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

Improved Access. Improved Services. Better Health Outcomes.


PHOTO CREDIT: WARREN ZELMAN

# FISCAL YEAR 2021 QUARTER 1 (OCTOBER–DECEMBER 2020) REPORT

USAID
FROM THE AMERICAN PEOPLE

# FISCAL YEAR 2021
# QUARTER 1
# (OCTOBER–DECEMBER 2020) REPORT

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

# TABLE OF CONTENTS

# PROJECT OVERVIEW

| | | |
|---|---|---|
| Program Name: | | USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program |
| Reporting Period: | | Fiscal year (FY) 2021 Quarter 1<br>(October-December 2020) |
| Activity Start Date and End Date: | | September 20, 2018–September 19, 2023 |
| Name of Prime Implementing Partner: | | Management Sciences for Health |
| Contract Number: | | 7200AA18C00074 |
| MTaPS Partners: | Core Partners: | Boston University, FHI360, Overseas Strategic Consulting, Results for Development, International Law Institute-Africa Centre for Legal Excellence, NEPAD |
| | Global Expert Partners: | Brandeis University, Celsian Consulting, Deloitte USA, Duke-National University of Singapore, El Instituto de Evaluacion Technologica en Salud, IC Consultants, MedSource, IQVIA, University of Washington |
| | Capacity Resource Partners: | African Health Economics and Policy Association, Ecumenical Pharmaceutical Network, U3 SystemsWork, University of Ibadan, African Collaborating Centre for Pharmacovigilance and Surveillance, Kilimanjaro School of Pharmacy, Muhimbili University, Pharmaceutical Systems Africa |
| | Collaborators: | International Pharmaceutical Federation, Howard University, University of Notre Dame, WHO, World Bank |

## Recommended Citation



2021. *USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program: Quarterly Report Fiscal Year 2021 Quarter 1 (October-December 2020).* Submitted to the U.S. Agency for International Development by the USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program. Arlington, VA: Management Sciences for Health, Inc.

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

# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| ABHR | alcohol-based hand rub |
| ADR | adverse drug reaction |
| ADRAC | Adverse Drug Reaction Advisory Committee |
| aDSM | active drug safety monitoring and management |
| AIDS | acquired immunodeficiency syndrome |
| AMR | antimicrobial resistance |
| AMRH | African Medicines Regulatory Harmonization |
| AMS | antimicrobial stewardship |
| ARTI | acute respiratory tract infection |
| ARV | antiretroviral |
| ASEAN | Association of Southeast Asian Nations |
| ATC | Anatomical Therapeutic Chemical |
| AWaRe | access, watch and reserve (WHO) |
| BCC | behavior change communication |
| CDC | Communicable Disease Control (Bangladesh) |
| CDC | US Centers for Disease Control and Prevention |
| CIAPOL | Ivorian Anti-Pollution Center |
| CLA | collaborative learning and adapting |
| COI | conflict of interest |
| COR | contracting officer representative |
| CPD | continuous professional development |
| CQI | continuous quality improvement |
| CRO | Oceanography Research Center |
| CSL | Commodity Supplies and Logistics |
| CSO | civil society organization |
| CTD | common technical document |
| CUK | University of Kinshasa Teaching Hospital |
| D10 | 10ème Direction |
| DAMS | Drug Administration Management System (Nepal) |
| DDA | Department of Drug Administration |
| DDD | defined daily dose |
| DDL | Development Data Library |
| DEC | Development Experience Clearinghouse |
| DFRS | Directorate of Training and Health Research |
| DGDA | General Directorate of Drug Administration |
| DGFP | Directorate General of Family Planning (Bangladesh) |
| DGHS | General Directorate of Hospital Services |
| DGOGSS | General Directorate for the Organization of Health Care |
| DGS | General Directorate of Health |
| DMAP | Data Management and Analytics Platform |
| DMHP | Directorate of Hospital and Proximity Medicine |
| DOH | Department of Health |

| | |
|---|---|
| DPM | Directorate of Pharmacy and Medicine |
| DPS | division provinciale de la santé |
| DQSHH | Directorate of Hospital Quality, Security, and Hygiene |
| DRA | Drug Regulatory Authority |
| DRC | Democratic Republic of the Congo |
| DSFGS | Direction pour de la Santé de la Famille et Groupe Specifique (DRC) |
| DSV | Directorate of Veterinary Services |
| DT | dispersible tablet |
| DTC | drug and therapeutics committee |
| DTG | dolutegravir |
| EAC | East African Community |
| eAMS | electronic asset management system |
| ECOWAS | Economic Community of West African States |
| EDT | electronic dispensing tool |
| eLMIS | electronic logistics management information system |
| EML | essential medicines list |
| EMP | essential medicines and health products (WHO) |
| EWG | Expert Working Group |
| 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 |
| GMP | Good Manufacturing Practices |
| GRevP | Good Review Practices |
| HCAI | healthcare-associated infection |
| HIPC | hygiene and infection prevention and control |
| HIV | human immunodeficiency virus |
| HTA | health technology assessment |
| HZ | health zone |
| ICC | infection control committee |
| IDDS | Infectious Diseases Detection and Surveillance Program |
| IGAD | Intergovernmental Authority on Development |
| IHR | International Health Regulation |
| ILI-ACLE | International Law Institute-African Center for Legal Excellence |
| IPC | infection prevention and control |
| IPCAF | Infection Prevention and Control Assessment Framework |
| IPCAF | Infection Prevention and Control Assessment Framework (WHO) |
| IPCAT2 | IPC assessment tool |
| IPRA | Ivorian Pharmaceutical Regulatory Authority |
| JAG | joint action groups |
| JEE | joint external evaluation (of International Health Regulations [2005] core capacities) |

