded, and 6 GHSA-funded work plans) and USAID approved 8 work plans for Asia Bureau, Cote d'Ivoire, Ethiopia, Kenya, the Philippines, Senegal, Tanzania, and Uganda, allowing for the commencement of technical activities. MTaPS will continue working with USAID/Washington and Missions to finalize the remaining work plans next quarter and quickly launch into implementation.

Staff continue to join the program, with 25 onboarding this quarter (3 in the home office and 22 in country offices), and as of the end of the third quarter, MTaPS had 97 staff, 41 working in the home office/remotely and 56 in country offices.

ABOUT THIS REPORT

We are pleased to present our performance report for fiscal year 2019 quarter 3 (April-June, 2019). This report summarizes program performance and key challenges and is organized by core funding, objective, and country.

2

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 (GHSA)

SUMMARY OF ACTIVITIES THIS QUARTER

MTaPS submitted a proposal of suggested core activities, which are designed to provide oversight and coordination of Global Health Security Agenda (GHSA)/antimicrobial resistance (AMR) activities in the 10 countries; coordinate with USAID/Washington and missions; provide cross fertilization; and capture and disseminate lessons learned. Additionally, USAID MTaPS submitted to USAID a detailed implementation and results framework for GHSA/AMR activities. This document highlights the new WHO benchmarks document and aligns it and the joint external evaluation (JEE) table with year 1 activities identified for the 10 MTaPS/GHSA countries.

MTaPS also submitted a document that maps the various partners working in the 10 countries in the MTaPS GHSA/AMR mandate areas, namely, antimicrobial stewardship (AMS), infection prevention and control (IPC), and multisectoral coordination (MSC). The document will help the program align activities to other partners and eliminate duplication of efforts. It will be periodically updated as more partner information is gathered, especially as greater country presence is established.

MTaPS interacted with WHO/Afro, FAO, and the USAID-supported Mother and Child Survival Project to share information about our GHSA/AMR work and to look for mutual opportunities for coordination and collaboration, including antimicrobial consumption and AWaRe grouping of antibiotics. MTaPS also participated in a policy roundtable on bridging the gap between WASH and global health on June 11, 2019. The event was hosted by the Kaiser Family Foundation.

MTaPS received USAID approval for year I GHSA Excel work plans for **Burkina Faso, Cameroon, Cote d'Ivoire, Democratic Republic of the Congo, Ethiopia, Kenya, Mali, and Uganda**. Excel work plans for **Tanzania** and **Senegal** were already approved in the previous quarter and began implementation.

EFFECTIVE MULTISECTORAL COORDINATION ON ANTIMICROBIAL RESISTANCE

MTaPS supported establishing and operationalizing MSC committees and technical working groups (TWGs) in Tanzania, Kenya, and Cote d'Ivoire. Activities have included participation in planning meetings and revising/developing terms of reference (TOR). Establishment of the TWGs is an important, required step in building national capacity to address AMR and improve JEE scores. In addition, MTaPS hosted an MSC workshop at MTaPS/Cote d'Ivoire's office to support the AMR secretariat and other stakeholders to update, operationalize, and validate their AMR national action plan (NAP) with a budget, an M&E plan, and updated governance and situational analysis sections. The AMR-NAP is now ready for implementation.

MTaPS initiated discussions this quarter with Uganda's Ministry of Health (MOH) on activities to strengthen coordination between the One Health platform and the Ugandan National Antimicrobial Resistance Sub-Committee (NAMRSC). MTaPS will be assisting in developing TOR and setting up IPC and AMS technical working committees (TWCs) that will report to NAMRSC and coordinate under the

GHSA-SUPPORTED COUNTRIES:

Burkina Faso

Cameroon

Côte d'Ivoire

Democratic Republic of Congo

Ethiopia

Kenya

Mali

Senegal

Tanzania

Uganda

One Health Platform. The activities will advance the JEE score to level 3, as suggested in the WHO benchmarks for international health regulations.

INFECTION PREVENTION AND CONTROL IMPROVED AND FUNCTIONAL

IPC activities began in Tanzania, Cote d'Ivoire, Kenya, Senegal, and Uganda. The initiated activities included steps to strengthen IPC/hygiene committees in the five countries, develop/revise IPC guidelines to align with WHO recommendations (in Tanzania), review and update in-service training curricula for IPC (in Tanzania and Kenya), and conduct/prepare for assessments of IPC committees' capacities and IPC conditions (in Cote d'Ivoire, Kenya, and Senegal). MTaPS/Uganda completed its baseline assessment of IPC practices this quarter. This assessment identified target behaviors and conditions to inform the other IPC activities, including strengthening IPC committees and developing/revising IPC guidelines and in-service training curricula.

USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

MTaPS also began activities to improve AMS in Cote d'Ivoire, Tanzania, Kenya, and Senegal. In addition to strengthening governance structures for MSC on AMS, MTaPS reviewed a draft AMS policy and guidelines document in Tanzania and provided logistical support and technical inputs during a stakeholder meeting in June 2019 to review the draft. In Cote d'Ivoire, Senegal, and Kenya, MTaPS and collaborators began to review their AMS policies and/or guidelines this quarter to establish the institutional foundation necessary for improving AMS practices. Additionally, MTaPS is currently revising in-service training curricula to incorporate AMS modules in Senegal and Ethiopia. In Kenya, MTaPS is conducting similar revisions to pre-service curricula and developing a combined AMS and IPC baseline assessment.

MATERNAL, NEWBORN, AND CHILD HEALTH

The maternal, newborn, and child health (MNCH) portfolio contributes to achieving Sustainable Development Goals and ending preventable child and maternal death targets by increasing global awareness of the barriers to access to essential maternal and child health medicines and supplies and by providing technical assistance to reduce these barriers, both at the global and the country levels. The goal of the MTaPS/MNCH portfolio is to ensure availability and appropriate use of quality medicines and supplies and effective pharmaceutical services to reduce maternal, newborn, and child mortality by strengthening pharmaceutical systems.

Late this quarter, the MTaPS/MNCH year I work plan was approved and eight activities are to be implemented before the end of the fiscal year.

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

MTaPS continues to support countries to ensure quality of MNCH medicines by strengthening the registration of MNCH medicines and improving procurement practices at subnational levels. MTaPS started planning the country documentation of status and barriers to registration of MNCH commodities. A draft list of medicines and supplies was circulated for review. Initial planning has also started for review of local procurement practices in Tanzania and Nigeria.

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

MTaPS activities under this objective fall into two groups; supporting the Global Financing Facility (GFF) to consider different aspects of management of pharmaceuticals at the secretariat level and in their country activities and supporting global learning on pharmaceutical systems for MNCH.

As part of final activities to support the GFF, the package of documents on quality in procurement of pharmaceuticals was finalized and is currently under review by the World Bank pharmaceutical team, prior to being shared with the World Bank procurement team. The finalized documents will be used to improve considerations of quality of medicines in World Bank procurements by those who approve World Bank procurements.

To ensure availability of medicines and supplies in Liberian counties implementing performance-based financing (PBF), the framework agreement was established for county procurement of specific medicines and supplies from approved wholesalers if the Central Medical Stores are unable to do so. The PBF team is working with MTaPS to finalize the procedures for procurement and monitoring and for enforcement of the approach. The first procurement using this framework agreement will be possible in the next quarter.

The GFF investment case (IC) guidelines have been completed, and a standalone document on management of medicines and supplies is being finalized as a resource document for country focal points to accompany the IC guidelines.

The scope of work for the GFF to continue managing commodities and the report on the assistance provided during the secondment are being finalized.

As part of the learning agenda, MTaPS is developing an online and in-person training program on pharmaceutical systems strengthening (PSS). Plans are underway to develop material for the MNCH component of the PSS training program.

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

Good quantification of MNCH medicines is a means of promoting their rational use and availability. In an effort to revise the RMNCH quantification guide developed under the UN Commission on Life-Saving Commodities, MTaPS conducted a preliminary review of the guide, which has been shared with partners to consolidate comments for inclusion. This revision is being conducted in coordination with the USAID Global Health and Supply Chain Program–Procurement and Supply Management (GHSC-PSM) project as they are developing a decision maker's guide on uterotonics, which may contain some quantification guidance.

This quarter also saw the launch of the integrated community case management (iCCM) commodities sub-group of the child health task force, a mechanism to align efforts and optimize coordination around ensuring availability and quality of child health commodities. MTaPS has been involved in the development of the scope and remit of the commodities sub-group with other partners and contributed to the discussions in their first meeting. MTaPS, a regular member of the child health task force and the institutionalizing iCCM subgroup, participated in their meetings this quarter as a means of ensuring that the management of medicines and supplies are included in these global conversations and as part of preparation for the institutionalizing iCCM meeting hosted by WHO and UNICEF next quarter.

MTaPS plans to finalize and disseminate amoxicillin dispersible tablets job aids to promote adherence to treatment of pneumonia. Given that some time has passed since the earlier work developing the amoxicillin adherence tools, some of the key people in UNICEF's supply division who would be important stakeholders in the rollout of the tools have changed. MTaPS has renewed contact with UNICEF to initiate discussions on finalizing these job aids and dispensing envelopes and potentially making them available through the UNICEF supply division.

ACTIVITIES FOR NEXT QUARTER				
ACTIVITY	DESCRIPTION	DATES		
	Develop the data collection instrument	July		
2.1.1 Review registration of	Collect data from the countries	August		
MNCH commodities	Review and consolidate data	September		
	Draft technical brief and develop action plans in each country			
2.1.2 Document quality assurance	Investigate and document implementation in Nigeria and Tanzania using a standard topic guide	August September		
in local procurement	Develop draft	Зерсеньег		
-	Finalize the following documents:			
	 Scope of work for commodity management support at the GFF secretariat 			
3.2.1 Finalize GFF transition	 Commodity management guidance document for IC development 	September		
	Package of documents to ensure quality in procurement			
	Final report of activities			
3.2.2 Facilitate global learning on pharmaceutical systems for MNCH	Develop a micro learning module on MNCH for the PSS training program	September		
	Request review and comments from key partners	August		
5.1.1 Revise RMNCH	Develop new sections for heat-stable carbetocin and	August		
quantification guide	tranexamic acid and circulate for review Finalize guide	September		
5.1.2 Support management of	Participate in institutionalizing iCCM meeting	July		
medicines at community level	Document next steps for MTaPS support	August		
	Finalize job aids and dispensing envelopes	August		
5.2.1 Improve adherence to amoxicillin DT for pneumonia	Discuss possibility of dissemination with UNICEF	August		
amoxiciiii Di foi pricumonia	Assess interest of adaptation for use on newborns	September		
	Review documentation on respiratory package and specifications			
5.2.2 Define respiratory package	Define standard package	September		
	Review assessments to identify bottlenecks in safe use of oxygen			

OFFICE OF HEALTH SYSTEMS, CROSS BUREAU FUNDING

Activities in this portfolio allow MTaPS to demonstrate and advance technical leadership in pharmaceutical systems strengthening (PSS), in line with the overall program goal and objectives.

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

During the third quarter, the PSS Insight team coordinated with the MEL and Philippines teams to plan co-implementation of the PSS Insight pilot with the performance monitoring plan baseline assessment in the Philippines. This included determining a facility sampling strategy, resource planning, and budgeting for the activity, which was included in the approved Philippines work plan. Work on the study protocol for the Philippines is ongoing, and completion is expected early in the next quarter, with PSS Insight and baseline implementation following soon after. Also, during this quarter, the PSS Insight team met with Deloitte to discuss improvements to the PSS Insight tool and the web-based platform.

The MTaPS program director and a senior technical advisor from the PSS Insight team participated in the inter-agency pharmaceutical coordination group meeting hosted by WHO at the World Bank on June 20. They presented on the outcomes of the expert consultation hosted by WHO in Delhi, India, in February (Monitoring the Components and Predictors of Access to Medicines: Taking Stock and Moving Forward). Their presentation included the process used at the meeting for indicator selection, a review of the selected indicators, the role of MTaPS in supporting this work by WHO, and how it relates to PSS Insight.

ACTIVITY 2: ENHANCE THE GLOBAL PHARMACEUTICAL SYSTEMS LEARNING AGENDA

MTaPS has made tremendous progress on the USAID PSS 101 e-learning course during the third quarter. All subject matter experts have developed slide decks for their respective modules and participated in dry runs for their assigned sessions. ePath has transcribed the presentations from the dry runs and is using the transcriptions to concurrently develop scripts and storyboards. The storyboard for module 5 has already been completed.

During this quarter, MTaPS also developed a concept note and initiated conversations with the Joint Learning Networking on creating a knowledge exchange on medicines in universal health coverage (UHC). MTaPS has continued with its efforts to form the PSS technical advisory group (PSS TAG). The TOR for the PSS TAG has been finalized and was approved by USAID. MTaPS aims to have five to seven PSS TAG members. MTaPS has created a list of prospective members, and membership recruitment is ongoing. MTaPS currently has four confirmed members and responses from others are pending.

MTaPS has also drafted a multi-year research plan outlining a prioritization process for setting the program's research agenda. The plan is being reviewed internally.

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

MTaPS funded a workshop for the validation of the monitoring and evaluation (M&E) tool for regional centers of regulatory excellence (RCOREs) under the African Medicines Regulatory Harmonization (AMRH) Programme held in Accra, Ghana, June 25-26, 2019. AMRH was established by the African Union within the framework of the African Union Development Agency NEPAD (AUDA-NEPAD). AMRH aims to create and improve standards and requirements for regulation of and access to safe, high-quality medicines across Africa by working on three focus areas: policy alignment, regional integration and harmonization, and human and institutional capacity development. In its efforts to

improve the human and regulatory capacity of national medicine regulatory authorities, AUDA-NEPAD designated 11 RCOREs. RCOREs are institutions or partnerships of institutions with specific regulatory science expertise that can train regulators with less expertise. Since 2014, RCOREs have been undertaking activities in their areas of designation, and a normative assessment tool was developed to assess their performance. MTaPS, in collaboration with core partners FHI360 and AUDA-NEPAD, organized the workshop in Accra to validate the RCOREs M&E tool. The workshop achieved the desired output by generating a validated RCOREs M&E tool, which will be finalized for use by the RCOREs.

MTaPS, in collaboration with NEPAD, participated in collaborative meetings including the AMRH steering committee, and technical working groups for regulatory capacity building and pharmacovigilance (PV); and the Biennial Scientific Conference on Regulation of Medical Products and the African Medicines Regulators Conference. The meetings are on course, but it is anticipated that the regulatory capacity building technical working group will be merged with the one on pharmaceutical policy and reform. MTaPS has yet to receive an official decision on this merger from AUDA-NEPAD, but the program will have to reevaluate its support for this activity if the merger is approved.