| | |
|---|---|
| KEML | Kenya Essential Medicines List |
| KM | knowledge management |
| KMITS | Knowledge Management and Information Technology Service |
| LANADA | National Laboratory for the Support of Agricultural Development |
| LDP+ | Leadership Development Program Plus |
| LGU | local government unit |
| LMICs | low- and middle-income countries |
| LMIS | logistics management information system |
| M&E | monitoring and evaluation |
| MAAIF | Ministry of Agriculture, Animal Industry, and Fisheries |
| MCC | Multisectoral Coordination Committee |
| MCCH | Maternal Child and Community Health |
| MCG | Multisectoral Coordination Group |
| MCH | maternal and child health |
| MDG | Millennium Development Goal |
| MDR | multidrug resistant |
| MEL | monitoring, evaluation, and learning |
| MESRS | Ministry of Higher Education and Scientific Research |
| MINADER | Ministry of Agriculture and Rural Development |
| MIRAH | Ministry of Animal and Fisheries Resources |
| MNCH | maternal, neonatal, and child health |
| MOH | Ministry of Health |
| MOHCDGEC | Ministry of Health, Community Development, Gender, Elderly and Children |
| MOHFW | Ministry of Health and Family Welfare |
| MOHP | Ministry of Health and Population |
| MOU | memorandum of understanding |
| MSC | multisectoral coordination |
| MSH | Management Sciences for Health |
| MSHP | Ministry of Health and Public Hygiene |
| MSR | medical surgical requisites |
| MTC | medicines and therapeutics committee |
| MTC | Multisectoral Technical Committee (Côte d'Ivoire) |
| MUHAS | Muhimbili University of Health and Allied Sciences |
| NAMRAC | National Antimicrobial Resistance and Containment Advisory Committee (Ethiopia) |
| NAMRsC | National Antimicrobial Resistance (AMR) Sub-Committee |
| NAP | National Action Plan |
| NC-AMR | National Commission on Antimicrobial Resistance |
| NCAT | National Committee for Antibiotic Treatment (Senegal) |
| NDA | National Drug Authority |
| NEPAD | New Partnership for Africa's Development |
| NGO | nongovernmental organization |
| NMTC | National Medicines and Therapeutics Committee |
| NTP | national tuberculosis program |
| OH | One Health |

| | |
|---|---|
| OHP | One Health Platform |
| OIE | World Organization for Animal Health |
| ORMICI | Observatory on Antimicrobial Resistance in Cote d'Ivoire |
| OSC | Overseas Strategic Consulting |
| PD | Pharmacy Department |
| PEPFAR | US President's Emergency Plan for AIDS Relief |
| PLMC | Procurement and Logistics Management Cell (Bangladesh) |
| PMED | Pharmaceuticals and Medical Equipment Directorate (Ethiopia) |
| PMIS | pharmaceutical management information system |
| PNAM | National Medicines Supply Program (DRC) |
| PNDAP | National Program for the Development of Pharmaceutical Activity |
| POPCOM | Commission on Population (Philippines) |
| PPB | Pharmacy and Poisons Board (Kenya) |
| PQM+ | Promoting the Quality of Medicines Plus Program |
| PSCM | procurement and supply chain management |
| PSCMT | Procurement and Supply Chain Management Team (Philippines) |
| PSM | procurement and supply management |
| PSS | pharmaceutical systems strengthening |
| PV | pharmacovigilance |
| PViMS | pharmacovigilance monitoring system |
| PY | program year |
| QMS | quality management system |
| RCORE | regional center of regulatory excellence |
| RH | reproductive health |
| RHSC | Reproductive Health Supplies Coalition |
| RMNCH | reproductive, maternal, newborn, and child health |
| RSS | regulatory systems strengthening |
| SADC | Southern African Development Community |
| SCMP | Supply Chain Management Portal |
| SEARN | Southeast Asia Regulatory Network |
| SEARO | WHO regional offices for South-East Asia |
| SIAPS | Systems for Improved Access to Pharmaceuticals and Services |
| SOW | scope of work |
| SPRINT | Scaling Pneumonia Response Innovations |
| STG | standard treatment guideline |
| TB | tuberculosis |
| TIMCI | Tools for Integrated Management of Childhood Illnesses |
| TLD | tenofovir/lamivudine/dolutegravir |
| TOR | terms of reference |
| TOT | training of trainers |
| TTC | Technical Thematic Committee |
| TWG | technical working group |
| UHC | universal health coverage |
| UN | United Nations |

| | |
|---|---|
| UNCoLSC | UN Commission on Life-Saving Commodities |
| UNDP | United Nations Development Programme |
| USAID | US Agency for International Development |
| VEML | Veterinary Essential Medicines List |
| WASH | water, sanitation and hygiene |
| WHO | World Health Organization |

# INTRODUCTION

## PURPOSE

Funded by the US Agency for International Development (USAID) and implemented by a team led by Management Sciences for Health (MSH), the purpose of the five-year MTaPS Program (2018–2023) is to provide pharmaceutical system strengthening assistance for sustained improvements in health system performance and to advance USAID's goals of preventing child and maternal deaths, controlling the HIV/AIDS epidemic, and combatting infectious disease threats, as well as expanding essential health coverage.

## GOAL

The goal of the MTaPS Program is to help low- and middle-income countries strengthen their pharmaceutical systems to ensure sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medicines, vaccines, and other health technologies and pharmaceutical services.

## MTAPS APPROACH TO STRENGTHENING PHARMACEUTICAL SYSTEMS

USAID awarded the MTaPS Program to enable low- and middle-income countries to strengthen their pharmaceutical systems to ensure sustainable access to and appropriate use of safe, effective, quality-assured, and affordable essential medicines, vaccines, and other health technologies and pharmaceutical services. In this context, "access" refers specifically to affordability, acceptability (or satisfaction), geographical accessibility, availability, and equity (the extent to which pharmaceutical systems deal fairly with population subgroups differentiated along various parameters). "Use" refers to prescribing, dispensing (or sale or supply to the user), and consumption (or end use).

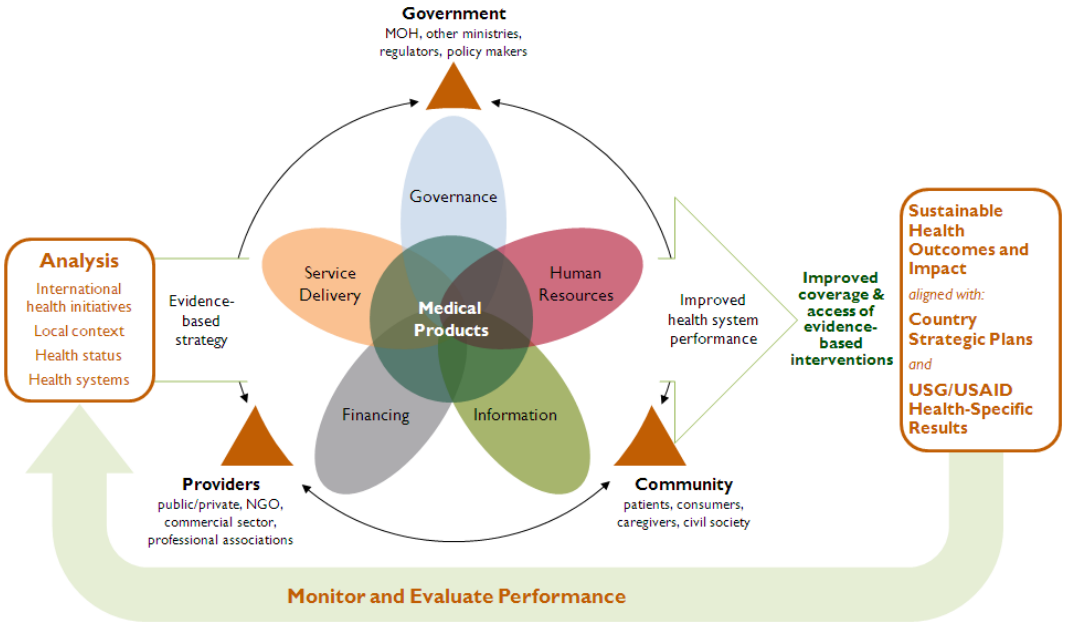



Figure 1. USAID pharmaceutical systems strengthening approach

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

### ABOUT THIS REPORT

This report presents a summary of achievements by portfolio for fiscal year 2021, quarter 1 (October-December 2020). It summarizes program performance and key challenges and is organized by core funding, objective, and country.

Implementation of planned activities this quarter continued to be impacted by the COVID-19 pandemic. Some activities have been delayed or postponed due to the general slowdown of activities and restrictions on gatherings/movement, as well as the limited availability of the staff.

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

## MTAPS RESPONDING TO THE COVID-19 PANDEMIC

Early in 2020, MTaPS received additional funding from USAID to respond to the COVID 19 pandemic in 13 countries (**Bangladesh, Burkina Faso, Cameroon, Côte d'Ivoire, Ethiopia, Jordan, Kenya, Mali, Mozambique, the Philippines, Senegal, Tanzania,** and **Uganda)**. The COVID-19 activities built off the program's existing platforms and best practices. In these countries, the program assists government stakeholders and implementing partners in strategic planning around the COVID-19 response for infection prevention and control (IPC) and emergency IPC supply chain management. Most countries supported by MTaPS completed their work this quarter, though MTaPS will continue supporting COVID-19 activities in Bangladesh and Jordan. Highlights include:

1) Developing COVID-19 IPC e-learning courses in the Bangladesh, Burkina Faso, Cameroon, Jordan, Kenya, Mali, Mozambique, Philippines, Senegal, and Tanzania
   - The Francophone modules are currently being adapted for an MSH program in Haiti
2) In the Philippines, the IPC e-learning modules have been fully transitioned to the government's Department of Health Academy
3) Supporting the development of and training on a COVID-19 commodity tracking system in the Philippines that is used across 1,282 health facilities. To date, there have been no stock-outs of COVID-19 IPC commodities.
   - This activity was presented during the Global Health Supply Chain Submit (GHSCS) 2020 and can be viewed here: https://www.youtube.com/watch?v=zsenyekapW0&feature=youtu.be
4) MTaPS/Uganda helped establish IPC mentorship programs, creating 45 district IPC committees and 486 mentors linked to 858 facilities in 5 regions. Results include:
   - 5,452 health care workers trained through supportive supervision and mentorship
   - Each health facility received 7 mentoring visits over 12 weeks
   - 5,148 mentorship visits were conducted over 12 weeks

Table 1 highlights some additional results as of December 31, 2020; for more information, refer to monthly progress reports on MTaPS COVID-19 activities. For more details on COVID-19 indicators, refer to Annex 3 of this report.