ACTIVITY 4: COLLABORATE WITH AND PARTICIPATE IN MEETINGS WITH WHO AND OTHER GLOBAL INITIATIVES TO ENHANCE TRANSPARENCY AND ACCOUNTABILITY IN THE PHARMACEUTICAL SECTOR

MTaPS has been invited to facilitate a session at a summer workshop entitled Combating Corruption and Promoting Equity in the Health Sector, which is being organized by the WHO Collaborating Center for Governance, Transparency, and Accountability in the Pharmaceutical Sector at the University of Toronto, Leslie Dan Faculty of Pharmacy, and the University of California, San Diego School of Medicine. The workshop, which will be held in San Diego from July I0 to 11, 2019, will enable MTaPS to raise awareness on work done by its predecessor project to improve pharmaceutical sector governance and share lessons learned. Additionally, the workshop will enable the program to connect with initiatives, countries, and partners to explore opportunities for joint collaboration and coordination. In this quarter, MTaPS and their partner, Boston University, worked with workshop organizers to finalize the agenda and the design of the MTaPS session and developed session materials.

MTaPS continued to reach out to other stakeholders working on health governance and anticorruption global initiatives and had a call with Transparency International UK's Pharmaceuticals & Healthcare Programme to learn more about their current and planned activities in pharmaceutical sector governance and to discuss opportunities for collaboration and coordination.

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

MTaPS has completed the roadmap outline and finalized the research questions for the literature review. The systematic literature review is underway with 11,297 article titles and abstracts screened, 1,417 full text articles assessed for eligibility, and 283 articles selected for quality assessment and data extraction. Data extraction is currently underway, and when completed, the findings will be used to create the roadmap/policy brief document. As demonstrated by the number of articles reviewed, there is a significant amount of literature and evidence on introduction, utilization, and institutionalization of health technologies assessment (HTA). This has impacted the planned timeline (end of June) for the activity. An additional four weeks is required to complete the roadmap/policy brief document, which will provide models or approaches for institutionalizing HTAs in LMICs. To mitigate this challenge, the quality assessment and data extraction process will occur in parallel to accelerate progress. The team will also seek additional support from partners and a new team member.

ACTIVITY 6: EXAMINE OPPORTUNITIES FOR AND BARRIERS TO THE USE OF DRUG SELLERS IN INCREASING ACCESS TO MEDICINES AND OTHER HEALTH TECHNOLOGIES IN LMICS IN SUPPORT OF UHC OBJECTIVES

MTaPS continued its review of the literature on the challenges and opportunities for utilizing drug shops and pharmacies in support of health system strengthening and achievement of UHC goals. MTaPS attended a regional workshop entitled Engaging Drug Shops and Pharmacies in Health Service Delivery and Support held in Abuja, Nigeria, May 7-9, 2019. USAID, the Alliance for Health Policy and Systems Research (hosted by WHO), Implementing Best Practices Initiative, Advancing Partners and Communities Project, and PATH convened the workshop to discuss the potential role of drug shops and pharmacies to effectively contribute to achieving national priority health goals. A principal technical advisor gave a presentation entitled State of Evidence on Engaging Drug Shops and Pharmacies in Health Service Delivery and Support. The meeting offered an opportunity to learn about projects in several African and Asian countries that leverage the use of private pharmacies and drug shops to increase access to medicines. Meeting participants identified three critical areas to address as countries try to engage the private sector in service delivery: map the number and location of drug shops and pharmacies; mobilize resources to improve the capacity of normative bodies to monitor the quality of service delivery; improve the communication lines between the private sector, policy makers and regulatory agencies. These insights will help inform MTaPS' examination of the opportunities and barriers for using private pharmacies and drug sellers to increase access to medicines.

ACTIVITI	ES FOR NEXT QUARTER	
ACTIVITY	DESCRIPTION	DATES (2019)
1.3	Work with Deloitte to revise the PSS Insight tool and web-based platform	Q4
1.4	Pilot PSS Insight in the Philippines	Q4
2.2	Convene the first PSS TAG meeting	Q4
2.3	Develop storyboards for the remaining modules	Q4
2.4	Finalize the multi-year research plan	Q4
3.2	Finalize the RCOREs' M&E tool for implementation; plan for data collection, data analysis, and dissemination of findings	Q4
4	Participate in the Combating Corruption and Promoting Equity in the Health Sector workshop organized by the WHO Collaborating Center for Governance, Transparency, and Accountability in the Pharmaceutical Sector, University of Toronto in San Diego	July 10-11
4	Continue discussions with WHO Essential Medicines and Health Products Department, WHO South-East Asia Regional Office, and WHO Western Pacific Regional Office on opportunities to support WHO's governance activities and collaboration and with SOAS University of London's Anti-Corruption Evidence research consortium on opportunities for coordination and collaboration	Q4
5	Conduct a regional workshop to share roadmap and approaches for scaling up HTA	Q4
6	Complete literature review and finalize report identifying opportunities and barriers for accessing medicines through the private sector	Q4

PROGRESS BY REGIONAL BUREAU PORTFOLIO

ASIA REGIONAL BUREAU

For countries in the Asia region to improve access to medicines, move toward self-reliance, and ultimately meet their universal health coverage (UHC) objectives (equitable access to quality health services and protection from financial risk), countries must place a greater emphasis on transparency, governance, evidence-based decision-making, and local capacity to improve resource allocation and efficiencies in the system. Consequently, MTaPS will build Asia regional countries' pharmaceutical systems by strengthening their ability to institutionalize transparent and evidence-based decision-making, building their capacity to use robust information to define and cost pharmaceutical coverage, promoting strategic sharing of pharmaceutical pricing to improve value in purchasing, and strengthening medicines regulatory capacity and pharmaceutical sector governance in the region.

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

Activity 1.1.1A: Contextualizing roadmap for health technology assessment (HTA) institutionalization in low and middle-income countries (LMICs) to Asia Bureau countries

Refer to <u>Cross Bureau Activity 5: Develop a roadmap for Health Technologies Assessments institutionalization for LMICs</u>, for a summary of this activity.

OBJECTIVE 2: CAPACITY TO DEFINE AND COST EVIDENCE-BASED PHARMACEUTICAL COVERAGE AND PROMOTE SHARING OF PHARMACEUTICAL PRICES TO IMPROVE VALUE IN PURCHASING IN ASIA REGIONAL COUNTRIES STRENGTHENED

Activity 2.2.1: Support the development of national processes for defining a pharmaceutical benefits package and the size and scope of coverage

MTaPS reviewed the 20th WHO Essential Medicines List and the 6th WHO Essential Medicines List for Children and began engaging with USAID/Indonesia and USAID/Bangladesh to collect data on each health system's benefits coverage.

MTaPS also reviewed the relevance of the COREPlus² and the One Health Tool³ for estimating financial outlays for a defined coverage package. In addition, MTaPS started engaging with USAID/Indonesia on building country capacity for disease-specific treatment and pharmaceutical regimens. A scoping visit for this additional costing work in Indonesia is being planned for next quarter.

MTaPS discussed the value of a regional reference-pricing database with WHO partners in India and South America to determine the relevance of such an activity. MTaPS will begin to sensitize the value of a regional pricing database with government counterparts in Indonesia and Bangladesh next quarter.

² COREPlus, or the Cost Revenue Analysis Tool, is a costing tool that was developed by MSH to evaluate how much a set of services would cost at a facility-based primary health center. It is a bottom-up costing tool that allows for a researcher or government official to take a series of standard treatment guidelines and apply that to different treatment regimens and commodity delivery for different diagnoses of care.

³ The One Health 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.

MTaPS also began discussions with Indonesia and Bangladesh as potential case studies for medicine pricing and procurement policies. A trip to Indonesia and Bangladesh is currently being planned for next quarter to assist with data collection on each country's pharmaceutical pricing policy.

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

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

MTaPS initiated a landscaping exercise to map regional and sub-regional organizations and entities as well as development partners and collaborations that are working to strengthen pharmacovigilance systems in the Asia region. Because many of the organizations and stakeholders are the same as those working to build regulatory systems in the region, MTaPS used the opportunity to gather information for the mapping sub-activity under activity 3.1.2.

As a first step to learning more about mechanisms for regional/sub-regional collaboration on pharmacovigilance and regulatory systems (activity 3.1.2), actions and events underway or planned, and opportunities for collaboration, MTaPS established contact with the pharmaceutical advisors at the WHO regional offices for South-East Asia (WHO SEARO) and the Western Pacific (WHO WPRO) and with stakeholders familiar with regulatory and pharmacovigilance activities in the region. In April, MTaPS staff had a call with the coordinator for Essential Medicines and Technologies at WPRO and point person for regulatory systems strengthening, and learned that much of the support provided by WHO WPRO at the regional level is channeled through the Regulatory Alliance for National Regulatory Authorities. The next meeting of the Alliance is in Japan August 27–29, 2019, and WHO WPRO has prepared a memorandum proposing MTaPS' participation for approval. If approval is received, MTaPS can leverage the forum to engage more directly with potential stakeholders and better understand what is going on in the region in the pharmacovigilance space for this activity and for regulatory systems more broadly.

MTaPS also spoke with the Regional Advisor for Essential Medicines and Technologies at WHO SEARO and learned more about the regulatory network that is evolving in the region, including a regional meeting planned in October in Thailand for possible participation.

Lastly, MTaPS began developing the strategic approach for the mapping exercises for both this activity and activity 3.1.2.

Activity 3.1.2: Explore opportunities for supporting regional and sub-regional initiatives and collaboration to strengthen regulatory systems in Asia regional countries

As reported under activity 3.1.1, MTaPS established contact with WHO SEARO and WPRO and some key stakeholders to understand the landscape, the entities and partners involved, ongoing or planned regulatory system and pharmacovigilance strengthening activities, and possible areas for collaboration, particularly on those focusing on LMICs. MTaPS will continue to follow up with the WHO regional offices on participation in the two potential regional meetings identified and will contact additional stakeholders next quarter.

In addition, MTaPS has received USAID Mission funding in some Asian countries, including Bangladesh and the Philippines, to help strengthen their regulatory systems. As the project works with USAID to assist these countries in establishing contacts to facilitate their involvement in harmonization initiatives in the region (e.g., SEARN, ASEAN), these efforts can also serve as an opportunity to obtain intelligence on the gaps and opportunities for collaboration and provide support for regulatory systems strengthening at the regional level.

Activity 3.2.1: Assist one country in the Asia region to assess transparency and accountability and develop an action plan for improvement

MTaPS initiated discussions during this reporting period toward exploring the interest in and feasibility of helping one country conduct a transparency and accountability assessment. Indonesia, Bangladesh, and the Philippines are being considered for this activity.

Activity 3.2.2: Develop guidance on managing conflicts of interest

As part of the discussions described under 3.2.1, MTaPS also began looking at possible demand for and feasibility of helping one entity—possibly a country's procurement or regulatory committee—develop guidance for managing conflicts of interest. As the previous activity, Indonesia, Bangladesh, and the Philippines are being considered.

ACTIVITIES FOR NEXT QUARTER				
ACTIVITY	DESCRIPTION	DATES		
I.I.IA. Draft and share roadmap and approaches/models for HTA scale up	Based on quality assessment and data extraction of literature, a draft roadmap document and policy brief will be developed for sharing with local and international partners for review.	Mid-August to mid-September		
	Draft roadmap document and policy brief; showcase findings, country experiences, frameworks, and lessons learned on HTA introduction to institutionalization during a regional workshop			
I.I.IB. Feedback and testing feasibility of recommended approach/models with global and regional Asian experts and interviews with key global stakeholders familiar with LMICs in Asia.	To be completed once draft roadmap and policy brief completed. Anticipated completion is late August. Stakeholder engagement to set up review to be initiated in July	July		
1.1.1C. Pilot introduction through a regional workshop for testing feasibility of recommended approach and provision of capacity building on HTA methods.	To be completed in early to mid-September	Mid-September		
I.I.ID. Support one to three selected Asia Bureau countries to finalize their action plans to incorporate HTA within priority-setting processes	Scoping visits to assess current needs of selected countries has begun. Initiating scoping visit for Indonesia in July.	Mid-July		
2.1.1 Scoping visits to Bangladesh and Indonesia	MTaPS team will visit Bangladesh to ascertain interest of key governmental stakeholders and Indonesia to refine the scope of work for Activity 2 in collaboration with USAID/Indonesia and USAID/Asia Bureau	July–August		
3.1.1 and 3.1.2: Develop mapping strategy	Develop a document to guide engagement with stakeholders for the mapping exercise	July–August		
3.1.1 and 3.1.2: Meeting of the Regulatory Alliance for National Regulatory Authorities	Attend regional alliance meeting in Japan in August if participation is approved	August 25–30		

INTERGOVERNMENTAL AUTHORITY ON DEVELOPMENT AND **EAST AFRICAN COMMUNITY**

The Intergovernmental Authority on Development (IGAD) consists of eight states in Africa: Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan, and Uganda. IGAD member states are committed to strengthening regional health systems for marginalized, cross-border, mobile populations to achieve improved life expectancy and socioeconomic prosperity of their citizens.

Both the East African Community (EAC) and IGAD are regional economic communities (RECs) in the broader Eastern Africa region. The EAC is a regional intergovernmental organization of six partner states: Burundi, Kenya, Rwanda, South Sudan, Tanzania, and Uganda. EAC members are committed to jointly preventing and controlling communicable and non-communicable diseases, pandemics, and epidemics of communicable and vectorborne diseases that might endanger the health and welfare of the residents of the EAC.

The EAC Medicines Regulatory Harmonization (MRH) began in 2012 and its scope of work includes medicine evaluation and registration; good manufacturing practices inspection; pharmacovigilance (PV) and post-marketing surveillance (PMS); harmonizing regulation of medical devices and in vitro diagnostics; development and implementation of pharmaceutical policy, legislation, and regulatory framework; and oversight of clinical trials. The national medicines regulatory authorities (NMRAs) of the EAC partner states are currently collaborating on conducting joint medicine evaluation and registration, joint good manufacturing practices inspections, sharing regulatory information, and working within the framework of the EAC-MRH program.

IGAD COUNTRIES Diibouti

Eritrea Ethiopia Kenya Somalia South Sudan Sudan Uganda

EAC COUNTRIES

Burundi Kenya Rwanda South Sudan Tanzania Uganda

TECHNICAL ACTIVITIES UNDER CONSIDERATION FOR THE FY 19 WORK PLAN

The IGAD and EAC MRH secretariats are interested in receiving technical assistance from MTaPS to strengthen medicine quality and safety monitoring. This assistance includes institutionalization of crossborder medicine surveillance systems in IGAD and EAC regions. MTaPS proposes the following activities for year I and other potential activities for years 2 and 3, which will be explained in subsequent work plans.

The MTaPS IGAD/EAC portfolio will apply the MTaPS Program's pharmaceutical systems strengthening approach in the two RECs to achieve results in the following focal areas: PV and patient safety; good medicine regulatory practices; AMR containment

A draft work plan was submitted to the USAID MTaPS COR team and USAID/KEA team for review at the end of May. After receiving feedback from the COR team and USAID/KEA, MTaPS is in the final stages of working with IGAD and EAC secretariats to clarify its proposed technical activities and will resubmit the work plan early next quarter.

ACTIVITIES FOR NEXT QUARTER				
ACTIVITY	DESCRIPTION	DATES		
Secure work plan approval	Finalize work plan and secure approval from USAID	July 2019		
Implement work plan activities	Engage IGAD and EAC secretariats to prioritize and develop an implementation plan for the approved activities	Aug 2019		

PROGRESS TOWARD OBJECTIVES

OBJECTIVE I: PHARMACEUTICAL SECTOR GOVERNANCE STRENGTHENED

Promoting transparency and accountability is a prerequisite for improving access to essential medicines and strengthening health systems to achieve 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 reports on MTaPS governance activities in this reporting period and highlights some areas of focus in draft work plans.

TRANSPARENCY AND ACCOUNTABILITY OF COUNTRY PHARMACEUTICAL SYSTEMS IMPROVED

The Ministry of Health and Family Welfare (MOHFW) in **Bangladesh** has recently been reorganized into two divisions. The Health Services Division is now responsible for oversight of the Directorate General of Health Services (DGHS), and the Medical Education and Family Welfare Division is responsible for Directorate General of Family Planning (DGFP). The Procurement and Logistics Management Cell (PLMC), a coordination and oversight mechanism established with assistance from the MTaPS predecessor program was not included as a cell or component in the restructured Ministry, so it stopped meeting. The PLMC was set up to coordinate procurement and supply chain management functions and oversee decentralization, training, and capacity-building efforts within the Ministry's key procuring entities, namely DGHS and DGFP. MTaPS and USAID/Bangladesh have been advocating for reinstatement of the PLMC as an essential mechanism for promoting effective, efficient and transparent procurement and effecting accountability. An important milestone was reached in this reporting period, when the MOHFW reconstituted the PLMC and identified five key positions for the unit. MTaPS will now assist the PLMC to restart its functions within the two divisions of the restructured Ministry.

Also in Bangladesh, MTaPS helped the Procurement and Supply Management (PSM) working group which is the National Tuberculosis Program's primary mechanism for planning, coordinating and making decisions on its supply chain activities, to review and revise its terms of reference (TOR). The TOR document is an important governance tool which defines the roles and responsibilities of any governing or management entity and explains how it must function. Additionally, the PSM working group discussed and with assistance from MTaPS drafted the TOR for a quantification cell which will be established within the PSM working group. The creation of the cell will be an important step towards building sustainable capacity for quantification within the NTP. The draft TORs for both entities have been submitted to the NTP for review and approval.

MTaPS supported establishing and operationalizing multisectoral coordination committees and technical working groups (TWGs) in GHSA countries, Tanzania, Kenya, and Cote d'Ivoire. For more information, refer to the GHSA multisectoral coordination section of this report.

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. http://www.who.int/medicines/areas/governance/EMP_brochure.pdf?ua=1

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

In 2017, **Mozambique** promulgated a new law on Medicines, Vaccines and Other Biological Products for Human Use, which created the National Directorate of Pharmacy (DNF) as an independent and autonomous national medicines regulatory authority. MTaPS is assisting the DNF to develop regulations that will administer the law using a phased approach, beginning with medicines registration and pharmacovigilance. In this reporting period, MTaPS partner, International Law Institute African Centre for Legal Excellence (ILI-ACLE) completed a review of the existing laws and regulations that govern medicines registration and drafted a report that outlines recommendations for the development of regulations for the newly enacted law.

The Government of the **Philippines** has recently enacted the Universal Health Care (UHC) Act which automatically enrolls all Filipino citizens in the National Health Insurance Program and prescribes complementary reforms in the health system. MTaPS is supporting the Department of Health (DOH) to develop the procurement and supply management component of the implementing rules and regulations (IRRs) for the Act. MTaPS reviewed the act and identified and briefed officials of the DOH's Procurement and Supply Chain Management Team on the areas with relevant implications. Subsequently, these officials formally advised the relevant DOH technical working group about incorporating these components in the UHC IRR.

MTaPS also worked with the DGHS Health Services Division in **Bangladesh** to facilitate a workshop to develop recommendations for updating two key procurement documents, the Table of Equipment and the Price Guide. In **Tanzania**, MTaPS helped to update the infection prevention and control (IPC) standards for hospitals, health centers, and dispensaries to align them with the recently updated IPC guide. Healthcare workers in these institutions now have updated standards to guide them in implementing appropriate IPC practices.

STAKEHOLDER ENGAGEMENT AND EMPOWERMENT, INCLUDING CIVIL SOCIETY AND CONSUMERS INCREASED

In **Ethiopia**, MTaPS is continuing work begun under its predecessor program to bolster the capacity of journalists and civil societies so that they are better able to raise awareness of antimicrobial resistance issues and containment initiatives in their communities. In this reporting period, MTaPS held a meeting with the Ethiopian Pharmaceutical Association (EPA) to identify and prioritize activities in these areas. As a first step towards better equipping EPA members with the knowledge and skills that they need to raise public awareness on AMR, MTaPS will collaborate with the EPA to deliver a continuing education session on AMR during the Association's annual conference in July 2019.

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

To develop a plan for countrywide scaling-up of standard, manual inventory tools, MTaPS/**Bangladesh** reviewed the training curriculum on basic logistics management. The team also conducted a highly participatory training on causality assessment and good vigilance practice to strengthen the capacity of the Adverse Drug Reaction Advisory Committee members, technical sub-committee members, and other Directorate General of Drug Administration PV team members.

As part of developing a comprehensive capacity building and sustainability plan, MTaPS/Bangladesh conducted a capacity assessment and collected qualitative data. Findings will serve to develop a five-year plan, which will define new and proven approaches, tools, and curricula for enhancing and maintaining government ownership and institutionalizing capacity-building efforts and building self-reliance in pharmaceutical systems strengthening in Bangladesh.

MTaPS has begun the process of reforming the preservice curriculum of the School of Pharmacy (UON/SOP) at the University of Nairobi, **Kenya**. The team also met officials from the National Nursing Association of Kenya and discussed the development of a continuing professional development (CPD) and re-licensure-linked in-service IPC training course for delivery through various professional associations. A partnership agreement was developed and is to be signed next quarter.

To secure inclusion of IPC and AMS modules in the Senegalese MOH's e-learning platform, MTaPS/**Senegal** met with the MOH's head of laboratories, as well as two USAID-funded programs, Human Resources for Health 2030 (HRH2030) and Integrated Service Delivery and Health Behaviors project (Neema) to discuss integrating the modules. A follow-up meeting is planned to present the platform and draft a roadmap for next steps required for integration of the modules.

In **Tanzania**, MTaPS started the process of institutionalizing the IPC e-learning methodologies for inservice staff. The team identified Morogoro center for distance education under the MOH, which is mandated to certify and accredit e-learning courses linking to CPD award, and will engage professional associations and zonal health resource centers next quarter to determine CPD credit points and to transform the IPC curriculum to suit the needs of the platform.

STRONGER MEDICINES REGULATORY CAPACITY, INCLUDING THROUGH REGIONAL REGULATORY HARMONIZATION

In **Mozambique**, MTaPS partner, ILI-ACLE, assessed the pharmaceutical legislative framework and the current electronic medicine registration system. Both assessments identified gaps that require MTaPS assistance, namely, capacity building in drafting regulations and support in modifying the current electronic medicine registration system. MTaPS has embarked on a strategy to assist the National Directorate of Pharmacy (DNF) in modifying the medicine registration tool Pharmadex to make the registration process more effective.

MTaPS/Mozambique also supported training regional medicine regulatory bodies (e.g., SADC, ZAZIBONA) and finalization of the active surveillance strategy and implementation plan with the DNF and National HIV Program. The University of Washington is also supporting activities for implementing the active monitoring plan.

In the **Philippines**, MTaPS plans to conduct a feasibility assessment for bringing private sector TB service providers under regulatory control for the next quarter.

MTaPS devised an approach to support five countries in West Africa to implement activities that will strengthen the regulatory framework for AMS. The plan is to develop a semi-structured tool to assess AMS policies and regulations and map stakeholders in **Cote d'Ivoire**, **Cameroon**, **Burkina Faso**, **DRC**. and **Mali**.

In an effort to support regional harmonization for medicine regulation, MTaPS, in partnership with FHI360, supported the New Partnership for Africa's Development (NEPAD) in conducting a validation workshop for members of designated regional centers of regulatory excellence (RCOREs) in Accra, Ghana. Participants were drawn from medicine regulatory authorities and academia in five African countries. The validated RCOREs M&E tool will assist in measuring the performance of training institutions that are in the process of building pharmaceutical regulatory capacity on the continent.

In this quarter, explorative work was undertaken to establish contacts in Asia through virtual meetings with key contacts at WHO's South East Asia Regional and West Pacific Regional Offices and some key stakeholders to understand the landscape, entities, and partners involved; ongoing or planned regulatory system and PV strengthening activities; and possible areas for collaboration, particularly those focusing on LMICs. Discussions have led to opportunities to interact with stakeholders in the Asian region and identify gaps that need to be addressed to strengthen pharmaceutical regulatory systems.

IMPLEMENTATION CHALLENGES

Pharmaceutical regulatory work requires specialized expertise in countries. There are limited human resources in this area; in some countries, appropriate personnel have not been identified due to scarcity.

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/**Bangladesh** supported a meeting with the National TB Program to discuss interoperability between e-TB Manager and DHIS 2 and customization of reporting forms. MTaPS/**Mozambique**, in collaboration with National Directorate of Pharmacy (DNF) and other stakeholders, evaluated the electronic medicine registration system (Pharmadex) and identified gaps to enhance its interoperability with other systems. A consultant has been engaged to correct these gaps and to advance this tool into a web-based platform accessible to applicants online.

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

In reference to implementing an active pharmacovigilance system for dolutegravir, other ARVs, and anti-TB medicines and to mitigate safety risks, MTaPS/**Mozambique** evaluated current systems in use. An electronic pharmacovigilance module will be incorporated into Pharmadex to achieve this objective. Implementation begins next quarter.

In the **Philippines**, MTaPS organized a learning session with Department of Health (DOH) on electronic logistics management information systems (eLMIS) to build understanding and clarity on expectations and use of eLMIS for pharmaceutical systems strengthening (PSS). MTaPS also supported DOH in analyzing the national eHealth framework and relevant provisions under the universal health coverage (UHC) law to envision the requirements for an eLMIS that would be interoperable with other information systems under a common enterprise architecture. The DOH has requested that MTaPS support the development of TOR and conduct a pre-bidding market survey for a ready and customizable eLMIS solution for the Philippines.

MTaPS/**Bangladesh** facilitated a technical review workshop organized by the Directorate General of Family Planning (DGFP) to review their existing electronic supply management tools to identify the requirements for further improvement of the tools; 50 champion users reviewed and developed an action plan for upgrading DGFP supply management tools. MTaPS/Bangladesh also helped finalize the eLMIS roll-out plan to track 25 priority medicines under the Directorate General of Health Services (DGHS).

ADVANCEMENTS IN PSS RESEARCH AND THE GLOBAL LEARNING AGENDA

During this quarter, MTaPS also developed a concept note and has had initial conversations with the Joint Learning Networking on creating a knowledge exchange on medicines in UHC. MTaPS has also finalized TOR for the PSS technical advisory group and started recruiting members. During this quarter, MTaPS also drafted a multi-year plan outlining a prioritization process for setting the program's research agenda. The plan is being reviewed internally.

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

REDUCTIONS IN FINANCIAL BARRIERS TO ACCESSING MEDICINES

MTaPS/**Bangladesh** developed a scope of work, based on the country's 20-year health financing strategy, to conduct a situational analysis of pharmaceutical financing and explore options for supporting the pharmaceutical component of the health financing strategy.

IMPLEMENTATION OF EVIDENCE-BASED MEDICINES STRATEGIES AND PHARMACY BENEFITS PROGRAMS

MTaPS/**Philippines** supported the Philippine Department of Health (DOH) in identifying areas related to procurement and supply chain management (PSCM) for the development of implementation rules and regulations (IRR) of the newly launched Philippine Universal Health Coverage (UHC) Act. MTaPS analyzed the Philippines UHC Act, identified areas with PSCM implications, and conducted advocacy and learning sessions with high-level DOH officials. As a result, DOH's PSCM team has formally advised the relevant DOH technical working group to incorporate PSCM-related components into the UHC IRR.

MTaPS/**Asia Bureau** reviewed the 20th WHO essential medicines list and the 6th WHO essential medicines list for children and begun engaging with USAID/Indonesia and USAID/Bangladesh to collect data on each health system's benefits coverage.

INCREASED EFFICIENCY OF PHARMACEUTICAL RESOURCE ALLOCATION AND USE

MTaPS/Asia Bureau reviewed the relevance of the COREPlus and the One Health Tool for estimating financial outlays for a defined benefits coverage package. In addition, MTaPS started engaging with USAID/Indonesia on building country capacity for disease-specific treatment and pharmaceutical regimens. MTaPS discussed the value of a regional reference-pricing database with WHO partners in India and South America to determine the relevance of such an activity. MTaPS will begin to sensitize government counterparts in Indonesia and Bangladesh on the value of a regional pricing database next quarter.

MTaPS/Asia Bureau also began discussions with Indonesia and Bangladesh as potential case studies for medicine pricing and procurement policies. A trip to Indonesia and Bangladesh is currently being planned for next quarter to assist with data collection on each country's pharmaceutical pricing policy.

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

Ensuring the availability of safe, effective, quality assured, and affordable medicines and health technologies is critical for effective health outcomes. It also requires sustainable demand planning; efficient and coordinated procurement systems; optimized warehousing, inventory management, and delivery systems; and reliable data for decisions supported by building local institutional and individual capacity.

INCREASED AVAILABILITY OF ESSENTIAL MEDICINES AND OTHER HEALTH TECHNOLOGIES

Procurement and supply chain strategy

During this quarter, MTaPS facilitated reactivation of the Procurement and Logistics Management Cell (PLMC) in **Bangladesh** in two divisions of the Ministry of Health and Family Welfare (MOHFW). In addition, MTaPS/Bangladesh assisted the National Tuberculosis Control Program (NTP) in organizing a procurement and supply management (PSM) working group and related sub-working groups. The working groups are mechanisms for NTP stakeholders to discuss and make decisions on TB medicine and supply PSM issues. One of the key discussion points was the establishment of a quantification cell under the PSM working group; MTaPS assisted in revising the working group's terms of reference (TOR) and drafting TOR for the quantification cell. In addition, MTaPS facilitated the drafting of the strategic plan for procuring health commodities (initiated in the previous quarter) and presented it to a small group of MOHFW representatives to validate and receive feedback.