Table 1. Cumulative MTaPS COVID-19 indicators, as of December 31, 2020

| # | Indicator | Total |
|---|---|---|
| 1 | # of MTaPS-supported health facilities whose staff received COVID-19-related IPC training:* | 3,086 |
| 1.a | # of facilities trained in IPC for COVID-19 | 2,594 |
| 1.b | # of facilities trained in emergency supply chain management | 633 |
| 1.c | # of facilities trained in health care waste management (HCWM) | 2,275 |
| 2 | # of health workers who received COVID-19-related training | 40,355 |
| 2.a | female | 22,941 |
| 2.b | male | 17,198 |
| 2.c | sex unknown | 216 |
| 3 | % of MTaPS-supported facilities in compliance with IPC COVID-19 guidelines/SOPs | 46% (700/1,533) |
| 4 | % of MTaPS-supported facilities that report stock data for IPC commodities with required frequency | 97% (721/740) |

* Because some health facilities received training in more than one technical area, indicator1 and sub-indicators 1a, 1b, and 1.c are counted separately to prevent double counting.

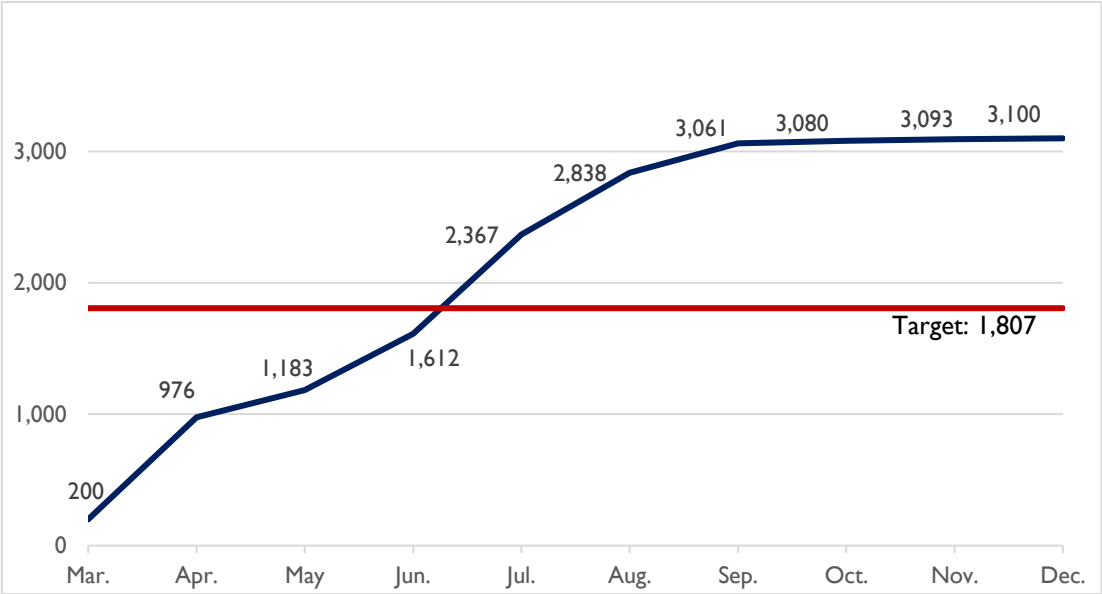



Figure 2. CV 1: Total # of MTaPS-supported health facilities whose staff received COVID-19-related IPC training across all countries