In the **Philippines**, MTaPS facilitated second- and third-round workshops involving a wider group of stakeholders on the national strategic plan (NSP) for procurement and supply chain management (PSCM). The three-year NSP for PSCM, drafted during the previous quarter, was validated with all incountry supply chain stakeholders. MTaPS, in collaboration with the Department of Health's (DOH) PSCM team (PSCMT), organized a separate workshop for final review of feedback received from stakeholders in the process of finalizing and presenting the final NSP for PSCM. A stewardship mechanism, supported by different PSCM technical working groups and sub-groups, will serve as oversight for implementation of the NSP in the country.

Logistics and information management tools

In Bangladesh, MTaPS facilitated a workshop on updating the table of equipment and price guide to reflect the current available list of equipment and associated prices. MTaPS/Bangladesh worked with the Directorate General of Health Services (DGHS) to develop a plan for countrywide scaling-up of standard, manual inventory tools that will streamline inventory management systems. Accordingly, MTaPS updated the training curriculum on basic logistics management.

MTaPS/Bangladesh worked with the DGHS management information system to finalize the roll-out plan for the electronic logistics management information system (eLMIS) to track 25 priority medicines managed by the directorate. In addition, MTaPS facilitated a technical review workshop in collaboration with the Directorate General for Family Planning (DGFP) for existing electronic supply management tools to identify requirements for further improvement.

MTaPS/Philippines also supported DOH's Supply Chain Management Office in finalizing and launching an operational manual (procedure) to streamline warehouse management practices at the central and regional warehouses. MTaPS co-facilitated review of processes and tools in the manual through a national workshop attended by central and regional supply chain officers.

In the Philippines, MTaPS supported the DOH in conceptualizing and developing framework agreements as a procurement mechanism to address current issues related to procurement failure. MTaPS organized learning sessions with DOH to present international best practices in procurement mechanisms and options for DOH under current procurement laws and multi-year obligatory authority. When implemented, the framework agreement with multi-year obligatory authority will reduce the time and effort currently spent in processing annual bidding.

MTaPS/Philippines organized a learning session with DOH on eLMIS to build understanding and clarity on expectations and use. MTaPS also supported DOH in analyzing the national eHealth framework and relevant provisions under the Universal Health Coverage (UHC) Act to determine the requirements for eLMIS that would make it interoperable with other information systems. MTaPS/Philippines supported the NTP in analyzing facility-level stock data and identified facilities with overstock and imminent stockout of first-line TB medicines. The results from the analysis were used to redistribute medicines as an immediate stop-gap measure to avert potential stock-out due to delayed deliveries by suppliers.

MTaPS/Philippines supported DOH in incorporating PSCM components into the UHC implementation rules and regulations (IRR). MTaPS facilitated a series of meetings and advocacy and learning sessions with PSCMT to identify sections in the UHC Act and its IRR, which were presented to DOH officials.

IMPROVED PATIENT-CENTERED PHARMACEUTICAL CARE

No activities this quarter.

IMPROVED PATIENT SAFETY AND THERAPEUTIC EFFECTIVENESS

MTaPS staff collaborated with the National Pharmacy Directorate (DNF) and the National HIV Program in **Mozambique** to finalize the active surveillance strategy, develop an implementation plan, develop the implementation budget, and extract national adverse drug reaction (ADR) data from Epi Info. MTaPS also collaborated with the University of Washington to develop questionnaires for data collection during program implementation. MTaPS began engaging potential software development partners for the activity of determining appropriate electronic data management tools for PV and other regulatory functions of Mozambique's DNF.

BETTER CONTAINMENT OF ANTIMICROBIAL RESISTANCE AND INFECTION PREVENTION AND CONTROL

MTaPS/**Bangladesh** contributed to preparations for antimicrobial awareness week in November, as well as the national antimicrobial consumption taskforce meeting organized by WHO, in collaboration with Directorate General of Drug Administration (DGDA). Next quarter, MTaPS will help establish a multisectoral coordination mechanism for antimicrobials under the leadership of the DGHS.

MTaPS is mandated to assist GHSA activities in 10 countries (Burkina Faso, Cameroon, Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, Kenya, Mali, Senegal, Tanzania, and Uganda), focusing on promoting AMS, IPC, and multisectoral coordination. For summary information on the GHSA portfolio, refer to the GHSA section of this report.

PROGRESS BY COUNTRY

BANGLADESH

MTaPS/Bangladesh focuses on integrated, innovative, and sustainable strategies to strengthen the pharmaceutical system and ensure sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medicines and pharmaceutical services. The program uses both USAID's pharmaceutical systems strengthening approach and the MTaPS' approach to contribute to the Government of Bangladesh's fourth Health, Population and Nutrition Sector Program (2017–2022) objectives and commitment to achieving universal health coverage.

OBJECTIVE I: PROCUREMENT AND SUPPLY CHAIN SYSTEMS IMPROVED AND MODERNIZED

The main strategy of MTaPS/Bangladesh is to work closely with the Ministry of Health and Family Welfare (MOHFW) and its key directorates to provide technical assistance to strengthen their existing systems and build capacity to manage overall procurement and the supply chain effectively and efficiently.

MOHFW

To bring transparency, accountability, and effectiveness in procurement and supply management (PSM), the MOHFW has reconstituted the Procurement and Logistics Management Cell (PLMC) with the following positions: one program manager, two deputy program managers, and two assistant program managers. MTaPS will work closely with the PLMC to reactivate its functions in two divisions of the MOHFW, the Directorate General of Health Services (DGHS) and the Directorate General of Family Planning (DGFP).

The MTaPS team facilitated a workshop on updating the table of equipment and price guide on May 5, 2019. With the guidance of additional secretaries from the Health Services Division (HSD), participants provided their recommendations on the way forward on updating these two documents. The report has been submitted to MOHFW for final approval.

The international procurement consultant submitted the first draft of the strategic plan on procurement for MOHFW, and the MTaPS team shared it with a small group representing MOHFW and its directorates for feedback and further inputs. With all the inputs, the second draft of the document has been prepared and sent to the home office for final review before submission to MOHFW for approval.

Directorate General of Health Services

MTaPS worked with the DGHS to develop a plan for countrywide scaling-up of standard, manual inventory tools. Accordingly, the MTaPS team reviewed and suggested changes to the training curriculum on basic logistics management.

Directorate General of Family Planning

MTaPS/Bangladesh facilitated a technical review workshop organized by the DGFP to critically review their existing electronic supply management tools to identify requirements for further improvement of the tools. DGFP invited about 50 of their champion users for a day-long review workshop, including a few representatives from development partners. The goal of the workshop was to develop an action plan to upgrade DGFP supply management tools (i.e., Warehouse Inventory Management System, Upazila Inventory Management System, and DGFP's electronic logistics management information system [eLMIS] module of the Supply Chain Management Portal [SCMP]).

Specific objectives of the workshop were to:

- Review the current status of tools and list new requirements for upgrading
- Reach consensus on proposed upgrade requests
- · Agree on next steps: upgrading tools, user acceptance testing, and national roll-out

MTaPS attended two meetings of the DGFP's supply chain monitoring committee to review the stock status of reproductive health and family planning (RH/FP) commodities at different levels of the supply chain. According to findings of this review, the DGFP made immediate decisions to issue letters to five sub-district-level FP managers to address stock-outs of contraceptives. The DGFP also issued an appreciation letter to one district FP manager for maintaining adequate stock of RH/FP commodities.

The DGFP organized basic training on the logistics management system for newly recruited supply officers. MTaPS technical advisors were invited to facilitate a technical session on the overall logistics management system of DGFP, including the electronic inventory management system.

National TB Control Program

MTaPS assisted the National TB Control Program (NTP) in organizing a PSM working group meeting on June 18, 2019. This was a forum for NTP stakeholders to discuss and make decisions on PSM of TB drugs and supplies. One of the key discussion points was the establishment of a quantification cell within the PSM working group. The MTaPS team assisted the NTP in drafting terms of reference (TOR) for the quantification cell and revising the TOR for the PSM working group. The PSM working group meeting discussed both the TOR and the agreed way forward. Both drafts have been forwarded to the deputy program manager for procurement and logistics at NTP for further review and process for approval.

OBJECTIVE 2: PHARMACEUTICAL REGULATORY SYSTEMS STRENGTHENED

This quarter the Directorate General of Drug Administration (DGDA) appointed a new director general. He acknowledged previous technical support to the DGDA under MTaPS' predecessor program, Systems for Improved Access to Pharmaceuticals and Services (SIAPS) in a meeting and requested that MTaPS continue and escalate its technical assistance in strengthening pharmaceutical registration, licensing, and inspection functions.

With the technical guidance from principal technical advisor for pharmacovigilance (PV), MTaPS facilitated a workshop on June 13, 2019, at the DGDA involving DGDA stakeholders. The objective of the workshop was to identify a strategy to roll out PV nationwide. Under the leadership of the director general, DGDA, participants from the MOHFW, hospitals, Adverse Drug Reaction Advisory Committee (ADRAC) members, and representatives from pharmaceutical companies provided valuable inputs to develop the strategy. MTaPS also facilitated a training on causality assessment and good vigilance practice for ADRAC technical sub-committee members and other DGDA PV team members on June 17, 2019.

A technical discussion was held on June 18, 2019, on the current status of active drug safety monitoring and management (aDSM) in Bangladesh and interventions needed for implementation. MTaPS, USAID, and other relevant stakeholders participated and the discussion ended with a request for MTaPS to draft a plan for implementation of the activities.

MTaPS facilitated a meeting with the hospital, the Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine, and Metabolic Disorders, on June 19, 2019. DGDA's PV team was present to monitor adverse drug event reporting with a mutual exchange of suggestions to increase reporting.

A short training on Vigiflow data entry at the Uppsala Monitoring Center was held on June 18, 2019 for the DGDA PV team.

OBJECTIVE 3: SYSTEMS FOR EVIDENCE-BASED DECISION MAKING INSTITUTIONALIZED

MOHFW

The MTaPS team worked with DGHS' director of management information systems (MIS) to finalize the roll-out plan for the electronic logistics management information system (eLMIS) to track 25 priority medicines under DGHS. A countrywide roll-out plan for eLMIS has been developed and approved by DGHS. The roll out of the system will help managers monitor national and sub-national level logistics data, thus improving the product availability.

The MTaPS team had a meeting with HiSP (the development and management organization for DHIS 2 for MIS, DGHS) to discuss joint collaboration on future enhancement of eLMIS and interoperability.

National TB Control Program

On June 24, 2019, NTP called a meeting to discuss the technical issues of rolling out e-TB Manager all over the country. Under the leadership of the director of mycobacterial disease control and the line director for the TB, leprosy, HIV/AIDS, and sexually transmitted disease program, relevant officials from NTP, USAID, and the MTaPS team participated in the meeting. Interoperability between e-TB Manager and DHIS 2 and customizing reporting forms based on changes made by WHO were also discussed. It was decided that the required customization will be done by MTaPS for e-TB Manager and by the DGHS/MIS for DHIS2.

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

In this quarter, MTaPS participated in a workshop to prepare celebrating antimicrobial awareness week, which will be held in November 2019, and the national antimicrobial consumption taskforce meeting organized by WHO, in collaboration with DGDA. Next quarter, MTaPS will work with stakeholders to establish or reactivate and mobilize a multisectoral coordination mechanism for antimicrobials under the leadership of the line director for communicable disease control at DGHS. The coordination mechanism will work to implement the National Action Plan for AMR containment.

OBJECTIVE 5: PHARMACEUTICAL FINANCIAL RESOURCE ALLOCATION AND USE OPTIMIZED

No activity this quarter.

ACTIVITIES FOR NEXT QUARTER ACTIVITY DESCRIPTION DATES Refresher training on Pharmadex and common 75 DGDA reviewers, master trainers to be trained By August technical document guidelines Assist DGHS and CMSD in rolling out manual Basic logistics management training for DGHS logistics officials; July-August inventory management tools to new districts monitor implementation of standard inventory tools at different (printing tools, training) levels With NTP, update and roll out individual TB Upgrade software, update training materials, training of trainers, By September patient information recording and reporting basic training for new users, implement and monitor reporting, and transfer to DHIS 2 system to selected sites Establish a multisectoral coordination Map stakeholders, activities, and existing platform; stakeholder By August mechanism for antimicrobials at DGHS analysis; facilitate stakeholder meeting Training on quantification Facilitate refresher training on quantification involving NTP and Last week of stakeholders August

BURKINA FASO

SUMMARY OF ACTIVITIES THIS QUARTER

Since the scoping visit in mid-March, the MTaPS team has worked to refine year I activities with the development and approval of the GHSA work plan (Excel work plan) and further elaborate on activities through the development of the MTaPS GHSA work plan narrative, which will be submitted early next quarter.

In its first year, MTaPS will focus on activities in the following GHSA result areas:

Effective multisectoral coordination on AMR

Activities in this result area will include providing support to the AMR Technical Thematic Committee (AMR-TTC) to improve its organizational, governance, and management capacity. This will include supporting the AMR-TTC to develop a costed, operational plan for antimicrobial stewardship (AMS).

Use of antimicrobial medicines optimized

In this result area, MTaPS will provide technical support the AMR-TTC to develop a national AMR policy and plan. This will be done by conducting a rapid assessment of the AMS environment to inform the development of the AMS plan in both the animal and human sectors. MTaPS will also support the development of national guidelines for use of antimicrobials in the animal sector and update the infectious disease component of the national treatment guidelines. As this work is being done at the central level, MTaPS plans to support the implementation of guidelines and policies at the peripheral levels.

It is anticipated that the work plan will be approved in the first month of Q4 so the team can begin implementing activities next quarter and continue into program year two.

Recruitment and onboarding of local MTaPS staff: MTaPS is in the final stages of the recruitment process for its in-country staff. Both the identified senior technical advisor and finance and administrative specialist have been submitted to USAID for approval. As the scope of the activities has a large focus on animal health, MTaPS is now recruiting a senior technical advisor for animal health. MTaPS is in the process of gathering resumes and plans to conduct interviews within the first two weeks of quarter four.

Office set-up: MTaPS headquarters has been working with the USAID Burkina Faso Mission to ensure that a work space with adequate resources is set up for MTaPS in-country operations.

ACTIVITIES FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES (2019)
Recruitment and onboarding of local MTaPS staff	MTaPS is awaiting USAID approval for staff and is recruiting a second senior technical advisor for animal health.	July
Office set-up	With USAID/Burkina Faso support, the project will establish a work space with adequate resources.	July
Work plan implementation	Work plan implementation will begin once MTaPS receives USAID approval of the work plan and for hiring local staff.	July

CAMEROON

SUMMARY OF ACTIVITIES THIS QUARTER

Work plan development

Since the scoping visit in early March, the MTaPS team has worked to refine year I activities with the development and approval of the GHSA work plan (Excel work plan) and to further elaborate on activities through the development of the MTaPS GHSA work plan narrative, which will be submitted early next quarter.

In its first year, MTaPS will focus on activities in the following GHSA result areas:

Effective multisectoral coordination on AMR

Activities in this result area will include providing technical and operational support to the AMR technical working groups to improve multisectoral coordination and supporting the development and validation of the costed AMR operational implementation plan.

Infection prevention and control

Activities include support for the development and validation of IPC guidelines in the human and animal sectors and the development of a national training package to strengthen IPC competency. Efforts will also be devoted to strengthening the governance and technical capacities of IPC committees.

Use of antimicrobial medicines optimized

MTaPS will support the development of a national plan to strengthen antimicrobial stewardship (AMS) in the human and animal sectors. This will be done by conducting a rapid assessment of the AMS environment to inform the development of the AMS plan. This will also include a review of the essential medicines list to accommodate grouping of antimicrobials into AWaRe categories and updating clinical guidelines to promote responsible and prudent use of antimicrobials. MTaPS will also support the establishment of effective and functional drug and therapeutics committees.

It is anticipated that the work plan will be approved early next quarter so the team can begin implementing activities.

Recruitment and onboarding of local MTaPS staff: MTaPS has completed the recruitment process for MTaPS Cameroon staff. The first senior technical advisor and finance and administrative specialist have been onboarded, while the second senior technical advisor is under review with USAID. MTaPS anticipates having a full team on board by the end of July.

Office set-up: MTaPS has established its office, which is located at the office of the Cameroon Baptist Convention Health Services (a member of the Ecumenical Pharmaceutical Network).

ACTIVITIES PLANNED FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES
Submission of work plan narrative	MTaPS will submit a draft work plan to USAID for approval	July 2019
Staff onboarding	Onboarding of the senior technical advisor and finance and administrative specialist	July 2019
Work plan implementation	Work plan implementation will begin once MTaPS receives USAID approval of the work plan	July 2019

COTE D'IVOIRE

The MTaPS team has worked closely with the AMR Secretariat, building on the validated NAP-AMR to develop both the narrative and Excel sheet work plan. The COR has approved both documents and they have been shared with the Mission. While awaiting the final approval of the narrative work plan, MTaPS has requested partial approval from the COR to start implementing the work plan.

RESULT AREA I: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

Activity 1.1.1: Finalize and validate the National Action Plan on Antimicrobial Resistance (NAP-AMR)

MTaPS supported the National AMR Secretariat in organizing a one-day meeting attended by a core team at the MSH office in Abidjan to review the National Action Plan on Antimicrobial Resistance (NAP-AMR) on May 9, 2019. This meeting allowed the AMR Secretariat and stakeholders (General Directorate of Health and Public Hygiene [DGSHP], Directorate of Hospital and Proximity Medicine [DHMP], Directorate of Veterinary Services [DSV], Ivorian Center for Antipollution, National Laboratory for Rural Development Support, and Ivorian Society of Microbiology) to review and finalize the NAP-AMR before printing and dissemination. The meeting recommended updating the situation analysis and governance sections of the NAP-AMR.

MTaPS supported the National AMR Secretariat in conducting a workshop to update the situation analysis and governance sections of the NAP-AMR and establish the functionality of the AMR Secretariat and establishing the functionality of the AMR Secretariat and Multisectoral Technical Committees for Sanitation, Infection Prevention and Control (MTC 4); and Antimicrobial Stewardship, Sale of Illegal Drugs (MTC 5) from May 22-24, 2019, in Jacqueville, Cote d'Ivoire.

Twenty-four participants from the human, animal, and environmental sectors attended the workshop, chaired by the national AMR focal point. The workshop:

- Defined how the AMR Secretariat works
- Designated MTC officers and other members
- Defined the mandate of each MTC officer
- Defined the roadmap of the MTCs
- Updated the NAP-AMR
- Identified and validated the priority activities of the NAP-AMR

USAID GHSA for Côte d'Ivoire and West Africa attended the opening ceremony and reinforced USAID's commitment to AMR containment activities in Cote d'Ivoire.

The next steps following this workshop include:

- Disseminating the NAP-AMR to the Ministry of Health and other ministries involved in AMR, along with the governance manual that MTaPS will develop in July 2019
- Organizing the dissemination meeting with the One Health platform
- Organizing a meeting to present the NAP-AMR to all ministries for appropriation

Activity 1.1.2: Strengthen the National AMR Secretariat

On June 14, 2019, 12 members of the IPC TWG (MTC 4) met to elaborate and validate the terms of reference (TOR) for two consultants who will do a rapid situational analysis of hygiene and IPC (HIPC) conditions in both the animal and human health sectors, draft IPC guidelines for the animal sector, and develop a national action plan to implement IPC guidelines in both the animal and human health sectors. The IPC TWG finalized the TOR and they are ready for posting for the recruitment.

On June 20, 2019, 18 members of AMS TWG (MTC 5) attended a meeting to establish the group's governance structure, elaborate and validate the AMS TWG roadmap, and develop the TOR for the two consultants to hire for a rapid situational analysis of antimicrobial use and regulation in the human and animal sectors. They also agreed on the selection criteria and constituted a committee of 17 local experts to draft the tools needed to support rational use of antimicrobials.

RESULT AREA 2: INFECTION PREVENTION AND CONTROL

Activity 2.5.1: Strengthening the functionality of IPC committees in the human and animal sectors

Conduct a rapid situational analysis of IPC committee capacity and functionality in two hospitals (Cocody, Bouake) and two veterinary clinics (Bingerville, Korhogo)

From June 17 to June 27, 2019, MTaPS, along with the AMR Secretariat, DGS, DSV, and DHMP, organized a joint site visit to two teaching hospitals and two veterinary clinics (identified by DSV) in Bouake and Abidjan. They are the only functional public sites, a primary criteria provided by the USAID Mission. For the teaching hospitals, the National AMR Secretariat decided to choose one hospital in Abidjan and one outside of Abidjan. Bouake was chosen because it is the only teaching hospital outside of Abidjan. Cocody was selected because of good working relationships.

The evaluation team visited the teaching hospital and the veterinary clinic in Bouake from June 17-21 and the teaching hospital and the antirabic centers, both situated in Cocody–Abidjan, from June 24-27. The site visits revealed that the:

- HIPC committees exist in both teaching hospitals, but they are insufficiently functional
- Two veterinary clinics lack IPC committees
- HIPC committee of each health facility demonstrated "an inadequate IPC level," meaning below 80%, which is the acceptable compliance rate; according to the evaluation tool used, the HIPC committees of the Bouake and Cocody teaching hospitals had respective scores of 45% and 31%, and the veterinary clinic in Bouake and the antirabic center in Cocody were both at 2%

Recommendation for the AMR Secretariat

• Develop a capacity-building plan for HIPC committee in the four targeted health facilities

Recommendations for the teaching hospitals (Bouake and Cocody)

- Revitalize the HIPC committees and the hospital hygiene services
- Share the findings of this evaluation with all care services
- Put in place strategies for good hygiene practices
- Increase collaboration with the technical structures in charge of hygiene and the HIPC committees

Recommendations for the animal health facilities

- Set up the HIPC committees (identify actors, roles and responsibilities, planning, training program in HIPC)
- Share the findings of this evaluation to all care services

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

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

In addition to the aforementioned workshops, MTaPS participated in a number of coordination meetings involving the National AMR Secretariat; Directorate of Pharmacy, Medicines, and Laboratories; National Program for the Development of Pharmaceutical Activities; Service of Infectious and Tropical Diseases; and the pharmacology department at the Medical School of Felix Houphouet Boigny University. They gathered existing guidelines and policies and established contacts and initial discussions with the said administrations on how to get them effectively involved in the review process and updating and owning the guidelines.

ACTIVITIES FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES
Activity 1.1.1: Finalize and validate the NAP-AMR	Following the NAP's finalization, 10 copies will be printed for official endorsement.	July 2019
	Two one-day meetings for each TWG (MTCs 4 and 5) will be held at the MSH office in Abidjan to support IPC and AMS planned activities.	July & September 2019
Activity 1.1.2: Strengthen the National AMR Secretariat	A workshop to develop/validate the NAP-AMR and the AMR governance manual will be held in Agboville.	July 2019
Activity 2.1.1: Develop a national action plan for IPC in the human and animal health sectors	One or two national consultants will be recruited to conduct a rapid assessment of hygiene conditions and IPC in the human and animal health sectors, develop IPC guidelines in the animal health sector, and develop a national IPC plan.	July-August 2019
Activity 2.5.1: Strengthening the functionality of IPC committees in the human and animal sectors	MTaPS will support the National AMR Secretariat in strengthening and/or setting up IPC committees at four targeted health facilities in the human and animal sectors. A joint site visit will be conducted in those four identified health facilities to establish IPC committees and develop capacity-building plans.	July-August 2019
	One or two consultants will be recruited to conduct situational analysis, develop data collection tools and draft an AMS plan for the both human and animal sector	
Activity 3.1.1: Improve the rational use of antimicrobials in the human and animal health sectors	The national consultants for the situational analysis 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. The draft national plan will be validated with the other AMS guidelines documents.	July-September 2019
	MTaPS will support the National AMR Secretariat to develop national AMS guidelines in the human and animal health sectors through a five-day workshop attended by experts from both sectors.	
	A workshop will be held to develop guidelines that will be validated later. These guidelines will be used to train members of drug and therapeutics committees in selected health facilities.	

DEMOCRATIC REPUBLIC OF CONGO

SUMMARY OF ACTIVITIES THIS QUARTER

Since the scoping visit in mid-March, the MTaPS team has worked to refine year I activities with the development and approval of the GHSA work plan (Excel work plan) and to further elaborate on activities through the development of the MTaPS GHSA work plan narrative, which will be submitted early next quarter.

In its first year, MTaPS will focus on activities in the following GHSA result areas:

Effective multisectoral coordination on antimicrobial resistance (AMR)

Activities in this result area will include providing technical and operational support to the AMR technical working group (AMR-TWG) to improve infection prevention and control (IPC) and antimicrobial stewardship (AMS) coordination. This will include the review of the AMR-TWG's organizational structure and terms of reference, technical and logistical support to establish AMS and IPC sub-committees, and support to develop a costed operational plan for the National Action Plan on AMR.

Use of antimicrobial medicines optimized

MTaPS will support the development of a national plan to strengthen AMS. This will be done by conducting a rapid assessment of stewardship policies and antimicrobial regulation as well as a rapid assessment of antimicrobial use and consumption, which will inform the development of the strategy.

MTaPS will also support a review of the essential medicines list to accommodate grouping of antimicrobials into AWaRe categories and a review the infectious disease component of the standard treatment guidelines. MTaPS will establish and strengthen drug and therapeutics committees to oversee implementation of AMS and IPC interventions. It is anticipated that the work plan will be approved in the first month of Q4, so the team can begin implementing activities in Q4 and continue into PY2.

Recruitment and onboarding of local MTaPS staff: MTaPS has finalized its recruitment process, with its first senior technical advisor and finance and administrative specialist starting the second week of July. The second senior technical advisor is pending USAID approval. MTaPS anticipates this approval within the next few weeks to complete the country staffing.

Office set-up and resource mobilization: MTaPS headquarters is in the final stages of securing a sublease with FHI360. MTaPS plans to obtain ownership of a vehicle for the project as the USAID-funded Challenge TB project comes to an end. MTaPS will work with the Mission to facilitate the transfer.

ACTIVITIES FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES (2019)
Submission of work plan narrative	Following the scoping visit, MTaPS will develop and submit a draft work plan to USAID for approval	July
Staff onboarding	Onboarding of the senior technical advisor and finance and administrative specialist	July
Work plan implementation	Work plan implementation will begin once MTaPS receives USAID approval of the work plan	July

ETHIOPIA

MTaPS/Ethiopia goal is to support AMR containment by strengthening the capacity of in-country stakeholders to implement a national AMR action plan. To achieve this goal, MTaPS/Ethiopia will support two result areas of the AMR action package in 2019: optimize the use of antimicrobials and strengthen IPC practices by engaging the Federal Ministry of Health's (FMOH) Pharmaceuticals and Medical Equipment Directorate (PMED) and the Clinical Services Directorate (CSD); and the National Advisory Committee on Antimicrobial Resistance Containment (NACARC) as key partners.

The MTaPS FY19 narrative work plan was approved on June 14, 2019 by USAID/Washington and the program subsequently began activity implementation.

RESULT AREA 2: INFECTION PREVENTION AND CONTROL

MTaPS/Ethiopia will support revision of the IPC guidelines and implementation in selected referral hospitals. Direct technical assistance will focus on strengthening the organizational capacity of counterparts at FMOH's CSD and the regional health bureaus (RHBs) to develop a national IPC implementation plan, effectively implement the guidelines, and conduct supportive supervision at selected health facilities.

Activity 2.5.1: Support the revision and implementation of IPC guidelines

- MTaPS conducted a meeting with the CSD to discuss joint activities around IPC in line with the work plan. MTaPS and the CSD have agreed to develop a joint work plan and map areas of collaboration.
- MTaPS is currently providing financial and technical support to the CSD to conduct a training of trainers (TOT) on IPC and AMR for 32 participants drawn from different regions of the country for 10 days next quarter (July 5-14, 2019).

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED (AMS)

Activity 3.1.1: Strengthen federal and RHBs and coordination platforms to define, coordinate, and implement AMS activities

MTaPS shared its FY19 plan of activities for AMS with PMED, who are in the process of developing their work plan for FY20. A joint meeting between MTaPS and PMED has been scheduled for mid-July to harmonize activities for Q4 and strategize on areas of collaboration in the future.

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

A meeting was held between the EPA and MTaPS to prioritize areas of activity regarding the training of journalists and raising awareness of civil societies, including members of the EPA, on AMR.

There will be a continuing education (CE) session on AMR (Role of Pharmacists in Containing the Emergence and Spread of AMR) for members of the EPA during their 39th Annual Conference to be held July 26-27, 2019, at the headquarters of the African Union Commission, Addis Ababa. MTaPS will facilitate and conduct the CE session.

Recruitment and onboarding of local MTaPS staff: A senior technical advisor for AMR to be seconded to FMOH has been selected and is awaiting USAID approval. A senior technical advisor for monitoring, evaluation, and learning is expected to start next quarter. A senior office manager has been recruited and the recruitment of a senior accountant is underway.