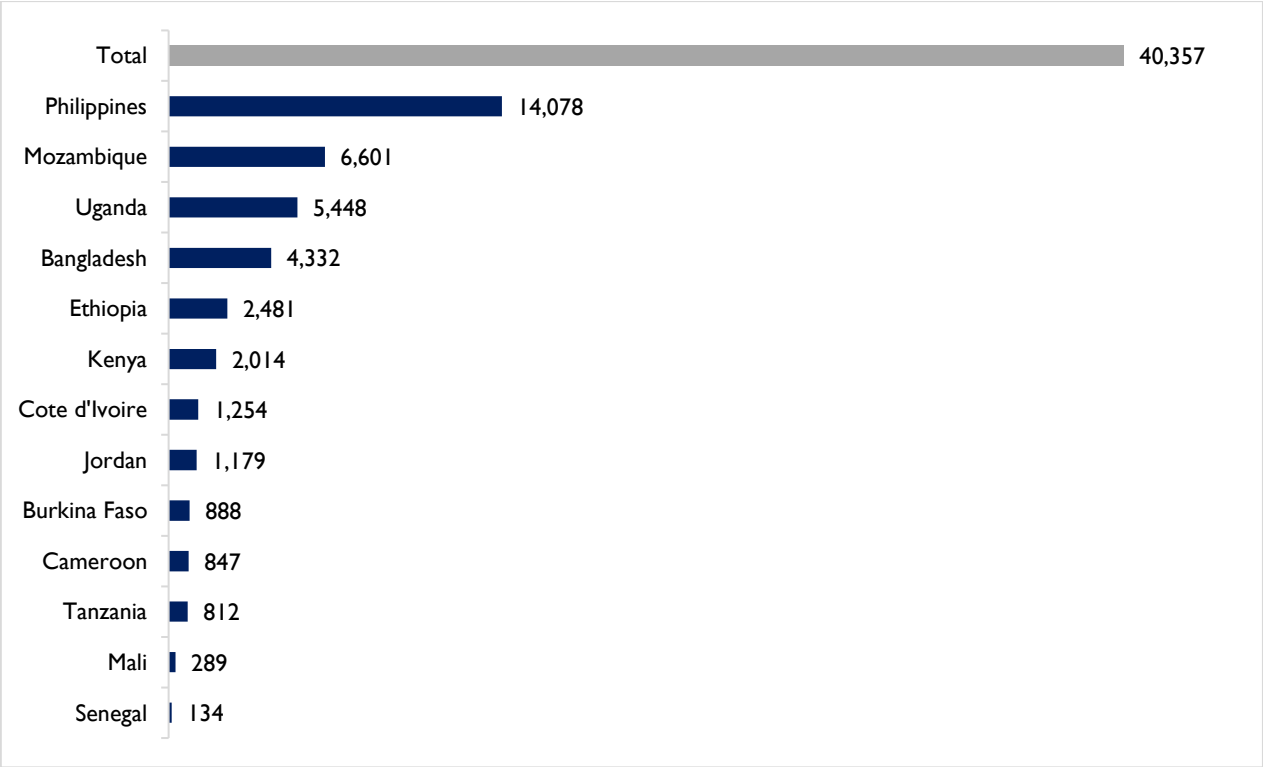



Figure 3. CV 2: Total # of persons who received COVID-19-related training, by country

# PROGRESS BY CORE-FUNDED PORTFOLIO

## COMMODITY SUPPLIES AND LOGISTICS

### ACTIVITY 1: INCREASING GOVERNMENT FINANCING OF FAMILY PLANNING COMMODITIES AND SUPPLY CHAIN IN A DECENTRALIZED HEALTH SYSTEM: A POLITICAL ECONOMY ANALYSIS

In this reporting period, MTaPS refined the scope of work and updated the timeline for the activity after discussion with the USAID's Commodity Security and Logistics (CSL) Division of the Office of Population and Reproductive Health and developed the activity for inclusion in the work plan, which was approved on December 22, 2020. MTaPS worked with the USAID CSL team to elaborate the criteria for selecting a short list of potential countries for the political economy analysis and began collecting data based on these criteria.

### ACTIVITY 2: ADVOCACY FOR GOVERNMENTS TO LEVERAGE PRIVATE-SECTOR LOGISTICS CAPABILITIES TO INCREASE ACCESSIBILITY AND AVAILABILITY OF FAMILY PLANNING COMMODITIES

In this quarter, MTaPS worked with the CSL team to finalize country selection for studying private-sector supply chain operation capability, the cost-benefit analysis, and the political economy analysis. We used five parameters for preliminary country selection: size of donor investment; marked private-sector role; presence of MTaPS, MTaPS partner, Pharmaceutical Systems Africa (PSA), or potential consultants; supply and not demand being a limiting factor; and relative market maturity with a score of 1–3. Based on this selection, we explored interests from the USAID/Mission in the top five countries. In addition, MTaPS facilitated a meeting with the CSL team to align fourth-party logistics provider activities, deliverables, and timelines. MTaPS contracted its partner PSA to conduct this activity.

### ACTIVITY 3: USE OF RETAIL PHARMACIES AS A SOURCE OF FAMILY PLANNING PRODUCTS AND OTHER ESSENTIAL MEDICINES FOR PUBLIC-SECTOR CLIENTS IN LMICS—A THOUGHT LEADERSHIP PAPER

In this quarter, MTaPS had two planning meetings with core partner Boston University School of Public Health (BUSPH) to review and agree on scope of activities, budget, and timelines for deliverables.

## ACTIVITIES FOR NEXT QUARTER

| ACTIVITY AND DESCRIPTION | DATE |
|---|---|
| Activity 1: Conduct a rapid desk review to analyze a set of selection criteria and propose some candidate countries<br>• Work with USAID CSL to identify a country, define the purpose, and obtain USAID and country agreement<br>• Initiate the literature review | January–March 2021 |
| Activity 2: Advocacy for governments to leverage private-sector logistics capabilities to increase accessibility and availability of FP commodities<br>• Facilitate alignment and management meetings with PSA, CSL, and Missions<br>• Conduct desktop reviews and rapid landscape analysis<br>• Finalize methods, data requirements, and tools and commence data collection | January–March 2021 |
| Activity 3: Use of retail pharmacies as a source of family planning products and other essential medicines for public-sector clients in LMICs—a thought leadership paper<br>• Organize the first joint meeting with USAID and BUSPH to align client expectations for thought leadership paper<br>• Initiate the literature review | January–March 2021 |

# GLOBAL HEALTH SECURITY AGENDA

## SUMMARY OF ACTIVITIES THIS QUARTER (FY21Q1)

MTaPS completed a draft for the revision of the Global Health eLearning course on AMR (part 1), which is under internal review, and began work on developing a revision outline for part 2 of the course.