ACTIVITIES FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES (2019)
Develop IPC implementation plan with FMOH's CSD	FMOH is in the process of reviewing the national IPC guidelines, which need to be validated and implemented.	July
Prioritize and select health facilities in collaboration with FMOH and RHBs	MTaPS has planned to implement IPC and AMS activities at 25 public referral and 5 private hospitals located in 3 regions.	July-August
Print and distribute IPC guidelines to health facilities	The revised IPC guidelines need to be printed and distributed to designated facilities and all health facilities c/o RHBs.	August- September
Provide TOT trainings on IPC	Agreement has been reached with FMOH to conduct TOT training for 32 IPC professionals July 1–10, 2019.	July
Develop/adopt standardized checklist and tools for supportive supervision	A checklist to be used for IPC and AMS during supportive supervision of the designated facilities will be developed/ adopted.	August
Organize consultative meetings to define the organizational setup for AMR coordination responsibilities of PMED	MTaPS has started discussions with FMOH on the need to have a strong central coordinating government unit to plan and guide AMR activities, which is beyond the mandate of PMED in its current setup.	July-August
Conduct baseline situational analysis of AMS practices in selected health facilities	Information on the current state and condition of work related to IPC and AMS will be collected from five referral hospitals and assessed to fine-tune interventions.	August- September
Revise and adopt NACARC TOR and guidance documents for the AMS and IPC working groups	In collaboration with the Ethiopian Food and Drug Administration, NACARC's TOR will be revised to make its function more effective.	August- September
Develop action plan with PMED	A joint work plan on AMS will be developed by MTaPS and PMED, and an MOU on its implementation will be signed.	July
Provide direct technical support to DTCs in selected referral hospitals to develop hospital-specific action plans and monitoring mechanisms	A meeting will be held for DTCs and IPC committees of all target health facilities to identify the technical support they need to effectively implement IPC and AMS activities. Technical assistance will be provided according to their needs.	August- September
Follow up implementation of AMS guidelines in selected health facilities	MTaPS will support the distribution and implementation of AMS guidelines to the designated health facilities	August- September
Conduct seminar for professional organizations engaged in public health in collaboration with EPA and AAU school of pharmacy	MTaPS, in collaboration with the EPA, will provide CE on AMR (Role of Pharmacists in Containing the Emergence and Spread of AMR) for EPA members during their 39th Annual Conference (July 26-27, 2019).	July

KENYA

The GHSA team and USAID approved the MTaPS/Kenya work plan for implementation on June 3, 2019. The work plan focuses on strengthening three broad areas of activities: multisectoral coordination, antimicrobial stewardship (AMS), and infection prevention and control (IPC). An implementation plan was subsequently developed in consultation with key stakeholders and submitted to USAID, MTaPS management, and the MTaPS/GHSA technical lead.

To initiate activities while ensuring joint planning and implementation for sustainable results, MTaPS/Kenya team met with key stakeholders to introduce the project, objectives, proposed activities, timelines, and expected deliverables. The stakeholders included the AMR secretariat, Directorate of Pharmaceutical Services at the MOH, the National Nursing Association of Kenya (NNAK), County Health Management Team of Nyeri, the University of Nairobi School of Pharmacy (UON/SOP), Gertrude's Children's Hospital, Nyeri County Referral Hospital, and Mount Kenya Sub-County Hospital.

RESULT AREA I: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

I.I.I Strengthen capacity of National Antimicrobial Stewardship Interagency Committee as a leadership, governance, and oversight body for One Health implementation

To achieve this objective, MTaPS/Kenya had an initial meeting with the national AMR focal team and discussed implementation of activities geared toward strengthening the National Antimicrobial Stewardship Interagency Committee (NASIC) and national-level AMS and IPC activities. This committee oversees implementation of the national policy and action plan for the prevention and containment of AMR in Kenya. The activities discussed were assessment of the current status of the AMR multisectoral coordination mechanism; reviewing the TOR and action plans of NASIC's IPC and AMS TWGs; finalizing the national guidelines on AMS; revising the national IPC policy and guidelines; developing a high-level communique for advocacy on AMR; developing a monitoring and evaluation (M&E) framework for the AMR national action plan (NAP); and reviewing and finalizing the matrix for AMR stakeholders. To fast-track activities under this objective, MTaPS will support a NASIC workshop planned in July to review the TOR of the TWGs and draft activities for the M&E framework.

RESULT AREA 2: IPC POLICIES AND PRACTICES STRENGTHENED

2.2.1 Technical assistance to develop a continuing professional development and re-licensure-linked in-service IPC training course for delivery through professional associations

MTaPS/Kenya met NNAK officials and discussed development of a continuing professional development (CPD) and re-licensure-linked in-service IPC training course for delivery through various professional associations. A partnership agreement was developed and will be signed by both parties in July 2019 before the activity commences.

2.5. | Supporting IPC activities in Nyeri County, sub-counties, and health facilities

MTaPS held a project sensitization meeting with Nyeri county government officials and members of the county health management team; the infectious disease detection and surveillance (IDDS) team and the two projects' USAID activity manager also attended. MTaPS' IPC- and AMS-related objectives, activities, and deliverables were discussed at length. IPC baseline assessment tools were developed in preparation for the joint IPC and AMS baseline data collection exercise scheduled for July 2019.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

3.1.1 Support development and implementation of national AMS guidelines

To achieve this objective, MTaPS/Kenya continued to review different chapters of the AMS guidelines, which are expected to be finalized in the fourth quarter of the year.

3.1.2 Support to revise the Kenya Essential Medicines List and classify EML antibiotics into AWaRe categories

MTaPS/Kenya met with senior MOH officers to discuss commencement and the approach to reviewing the current Kenya essential medicines list (KEML). It was agreed that a consultant be engaged to coordinate the exercise while working in close collaboration with MOH and MTaPS personnel. The National Medicines and Therapeutics Committee (NMTC) will lead the review process, and county-level implementation of the KEML will be driven by the county and facility-level MTCs. MTaPS will hire the consultant in July 2019.

3.2.1 Support the University of Nairobi, School of Pharmacy (UON/SOP) to reform the preservice curriculum to integrate AMS-related topics of practical importance

MTaPS/Kenya met with the dean of the SOP and the head of the core departments at the UON/SOP to introduce MTaPS activities and generate consensus on next steps. Names of faculty members who are going to work with the MTaPS team were shared. There is another meeting planned for mid-July between the MTaPS team, the AMR secretariat, and the UON focal team to discuss a needs assessment and develop a milestone-based roadmap for the actual curriculum development process.

3.5. I Support to county, sub-county, and facility-level AMS activities

Refer to activity, 2.5.1 Supporting IPC activities in Nyeri County, sub-counties, and health facilities, for updates this quarter.

Recruiting and onboarding staff: The senior technical advisor and technical advisor reported to work on April 8 and June 3, respectively. The recruited senior accountant and county-focused project support associate are expected to report in quarter 4.

IMPLEMENTATION CHALLENGES

There is great demand from MOH and the counties for technical assistance from MTaPS in AMR and other areas along the broad MTaPS objectives that call for proactive management of counterparts' expectations by the MTaPS team.

ACTIVITIES PLANNED FOR N	EXT QUARTER	
ACTIVITY	DESCRIPTION	DATES
Activity initiation and joint implementation planning for national level, focus counties, and prioritized health facilities	AMR multisectoral coordination, IPC and AMS baseline assessments	July
Effective multisectoral coordination activities for AMR	Develop high-level communique on AMR for advocacy Finalization of national AMS guidelines Initiate revision of national IPC policy and guidelines Develop M&E framework for AMR NAP	July–September
Activities improving IPC	Soliciting for IPC/CPD course e-learning platform vendors Development of IPC/CPD curriculum for health professionals County and facility baseline assessments, development of prioritized action planning and implementation of targeted interventions	July–September
Activities for optimizing use of antimicrobial medicines	Appointment of NMTC members and review of KEML Needs assessment and development of pre-service AMS curriculum Soliciting for AMS/CPD course e-learning platform vendors Development of AMS/CPD curriculum for health professionals County and facility baseline assessments, development of prioritized action planning and implementation of targeted interventions	July–September

MALI

SUMMARY OF ACTIVITIES THIS QUARTER

Since the scoping visit in early March, MTaPS/Mali has worked to refine year I activities with the development and approval of the GHSA work plan (Excel work plan) and the further elaboration of activities through the development of the MTaPS GHSA work plan narrative, which will be submitted early next quarter.

In its first year, MTaPS/Mali will focus on activities in the following GHSA result areas:

Effective multisectoral coordination on AMR

Activities in this result area will include providing technical and operational support to the multisectoral coordination committee for AMR and facilitating collaboration and joint learning between the human and animal health sectors.

Infection prevention and control

Activities in this result area will include supporting the strengthening of IPC programming at the central and peripheral levels. This will be done by conducting a rapid assessment of practices in the animal sector to inform for the development and validation of IPC guidelines for animal health. MTaPS will also produce implementation and dissemination toolkits for IPC guideline implementation.

MTaPS will also support the strengthening of IPC programming at the facility level by delivering a resources induction workshop at health facilities and supporting implementation of IPC guidelines.

Use of antimicrobial medicines optimized

MTaPS will support the strengthening of AMS by conducting a rapid assessment of stewardship policies and regulations, as well as an assessment on supply chain management of antimicrobials. This information will be used to inform the development of a national action plan and guidelines for AMS. MTaPS will also support the development of treatment guidelines to manage common infectious diseases and assist with grouping essential medicines list antibiotics into AWaRe categories. Lastly, MTaPS will establish drug therapeutic committees at selected sites.

It is anticipated that the work plan will be approved in the first month of Q4 so the team can begin implementing activities.

Recruitment and onboarding of local MTaPS staff: MTaPS is in the final stages of recruiting a country project director and a senior technical advisor, both of whom have been submitted to USAID and are pending approval. MTaPS is recruiting an operations officer and a second senior technical advisor. MTaPS is currently benefitting from already existing MSH staff in Mali who are supporting operational start-up activities.

Office set-up: MTaPS has secured a new office space and is beginning office installation. The office should be fully functional by August.

ACTIVITIES FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES (2019)
Work plan submission	Development and submission of FY19 MTaPS/Mali work plan for approval	July
Recruitment and onboarding of local MTaPS staff	MTaPS country project director and senior technical advisor are pending USAID approval; MTaPS will finalize recruitment of an operations officer and a second senior technical advisor this month.	July
Office set-up	The MTaPS/Mali office has been secured. The project will move forward with office installation.	July-August
Work plan implementation	Work plan implementation will begin once MTaPS receives USAID approval of the work plan and for hiring local staff.	August

MOZAMBIQUE

The goal of MTaPS/Mozambique is to strengthen the pharmaceutical system to ensure sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medicines and medicine-related pharmaceutical services.

OBJECTIVE 1: PHARMACEUTICAL SECTOR GOVERNANCE STRENGTHENED

1.1.1 Assist with developing medicine registration regulations for new medicines

Overall, there has been progress the past two years in strengthening the regulatory system in Mozambique. The new law of 12/2017 on the regulation of medicines, vaccines and biological products provides a solid legal framework for the regulatory process and established the regulatory agency, Autoridade Nacional Reguladora de Medicamentos de Mozambique, (ANARME). The law subscribes to the WHO Global Benchmarking Tool as it provides for rules on export, import, marketing authorization and distribution, and licensing.

Since the law was passed, only 2 of 15 necessary regulations have been adopted to establish a sound regulatory framework for ANARME. MTaPS' technical assistance will expedite the finalization of the pending regulations and guidelines. To that end, a consultant of MTaPS partner, International Law Institute-Africa Centre for Legal Excellence traveled to the country May 20-25 to review the current pharmaceutical legislative framework, including medicine registration regulations, assist in the development of any new or additional regulations that might be needed for the new medicines act. The consultant produced a draft report with recommendations based on his findings and best international practices.

2.1.1 Enhance functions of the electronic medicine registration tool (Pharmadex) and its interoperability with other systems

The senior technical advisor for pharmaceutical management information systems traveled to Mozambique May 15-25 to evaluate the electronic medicine registration system, Pharmadex, and to collaborate with Directorate of Pharmacy (DNF) and other relevant stakeholders to identify gaps in the setup. He further developed an activity plan that lays out the level of effort required to improve Pharmadex. He is currently working closely with DNF staff to support Pharmadex optimization, expand reporting capabilities, and enable off-site access by applicants.

2.1.4 Support planning, hosting, participation, and training with regional medicine regulatory bodies (e.g., SADC, ZAZIBONA)

During the reporting quarter, MTaPS supported participation of an additional DNF medicine registration staff to join the ZAZIBONA dossier evaluation workshop in Botswana, held June 17-22, 2019.

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

3.1.1 Implement active pharmacovigilance of DTG, other ARVs, and anti-TB medicines and mitigate safety risks

During the quarter, a principal technical advisor assisted DNF staff and the National HIV Program to finalize the active surveillance strategy and develop an implementation plan and budget. In addition, MTaPS collaborated with the University of Washington (UW) to develop four different questionnaires to be used for data collection during implementation of the program. MTaPS also supported the DNF in extracting its adverse drug reaction data that was captured in its Epi Info database.

Furthermore, two task orders (TO1 and TO2) were developed for UW. The TOs outline the specific activities to be carried out by UW, which includes developing technical documents, such as SOPs and training materials, for implementation of the active monitoring plan.

MTaPS has engaged software development partners to identify any electronic data management tools that meet the needs of the DNF for PV and its other regulatory functions.

IMPLEMENATION CHALLENGES

The delay in getting UW's TOs approved delayed development of some of the tools.

Identifying an electronic data management tool that meets the needs of the DNF for spontaneous reporting, active surveillance, and other regulatory functions has been difficult. The MTaPS team meets regularly to brainstorm and identify and streamline the data management options that offer the best fit for DNF's needs.

ACTIVITIES FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES (2019)
Support DNF in submitting request for ethical approval	Develop the protocol and supporting documents in line with guidance provided by the national ethics committee; translate the protocol	By July 10
Obtain ethical approval from national ethics committee	Submit request for ethical approval to the national ethics committee	By July 13
Develop training materials and SOPs	Develop all SOPs and training materials for implementation of active surveillance	By July 31
Translation of document	Translate all the documents into Portuguese; these include the active surveillance strategy, implementation plan, all questionnaires, the protocol, and all SOPs and training materials	July 11-August 10
Train site teams	Train 60 participants on conducting active surveillance	August 12-19
Enroll patients	Commence enrollment of patients into cohort	September I
Electronic data management	Develop electronic tool for management of active surveillance data	June-September
Finalize technical report	Technical report detailing findings and recommendations for revisions to pharmaceutical legislative framework, including medicine registration will be submitted	July 2019

NEPAL

SUMMARY OF ACTIVITIES THIS QUARTER

After the USAID Nepal Mission's buy-in, an MTaPS home office team made a scoping visit to Nepal May II-24, 2019. During the visit, the MTaPS team met the USAID team (in-briefing and de-briefing), Ministry of Health and Population, Department of Drug Administration (DDA), Department of Health Services, WHO, USAID implementing partners, Association of Pharmaceutical Producers of Nepal, and other stakeholders, including professional associations. The MTaPS team also facilitated a consultative meeting with DDA officials to discuss potential activities for the year I work plan.

As agreed with the Mission, the MTaPS team developed the draft work plan for year I (July 16, 2019–September 30, 2020) and submitted it to the Mission on June 20, 2019 for their review. Submission of the final version of the work plan is expected on July 12, 2019.