MTaPS coauthored an article on antimicrobial use in Tanzania published in BMJ Open this quarter. In addition to MTaPS, coauthors are affiliated with the Catholic University of Health and Allied Sciences in Mwanza; the Ministry of Health, Community Development, Gender, Elderly, and Children (MOHCDGEC); and MTaPS' partner, the University of Washington. In collaboration with GHSA Consortium and Echo Health Alliance, MTaPS presented at a side meeting at the 6th GHSA Ministerial Meeting, "Moving Toward Best Practices in Multisectoral Coordination"; the side meeting was held on November 4, 2020. Additionally, MTaPS participated in and also served as moderator/rapporteur for group work in the Global Consultative Meeting on WHO Policy Guidance on Integrated AMS Activities in Human Health held virtually on December 2-3, 2020. During the quarter, MTaPS developed and made available on the website a number of documents, flyers, success stories, and blogs promoting our Global Health Security Agenda (GHSA) activities as listed below with their links and the date they were published:

GHSA-SUPPORTED COUNTRIES:

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

*Resources*

- MTaPS GHSA Flyer - November 5, 2020. Available in French and English
- Multisectoral Coordination for the Fight against AMR: The Experience of Côte d'Ivoire - November 6, 2020
- Effective Multisectoral Coordination on AMR: A Landscape of Experiences and Lessons from 11 Countries - November 16, 2020
- Technical Update: Advancing the Global Health Security Agenda - November 24, 2020

*Success stories and blogs*

- New Tools Lay Foundation to Improve Antibiotic Use in the Animal Sector in Uganda - November 10, 2020
- Côte d'Ivoire Launches First-Ever AMS Multisectoral Plan to Combat AMR - December 4, 2020-
- Supporting Infection Prevention and Control in Mali - December 7, 2020. Available in French and English
- The First Therapeutics Committees Implemented in Mali - December 9, 2020. Available in French and English
- New Findings on Antimicrobial Use Across Six Hospitals in Tanzania - December 18, 2020
- Helping Those Protecting Us Against COVID-19: Cleaners, Ambulance Drivers, and Morgue Attendants Receive IPC Training in Mali - December 21, 2020. Available in French and English

Additionally, for World Antibiotics Awareness Week (WAAW), November 18-24, 2020, MTaPS participated in several AMR activities in our supported countries and promoted awareness of AMR through a social media campaign. Details are at the end of the section.

During the quarter, MTaPS started GHSA work in two new countries, Mozambique and Nigeria, while activities in Ethiopia came to a close. In Nigeria, during the reporting period, MTaPS got USAID approval for its GHSA country work plan and recruited a senior technical advisor and technical advisor who will

start next quarter. MTaPS/Nigeria will operate out of the MSH Nigeria offices and leverage access to key finance and administrative staff to support MTaPS program implementation. In Mozambique, MTaPS received approval for the Excel version of its GHSA work plan and subsequently submitted the narrative version; the program is awaiting approval of the narrative work plan but has been given permission to start working. MTaPS is currently recruiting a senior technical advisor and has already engaged a consultant to support IPC activities.

## COUNTRY PROGRESS

The focus of the MTaPS approach and implementation framework is to help countries make progress on the pathway to the next level of WHO Joint External Evaluation (JEE) capacity in multisectoral coordination (MSC), IPC, and AMS. Table 2 highlights the areas that MTaPS supported this quarter.

Table 2. GHSA activities supported this quarter by MTaPS

| GHSA result area | Activity | GHSA-funded country | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Bangladesh | Burkina Faso | Cameroon | Côte d'Ivoire | DRC | Kenya | Mali | Senegal | Tanzania | Uganda |
| Effective MSC on AMR | Strengthening MSC governance structures and functions | | | | X | | X | | | | X |
| | Holding AMR meetings or activities with multisectoral participation | | X | X | X | X | | | X | X | X |
| IPC improved and functional | Assessing IPC programs at national and/or facility levels and/or developing action plans | X | | | | | X | | | X | |
| | Developing and implementing IPC policy and/or guidance documents | | | X | | | X | X | X | | |
| | Developing individual and local capacities | | X | X | | | X | X | X | X | X |
| Use of antimicrobial medicines optimized | Developing AMS policy, plan, and guidance documents, including AWaRe categorization | X | X | X | X | X | X | X | X | X | |
| | Assessing and/or reviewing AMS policies and practices | | | | | X | X | | | X | X |
| | Developing individual and local capacities | | X | X | X | | X | X | X | X | |
| | Increasing awareness of AMR | X | X | | X | | X | X | | X | X |