Activities in the proposed work plan are:

- Activity I.I.I: Assist in reconfiguring Nepal's Department of Drug Administration's (DDA) organizational structure, taking account of the decentralization policy
- Activity 1.2.1: Review the draft amendments to the Drug Act and provide support to modify them and/or include additional provisions
- Activity 1.2.2: Map and appraise the DDA's current regulations (rules and codes)
- Activity 2.2.1: Conduct interim external Global Benchmarking Tool assessment in collaboration with WHO, and assist the DDA to update the institutional development plan and develop a five-year strategic plan
- Activity 2.2.2: Assist the DDA to develop a quality management system
- Activity 3.1.1: Develop a system requirements specifications document for selected modules of an integrated electronic regulatory management information system and initiate software development

Recruitment and onboarding of local MTaPS staff: Recruitment is ongoing for both technical and operations positions and will continue into next quarter.

Office set-up: MTaPS identified an office space and a lease agreement drafted. A local law firm is working on legal registration in Nepal.

ACTIVITIES FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES (2019)
Work plan submission	Submit of FY19 MTaPS/Nepal work plan for approval	July 12
Recruitment and onboarding of local MTaPS staff	Continue recruiting for technical and operational staff	July
Work plan implementation	Work plan implementation will begin once MTaPS receives USAID approval of the work plan and for hiring local staff.	August

THE PHILIPPINES

The goal of the MTaPS/Philippines Program is to establish and institutionalize an integrated health supply and pharmaceutical management system. To achieve the goal, MTaPS/Philippines will provide state-of-the-art capacity building to the Department of Health (DOH) and strengthen procurement and supply chain management (PSCM) and PV functions, including forecasting, procurement, warehousing, inventory management, distribution, and appropriate use across supply chain levels, including point of care. Additionally, in an effort to ensure the uninterrupted availability of health commodities, especially for TB and FP programs, MTaPS will support the establishment and institutionalization of an effective PSCM at the central, regional, and LGU levels. MTaPS will also contribute to patient safety through the establishment of a functional PV system and support to regulatory measures and contribute to overall AMR containment in the Philippines.

OBJECTIVE 1: PHARMACEUTICAL SECTOR GOVERNANCE STRENGTHENED

MTaPS/Philippines has supported the DOH in reviewing and finalizing the national strategic plan for strengthening procurement and the supply chain management system and associated implementation plan. MTaPS facilitated a national stakeholder consultation workshop for the strategic plan and organized a separate workshop for incorporating reviews and suggestions from stakeholders in the process of finalizing the strategic plan.

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

MTaPS supported the DOH in conceptualizing and developing framework agreements as a procurement mechanism to address current issues related to procurement failure. MTaPS organized learning sessions with the DOH to present international best practices in procurement mechanisms and options for the DOH under the current procurement laws and multi-year obligatory authority. The DOH has accepted the idea of piloting multi-year framework agreement arrangements with prequalified suppliers for five products in their next procurement cycle.

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

MTaPS organized a learning session with the DOH on electronic logistic management information systems (eLMIS) to build understanding and clarity on expectations and use of eLMIS to strengthen pharmaceutical systems. MTaPS also supported the DOH in analyzing the national eHealth framework and relevant provisions under the universal health coverage (UHC) law to envision the requirements for eLMIS that would make it interoperable with other information systems under a common enterprise architecture. MTaPS advocated for a state-of-the-art eLMIS solution and facilitated meetings among various units of DOH and PhilHealth to reach a common understanding about an eLMIS solution. While PhilHealth is moving forward with implementing other information system solutions, including electronic medical records and enterprise resource planning for service delivery points, the DOH has requested MTaPS' support developing a terms of reference and conducting a pre-bidding market survey for a ready and customizable eLMIS solution for the Philippines.

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

MTaPS supported the DOH in identifying areas related to PSCM for implementation rules and regulations (IRR) for the UHC Act. MTaPS analyzed the UHC Act, identified areas with PSCM implications, and conducted advocacy and learning sessions with high-level DOH officials. As a result, DOH's PSCM team has formally advised the relevant technical working group in the DOH to incorporate PSCM-related components into the UHC IRR.

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

MTaPS has supported the National TB Program (NTP) in collecting and analyzing service delivery point-level consumption and stock data to identify facilities with overstock and nearly stock-out situations to support stock realignment and cross-distribution to avoid facility-level stock-out of first-line TB drugs.

Through DOH's Supply Chain Management Office, MTaPS co-facilitated a national workshop for launching and pretesting a warehouse operations management training module.

ACTIVITIES FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES (2019)
	Assist DOH in approving and launching the PSCM national strategic plan	
Strengthen PSCM and PV governance	Develop a national PV strategy	July-September
Sovermance	Develop and put in place stewardship and coordination mechanisms for PSCM and PV	
	Continue learning and advocacy sessions	
Support human resources	Support DOH in finalizing and implementing guidelines for procurement framework agreement	lulu Santamban
development for PSCM and PV	Support DOH in developing a performance management system for PSCM	July-September
	Make institutional arrangements for capacity building in PV	
Support strengthening	Support DOH in procuring and implementing an eLMIS	
information systems for PSCM and PV	Support TB and FP programs in analyzing and using data from existing sources	July-September
	Support DOH to transition procurement of second-line TB drugs from Global Fund to DOH sources	
Support resource management for PSCM and PV	Conduct PSCM systems design	July-September
To For Faile FV	Conduct feasibility assessment for bringing private sector TB service providers under regulatory control	
	Support DOH in quantification of TB and FP commodities	
Support pharmaceutical service	Conduct knowledge, attitudes, and practices study for PV	July-September
delivery [']	Conduct exploratory research on AMR	July-September
	Conduct exploratory research on gender in PSCM and PV	

RWANDA

MTaPS/Rwanda intends to support the country's quality improvement in the development of standards for pharmacy services to accelerate the accreditation system; policy issues to support medicine registration, the regulatory framework, combating antimicrobial resistance (AMR), treatment protocols, and essential medicine listing and monitoring (including for maternal, newborn, and child health); and improving the establishment and function of hospital drug and therapeutic committees (DTCs).

SUMMARY OF ACTIVITIES THIS QUARTER

Work plan development

On March 25, at the request of the Mission, a detailed SOW for MTaPS was submitted. The comprehensive year I annual work plan was submitted to the Mission on March 26. The Mission indicated that concurrence could not be provided by the activity manager for the submitted work plan until such time that the work plan was presented to key governmental stakeholders for inputs and concurrence. The Mission further indicated that the work plan could only be presented by MTaPS incountry staff. As a result of this information, MTaPS prioritized the recruitment process. Three staff onboarded on June 26. MTaPS' regional technical strategy lead is scheduled to be in Kigali from June 29 to July I3 to orient new staff and to facilitate presentation of the year I work plan to key governmental partners.

Recruiting and onboarding staff: A senior technical advisor, finance manager, driver on boarded at the end of this quarter. Interviews remain ongoing for the country program director.

ACTIVITIES FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES (2019)
Presentation of year I work plan	MTaPS year 1 work plan will be presented to key governmental partners for inputs and concurrence	July 1-12
Capability and functionality of electronic pharmaceutical regulatory information system for medicine review	Functionality of the system will be assessed	July/August
Reporting adverse drug reactions by spontaneous reporting system strengthened and use of safety data for management of patients improved	Support Rwanda FDA to develop or adapt and disseminate information and education materials	July/August

SENEGAL

The USAID COR team approved the MTaPS/Senegal's GHSA work plan for FY19 on May 31, 2019. Following the approval, the MTaPS/Senegal team presented the translated French version of the work plan and MTaPS priority activities for this quarter to the MOH and GHSA implementing partners.

RESULT AREA 2: INFECTION PREVENTION AND CONTROL POLICIES AND PRACTICES STRENGTHENED

2.3.1 Conduct a baseline assessment in three targeted hospitals (one each tertiary, regional, and district) with MOH, based on agreed criteria

MTaPS is in the process of planning the baseline situation analysis of targeted hospitals with the National Program for the Fight against Nosocomial Infections (PRONALIN), who advise on the selection criteria for selecting the three hospitals to be prioritized for year I implementation. The selection criteria include the commitment of regional and district leadership, a high level of functionality of hospitals, hospitals receiving support from the USAID-funded, Integrated Service Delivery and Health Behaviors project (Neema), and the level of accessibility of hospitals. MTaPS selected St. Jean de Dieu hospital in Thies (private hospital considered a level 2 hospital), Mame Abdoul Aziz in Tivaouane hospital (level I hospital), and Fann UTH in Dakar (level 3 hospital). MTaPS and the PRONALIN team will continue to do more research on the hospitals while the assessment tool is still under development.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

3.1.1. Provide technical and financial support for meetings and workshops to develop the national AMS strategy/plan, including completing the ongoing revision process of the policy and standard treatment guidelines on antibiotic therapy

In May 2019, MTaPS/Senegal met with the PRONALIN coordinator and updated her on the work planning process and approved work plan activities. She stressed that, although all activities of the work plan are important, the most pressing activity is finishing revising the antibiotic therapy standard treatment guidelines (STGs), which had stopped due to lack of funding. The PRONALIN coordinator invited the team to join the working groups of the national committee on antibiotic therapy.

On June 18, MTaPS participated in another meeting held with the PRONALIN coordinator, who had recently been nominated director of quality for security and hygiene (directly reporting to the General Directorate of Health Facilities at the MOH). During the meeting, PRONALIN requested MTaPS' support for revitalizing the national antibiotic therapy committee with the review and update of the antibiotic usage guide. MTaPS will assess the existing support from other stakeholders in order to ensure a complementary contribution that adds value in revitalizing the national antibiotic committee.

MTaPS integrated the four sub-technical groups of the national committee working on the following themes: antibiotic therapy policy, community antibiotic therapy of adults and children, community infections, antibiotic therapy of health care-associated infections, and antibiotic prophylaxis. Each technical working group has the mandate to review the STG document related to its group theme, identify areas using evidence-based information from reliable scientific local and international sources, and propose recommendations that take into account feasibility in the local context. One critical area of technical contribution for MTaPS is to help the committee understand the importance of and adopt the WHO's Access, Watch, and Reserve (AWaRe) categorization of antibiotics, which was not considered

in the 2018 revised version of the National List of Essential Medicines and Health Products. The WHO has agreed to follow up with their Regional Bureau of Africa office to collect and share any documents, preferably in French, pertaining to AWaRe categorization of antibiotics in support of the working groups of the national committee on antibiotic therapy.

3.2.1 In close collaboration with USAID HRH2030, conduct meetings with MOH (General Secretary, Human Resources Directorate, and Informatics Unit) and other relevant stakeholders to secure buy-in for including IPC and AMS topics in the Ministry's e-learning platform

For HRH2030, MTaPS met with the head of the Directorate General of Health (DGS)/MOH's laboratories to discuss the process of using the MOH's e-learning platform to integrate AMR and AMS modules for leaders, managers, and health care workers. Following this meeting, MTaPS met separately with the USAID-funded HRH2030 and Neema programs to discuss opportunities for synergizing the use of the e-learning platform with HRH2030 and the IPC and continuous quality improvement (CQI) activities with Neema, as both of these programs overlap with MTaPS' planned activities.

On June 19, 2019, MTaPS met with HRH2030, Neema, and both the administrators of the e-learning platform and the human resources training division in the MOH to discuss the modalities and procedures involved in integrating the IPC/AMR training modules into the platform. During the meeting, the MOH Informatics Unit provided an overview of usage and the modules already implemented on the platform. Neema shared learning experiences from previous e-learning activities, specifically discussing costs and procedures for developing modules. A follow-up meeting is being planned to present the platform and draft a roadmap for next steps required for integrating the IPC/AMR and AMS modules. The agreed next steps include:

- Organizing a workshop to present the selected modules to the MOH Informatics Unit and have them
 design the scenarios to adapt the e-learning formats with audio and video tutorials
- Assessing the need for customizing the training for health facility maintenance workers with low literacy and technology capacities

IMPLEMENTATION CHALLENGES

- The country legal registration authorizing MSH to operate in Senegal is still pending government approval. Therefore, MTaPS cannot fully operate at the level needed to begin implementation.
- The sublease contract between MSH and FHI 360 is not finalized yet. As such, MTaPS personnel cannot move into the office space. In the interim, FHI 360 is allowing MTaPS staff to hold meetings in their office.
- The ongoing Senegalese presidential reform for phasing out the position of the Prime Minister (PM) contributes greatly to delaying GHSA activities, including those of the One Health Secretariat initially located in the PM's office. MTaPS shall continue to monitor the situation and take any opportunity to meet with the One Health Secretariat to present approved MTaPS work plan activities.
- The Government of Senegal will host an international conference on health security the second half
 of July 2019. Almost all the counterparts will spend most of their time preparing for the event.
 Therefore, MTaPS expects delays in implementing activities.

ACTIVITIES EVENTS FOR NEXT QUARTER ACTIVITY DESCRIPTION DATES (2019) Plenary meeting of the national committee followed by a workshop will be convened in August to finalize STGs Support the national committee on July 29-August 20 antibiotic therapy to develop the national AMS strategy/plan Support the MOH to monitor and document the implementation process of the IPC and AMS e-Support the MOH in developing a roadmap, selecting priority modules, and target trainees for an initial testing of using the July 25 e-learning platform for IPC & AMS learning modules Support the MOH in reviewing and updating the previous tools used for IPC evaluation in hospitals by the WHO $\,$ Develop the protocol and the tools July 25 of the baseline assessment Select three hospitals based on agreed criteria with the MOH Confirm the selection of the three hospitals for baseline assessment and support the MOH in elaborating the TOR for July 20-August 15 the baseline assessment

TANZANIA

RESULTS AREA I: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

Activity 1.1.1: Enhance multisectoral coordination to improve AMR containment

MTaPS/Tanzania was introduced to the multisectoral coordination committee and highlighted key activities that will be undertaken to strengthen the committee. MTaPS will engage the One Health coordination desk from the Prime Minister's Office to collaborate further on activities to strengthen inter-sectoral coordination, including conducting a needs assessment to update TOR.

RESULTS AREA 2: INFECTION PREVENTION AND CONTROL (IPC) POLICIES AND PRACTICES STRENGTHENED

The program director met MOH counterparts represented by the Pharmaceutical Services Unit (PSU), Directorate of Human Resources (DHR), Directorate of Health Quality Assurance (DHQA) and the laboratory. The director held discussions with the MOH and presented the MTaPS work plan and key result areas. The PSU and the IPC section made presentations to highlight progress and situations in the two areas. The two parties agreed on mutual collaboration and transparency, both technical and financial, and the need to engage zonal health resource centers and the DHR for activities that would address human resources capacity building. There was consensus that implementing the program through existing government structures will foster program sustainability and collaboration.