### EFFECTIVE MSC ON AMR

**Strengthening MSC governance structures and functions.** MTaPS/**Côte d'Ivoire** facilitated a number of meetings to further strengthen MSC governance during the quarter; for example, in November, MTaPS met with the AMR national focal point to discuss ways of enhancing implementation and sustainability of AMR activities, including disseminating documents that outline each AMR entity's roles and responsibilities, providing TOR for each AMR structure, developing an annual work plan to ensure the functionality of the AMR secretariat, and establishing a Governance and Regulatory Medicines and Therapeutics Committee (MTC) (technical working group [TWG]). MTaPS also supported the participation of the AMR-TWG in an assessment of International Health Regulation capacities. Results showed that the implementation of AMR activities in the National Action Plan for Health Security had increased from 0% in 2019 to 40% in 2020 and that AMR had the highest performance level among the six basic capacities in prevention. In **Kenya**, MTaPS worked with the Murang'a County government and the FAO to hold a four-day workshop in November to develop a comprehensive One Health costed

County AMS Committee (CASIC) work plan for 2020-2022. Among the 30 participants were county leadership, including officials for health and agriculture and representatives from IDDS and the FAO Emergency Centre for Transboundary Animal Diseases.

In **Uganda**, MTaPS continued to support the One Health information and document exchange platform that is hosted on MSH servers. A domain (www.namrsc.org) was procured for two years. This online information exchange platform supports MSC, AMS, and IPC activity implementation under the national action plan for AMR (NAP-AMR). Data on the platform includes TWG objectives, TOR, composition, meeting schedules and minutes, reference documents, tools, and research information.

**Holding multisectoral meetings or activities.** Figure 4 shows the number of collaborative meetings and activities during the quarter across 10 countries. For example, MTaPS helped organize a number of multisectoral meetings in **Côte d'Ivoire** during the quarter, including bimonthly meetings of the MTC 4 (IPC TWG) and MTC 5 (AMS TWG); quarterly coordination meetings with the AMR-TWG attended by experts from the MOH, Ministry of Animal and Fisheries Resources, Ministry of Environment and Sustainable Development, Ministry of Agriculture and Rural Development, and AMR national focal points from various sectors; and a meeting in November of the AMR secretariat to review the NAP-AMR and list priority activities. At the MTC 4 meeting in December, MTaPS presented on the milestones leading to the next JEE level in IPC. Côte d'Ivoire plans to complete all level 3 actions in 2021, which requires six actions, of which three are complete. At the MTC 5 meeting in December, a review of the WHO benchmarks for AMS showed that for level 2, Côte d'Ivoire had completed three of four required actions, and for level 3, one had been completed. MTaPS also helped prepare a presentation delivered by the president of the AMR MSC Group to the National One Health Platform and AMR-TWG in November. In **Cameroon**, the MOH asked MTaPS to provide technical support for a validation workshop for the integrated disease surveillance and response guide; in addition to MTaPS and MOH, participants included the Ministry of Environment and Nature Protection, Ministry of Livestock and Animal Husbandry, WHO, IDDS, CDC-Metabiota, and Médecins Sans Frontières.

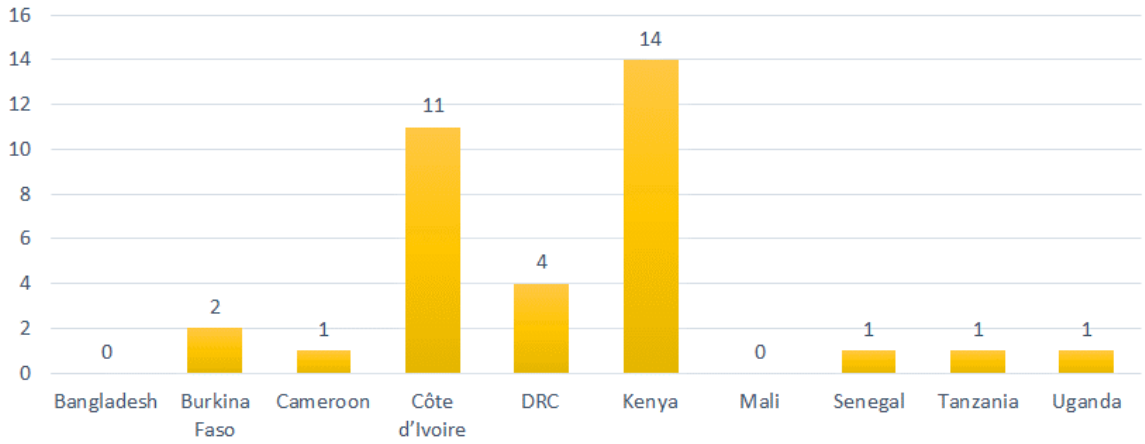



Figure 4. Indicator MSC 1: # of AMR in-country meetings or activities conducted with multisectoral participation

### IPC IMPROVED AND FUNCTIONAL

**Developing and implementing IPC policy and guidance documents.** In **Cameroon**, MTaPS continued to follow up with national stakeholders to integrate inputs from the validation workshop and finalize the national IPC guidelines. MTaPS/**Mali** supported the National MSC Group through the National Directorate of Veterinary Services to validate and finalize IPC guidelines and a national IPC plan for the animal sector. MTaPS is now supporting the publication of these documents. In **Senegal**, MTaPS provided technical and financial support for a workshop to update the IPC guidelines of the Idrissa Pouye General Hospital (a level 3 hospital in Dakar) based on WHO's IPC guidelines and recommendations. The Department of Hospital Quality, Safety, and Hygiene (DQSHH) will use the IPC guidelines from the three MTaPS-supported pilot hospitals to complement the national-level IPC guidelines. MTaPS/**Kenya** supported the review and finalization of the National IPC Policy (2020) and strategic plan (2020-2024) for health care settings.