Activity 1.2.1: Support the publication, launch, and dissemination of the latest MOH-approved (signed) national IPC guides

MTaPS worked collaboratively with the IPC TWG to prepare materials for dissemination of the newly developed IPC guide in Dodoma (May 20-24). The main objectives of the workshop were to finalize the draft PowerPoint slides as per the new IPC guidelines for each chapter to ensure alignment with the new IPC guidelines (while observing the standards for training facilitation) and to propose and align new areas and updates as per the new IPC guidelines and WHO recommendations.

MTaPS, in collaboration with the IPC TWG, identified areas within the guideline that need further edits before printing and dissemination. MTaPS Technical Advisors provided technical support during the entire process, including editing the document.

MTaPS also supported revising IPC standards (June 11-15) to align with the updated IPC guide. Standards are now updated for hospital, health center, and dispensary levels. The revised IPC standards will provide updated guidance for health care providers to adhere to IPC.

MTaPS started the process of institutionalizing IPC e-learning methodologies for in-service. MTaPS held a meeting with the DHR and the DHQA and strategized ways to introduce the program. The group identified Morogoro Center for distance education under the MOH, which is mandated to certify and accredit e-learning courses linking to CPD award. The Center had allowed MTaPS to use the Moodle open source platform to host e-CPD courses for IPC. MTaPS will engage professional associations and zonal health resources centers in the next quarter to determine CPD credit points and to transform the IPC curriculum to suit the need of the platform.

RESULTS 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

MTaPS worked collaboratively with MOH, WHO, CDC, Sokoine University of Agriculture, and representatives from the environmental sector and the National Medical and Therapeutic Committee (NMTC) to finalize review of the antimicrobial stewardship policy guideline. MTaPS intends to engage more technical expertise to produce a quality document to guide AMS implementation in Tanzania.

Recruitment and onboarding of local MTaPS staff: A Senior Technical Advisor assumed duty in June and underwent orientation. MTaPS/Tanzania is in the process of recruiting a finance specialist and technical advisor and both positions are expected to be filled next quarter.

ACTIVITIES FOR NEXT QUARTER		
ACTIVITY	DESCRIPTION	DATES (2019)
Build capacity for the NMTC	Capacity building for NMTC will be key to enhancing facility- and district-based committees to carry out AMS activities.	July
Disseminate guideline	Newly developed IPC guideline will be disseminated to key leadership in eight Ebola-prone regions, including regional health management teams.	July 10
Finalize review of the AMS policy guideline	Guideline (with sections for animal and human sectors) is meant to standardize AMS activities at the facility level.	July 5
Conduct antimicrobial utilization survey	Collaborators will be engaged to assist in carrying out the utilization survey at the national level to inform antimicrobial use.	July 20
Strengthen institutional capacity to host eLearning	e-Learning will be linked to CPD credit points according to the MOH CPD framework.	July
Promote CQI methodology	CQI shall consist of peer-to-peer assessment and some external support to promote adherence to IPC standards.	August 15
Strengthen governance on multisectoral collaboration	Multisectoral coordination is at the core of One Health. We will promote and advocate for the One Health coordination mechanism to address AMR.	August

UGANDA

The MTaPS/Uganda strategy aims to work with the government to set up a national program for AMR that uses multi-sectorial coordination mechanisms to implement evidence-based recommendations to improve the country's JEE scores for antimicrobial resistance, emphasizing infection prevention and control (IPC) and antimicrobial stewardship (AMS).

RESULT AREA I: EFFECTIVE MULTISECTORAL COORDINATION OF AMR

Activity 1.1.1: Work with National Antimicrobial Resistance Sub-Committee (NAMRsC) to set up IPC and AMS technical working committees (TWCs).

Entry meetings were held with the national focal person for IPC and the chairperson of the NAMRsC about the need and timelines for activation of the national IPC and AMS TWCs. The approach to appointment and composition of the committees was agreed upon. Next steps include the NAMRsC requesting ministries to formally appoint members to the TWCs. Formation of the TWCs is expected to be completed next quarter.

RESULT AREA 2: IPC POLICIES AND SERVICES STRENGTHENED

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

During the reporting period, MTaPS supported the MOH in conducting a national baseline survey of IPC practices in the country. In addition to informing MTaPS interventions, the baseline survey findings will also inform the 2019 WHO Global Survey on Infection Prevention and Control and Hand Hygiene. The survey was conducted at the national and health-facility levels. At the national level, the WHO core components for the IPC programs' national-level assessment tool was completed by the national IPC focal person at the MOH. At the health-facility level, the survey was undertaken using four standard WHO tools:

- 1) WHO Infection Prevention and Control Assessment Framework
- 2) WHO Hand Hygiene Self-Assessment Framework
- 3) WHO Hospital Acquired Infections Point Prevalence survey tool (modified for the survey)
- 4) WHO hand hygiene observation form

At the sub-national level, 42 health facilities were assessed by 32 national trainers who completed a one-day training program. The 42 health facilities that participated in the baseline survey were selected with the guidance of the MOH and included large and small public health facilities, private not-for-profit health facilities and private health facilities. Geographical distribution of health facilities was considered during the selection process. The survey was completed over two weeks, with each health facility assessed over one to three days, depending on the size. Data from two of the tools was submitted to the WHO online platform by assessors as part of the requirements for the global IPC survey. Other data collection tools were submitted to Makerere University School of Public Health to lead the data analysis and report writing process. The baseline report will be completed by the end of Q4 and the findings subsequently disseminated.

RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED (AMS)

Activity 3.1.1: Work with National Drug Authority (NDA) and Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF) to update the EML for veterinary use and develop guidelines on the use of antimicrobials in the animal sector

Discussions with the Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF) about the support for implementing activity 3.1.1 which aims to update the essential medicines list (EML) and develop simple guidelines and job aids for using antibiotics in the animal sector, under result area 2. A follow-on one-day meeting to finalize the implementation roadmap for this activity is scheduled for Q4.

Discussions with the MOH's Pharmacy Department about support for the Appropriate Medicines Use (AMU) Division, which is also the secretariat for AMS in the country. Brainstorming on the necessary support for the AMU Division was done, and strategies for implementation of AMS and setting up centers of excellence using the existing medicines and therapeutic committees (MTCs) were discussed. During this meeting, MTaPS was introduced to the Pharmacy Department.

Activity 3.5.1: Increase AMR awareness in animal sector

MTaPS held an introductory meeting with FHI 360 who will support the MTaPS in developing a communication strategy for creating awareness of the burden of AMR in the animal health sector. FHI 360 will develop innovative messages to communicate the AMR burden in the agricultural sector. Subsequent meetings are planned to develop a schedule of activities and map key stakeholders.

Recruitment and onboarding of local MTaPS staff: A senior technical advisor has been hired who will also be the lead for MTaPS/Uganda. Candidates for a senior technical advisor and technical advisor are pending approval from USAID. The process of filling the positions of senior accountant and operations specialist began and are currently ongoing with interviews scheduled for next quarter.

ACTIVITIES FOR NEXT QUARTER			
ACTIVITY	DESCRIPTION	DATES (2019)	
Inauguration and training of IPC TWC	Conduct one-day inauguration meeting; hold a weeklong training on management of IPC programs	August	
Training IPC committees, prioritization of interventions	Conduct training of IPC committees, prioritize multimodal interventions for filling gaps identified during baseline survey, and develop work plans	August/September	
Develop work plan and strategy with MAAIF and National Drug Authority (NDA) on development of EML	Meeting with MAAIF and NDA to develop an EML for agriculture; hold a five-day workshop with MAAIF to review existing EML and antibiotic use guidelines	July/August	
Gap analysis of MTC implementation in seven regional referral hospitals (RRHs)	Working with MTCs, conduct a baseline survey of AMS in seven RRHs	July	
Training MTC, prioritization of interventions	Conduct training of MTCs, prioritize multimodal interventions for filling gaps identified during baseline survey, and develop work plans	August/September	
Identify standards of data and data sources for AMS at NDA	Meetings and discussions with NDA to identify standards of data and data sources required for data and information exchange	August	

MONITORING, EVALUATION, AND LEARNING

Program Monitoring, Evaluation, and Learning (MEL) Plan

A final draft of the program MEL plan was submitted to USAID for approval in Q3. The plan encompasses an overarching approach for baseline evaluation and the USAID mid-term evaluation. The plan includes a list of key performance indicators with draft performance-indicator reference sheets. It also presents the program's data collection, reporting, data quality assurance, and data management system and knowledge management and learning strategy.

Theory of Change

MTaPS detailed the program's theory of change (TOC) as an organizing framework for performance measurement and developed a diagram that illustrates the pathways for attaining the program's goal and objectives.

Performance Indicators

MTaPS developed performance indicators to effectively monitor program outputs and outcomes, guided by the program results framework and TOC. Sources of indicators included USAID standards/ requirements, the MSH PSS Insight Tool, guidelines developed by WHO, and country strategies. MTaPS categorized the indicators as follows:

- Level I: MTaPS global program-level indicators are most often measured in units of countries and are aggregations of level 2 indicators.
- Level 2: Country-level metrics that capture the results of MTaPS implementation efforts in each country portfolio. Level 2 indicators inform or feed into a level 1 indicator.
- Level 3: Custom indicators that fall outside the realm of level 1 and level 2 indicators.

In Q4, MTaPS will finalize the mapping of custom indicators to the overall MTaPS program result areas to ensure alignment with the program results framework and TOC.

Partner Consultations on Performance Indicators

The MTaPS strategic alignment meeting in April presented an opportunity to consult with consortium partners to solicit their feedback on level 1 and level 2 indicators. The MEL team held a World Café session on April 3 to introduce these indicators to partners in attendance and gather feedback. As a follow up to the World Café, MTaPS consulted with partner Boston University to validate the selection of eight long-term outcome indicators from the MSH PSS Insight tool. These eight indicators will measure the strength of a country's pharmaceutical system and progress toward (long-term) desired health outcomes. Additionally, MTaPS consulted with partner R4D to strengthen pharmaceutical systems financing (objective 4) indicators. MTaPS also consulted with partner OSC to ensure that indicators are gender sensitive and gender inclusive. MTaPS took partners' feedback and inputs into consideration when defining and finalizing level 1 and level 2 indicators.

Baseline Assessment Approach and Protocol

MTaPS developed an overarching approach and methodology for conducting baseline assessments at the country level within three months of a country's work plan approval. The baseline assessments will establish reference points for future evaluations. The detailed baseline methodology will be finalized simultaneously with the MTaPS country MEL plans.

MTaPS will implement baseline assessments in each country it supports to generate values for evaluating (I) the change in the pharmaceutical system due to program interventions and (2) the extent to which the system ensures sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medicines and medicine-related pharmaceutical services. The baseline assessments

will enable MTaPS to determine how successful its PSS interventions have been in realizing program goals and objectives.

Country MEL Plan Template

MTaPS developed a template and guidance for country teams on developing a country-specific MEL plan. In Q4, MTaPS will finalize and disseminate this template to country teams to use and adapt as needed. In the interim, the MEL team has provided inputs to MEL sections of the work plans for several countries and will support these countries in finalizing country MEL plans using the country MEL template and SOP.

Philippines MEL Plan

MTaPS developed and submitted a draft Philippines country program MEL plan to the USAID/Philippines Mission. The plan presents the country program's TOC as an organizing framework for performance measurement and performance indicators, and it encompasses a learning strategy. Next quarter, MTaPS will develop and submit MEL plans for other country portfolios as needed.

Data Collection and Analysis Platform

MTaPS worked on the configuration of an M&E platform for data collection and analysis. The platform will undergo testing and roll-out in Q4, with all countries using the system by the end of PYI.

Data Dashboards

MTaPS began designing data dashboards for the M&E platform. Next quarter, MTaPS will refine the dashboards to include robust analytic capability and data visualizations at the global, country, and health portfolio levels.

Partner Matrix

MTaPS began developing a matrix that lists each partner's capabilities; expected role in MTaPS implementation (as per the program's proposal); actual/current role in implementation (i.e., what is the partner actually doing within MTaPS); opportunities for future collaboration; and any perceived challenges in the partnership. MTaPS will review this information biannually to assess partner roles and identify actions to ensure optimal utilization. The matrix will also incorporate local organizations and institutions of higher learning as they become involved with the program. MTaPS will complete the partner matrix in Q4 and update it annually.

Data Management Plan

MTaPS developed a data management plan to comply with USAID's policy on submission of data sets to the Development Data Library (DDL). In accordance with the policy, MTaPS will submit a copy of any data set created or obtained in the performance of the contract, including data sets produced by any subcontractor at any tier, next quarter.

Program Website Development and Launch

MTaPS worked with a vendor to develop the program website as per the website development plan. The website was submitted to USAID for approval in June. Launch of the website is contingent upon receiving USAID approval.

Recruitment and Onboarding of MTaPS Staff

The new MTaPS MEL director joined the team in April and next quarter MTaPS will finalize the recruitment of a health informatics specialist to complete the MEL team staffing.

Other Activities

MTaPS provided technical support to NEPAD to develop an M&E tool for the 11 regional centers of regulatory excellence (RCOREs) and to facilitate the tool's validation workshop held in Accra, Ghana, June 25-26, 2019. RCOREs came about as a result of a consortium of partners, representatives from nine of the continent's regional economic communities (RECs), and over 40 national medicine regulatory authorities, which endorsed the African Medicines Regulatory Harmonization (AMRH) initiative in 2009 that was outlined in a consensus plan articulating the way forward toward medicine regulation harmonization on the continent. This initiative evolved into the AMRH program, through which NEPAD—as the technical arm of the African Union—and partners are supporting RECs and their member states to lead medicine regulatory harmonization in their respective countries and to respond to the challenges of increasing access to essential medicines.

ACTIVITIES FOR NEXT QUARTER			
ACTIVITY	DESCRIPTION	DATES (2019)	
Staff onboarding	Initiate MEL onboarding of new staff	July-September	
Program MEL plan	Disseminate USAID-approved program MEL plan	July	
Country program MEL plan(s)	Disseminate Country MEL plan template, adapted for country use	July	
Level 2 indicator data collection tools	Provide level 2 indicator data collection tools	August	
Training on country-level data collection	Provide remote training on level 2 indicator data collection	September	
Training on use of M&E platform	Provide remote training on use of M&E platform	September	
M&E platform launch	Roll out user testing and DHIS 2-based platform at global and country levels	September	
Data verification strategy	Integrate country- and HQ-level data verification strategy into the M&E platform	September	
Baseline assessment	Provide country indicator baselines for countries where activities have started	August	
Field-testing of PSS indicators	Provide field-testing subset of MSH PSS Insight Tool indicators as part of baseline for countries where activities have started	August	
Mid-term evaluation	Provide indicator matrix to assess mid-term evaluation questions (incorporation of program guiding principles) and delineation/incorporation of indicators into program MEL plan	August	
Partner matrix	Finalize partner matrix	September	