**Assessing IPC programs at national and facility levels and developing action plans.** MTaPS conducted a national IPC assessment using the IPC Assessment Tool framework in **Tanzania**. This one-day meeting with IPC stakeholders included FHI 360, WHO, and IPC TWG members. The country


Figure 5: National IPC assessment results for Tanzania, December 2020

scored more than 60% in four of six components (figure 5), with a poor score in health care-associated infection surveillance.

MTaPS/**Bangladesh** organized two workshops at Munshiganj District Hospital and Cumilla Medical College Hospital to share the results of last quarter's IPC and AMS assessment findings. The hospitals have revitalized their IPC committees to include TOR, incorporate multidisciplinary members, and assign a focal person to oversee IPC procedures. MTaPS/**Kenya,** in collaboration with the Division of National Patient and Health Care Worker Safety, conducted the quarterly National IPC Advisory Committee Meeting in December. Implementing partners gave updates on IPC activities during the reporting quarter, and the national MOH IPC program gave the status of IPC activities across the country, including achievements and areas of improvement in the context of COVID-19. MTaPS also collaborated with the Kisumu County Health Department in conducting an IPC/AMS midterm assessment in eight facilities. They will use the results to modify their work plans in the two areas.

**Developing individual and local capacities.** In December, MTaPS/**Senegal** helped the DQSHH convene a joint meeting with three IPC pilot hospitals to review accomplishments, experiences, challenges, lessons learned, and the way forward for scaling up IPC programs in all hospitals. MTaPS' support for the design and implementation of the plan of action contributed to significant improvements at the three pilot hospitals in their respective IPC capacity levels: Tivaouane level 1 hospital improved its capacity level from inadequate (100/800) to intermediate (500/800); Thiès level 2 hospital (faith-based

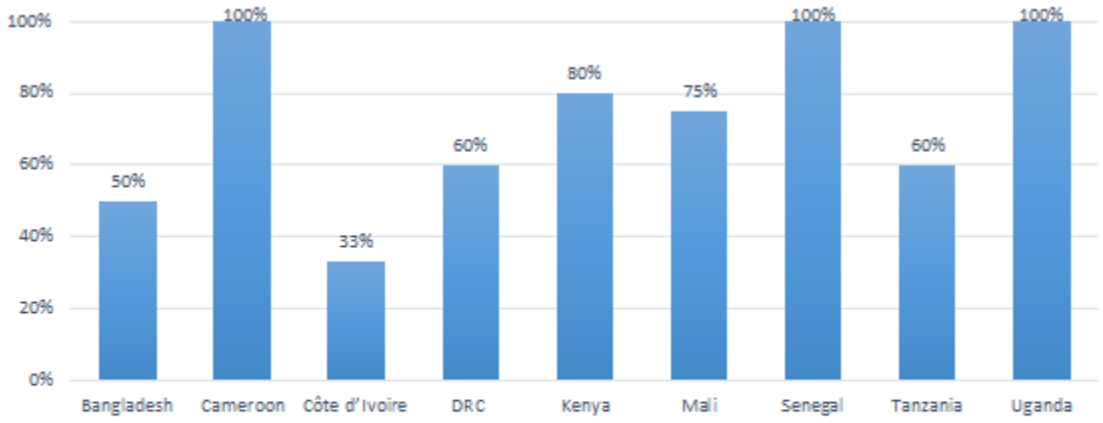
organization/private) improved its capacity level from intermediate (500/800) to advanced (688/800); and Dakar level 3 hospital improved its capacity level from basic (315/800) to intermediate (435/800). The meeting identified 22 best practices for the 8 WHO IPC capacity core components that contributed the hospitals' instituting infection control committees. MTaPS will support the DQSHH in using these best practices to revitalize infection control committees at five additional hospitals. MTaPS/**Tanzania** supported the MOHCDGEC in conducting a two-day training for 17 health care workers from 10 health facilities on Tanzania's national standard-based monitoring and recognition model of improvement in IPC. Facilities will use these standards and assess themselves quarterly and report back to the MOHCDGEC.

Work has begun with professional councils to create AMR awareness among members through targeted IPC and AMS continuing medical education sessions linked to credits in **Uganda;** MTaPS identified the councils and organized orientation meetings. MTaPS/**Mali** is expanding IPC programming to four new facilities (three public and one private sector). MTaPS helped develop TOR and budgets to establish IPC committees. In **Cameroon**, MTaPS held a working session with the Division of Health Promotion to plan the extension of IPC activities, including timelines, in six additional hospitals in four regions. MTaPS/**Kenya** continued to provide technical assistance and mentorship to Nyeri and Kisumu Counties' and facility IPC committees to carry out their IPC work plans; in addition, the team held virtual planning meetings with county and health management teams in two new counties of support, Murang'a and Kilifi. The participants selected two hospitals in each new county to be the focus of IPC and AMS support and developed county IPC and AMS work plans for year 3; additionally, MTaPS met with county and hospital leadership in Kilifi to orient them on IPC and AMS implementation.

Public health officer at Kombewa County Hospital, Kisumu washing hands next to a poster on handwashing technique distributed by MTaPS. (Photo credit: Doris Bota, MTaPS Kenya)

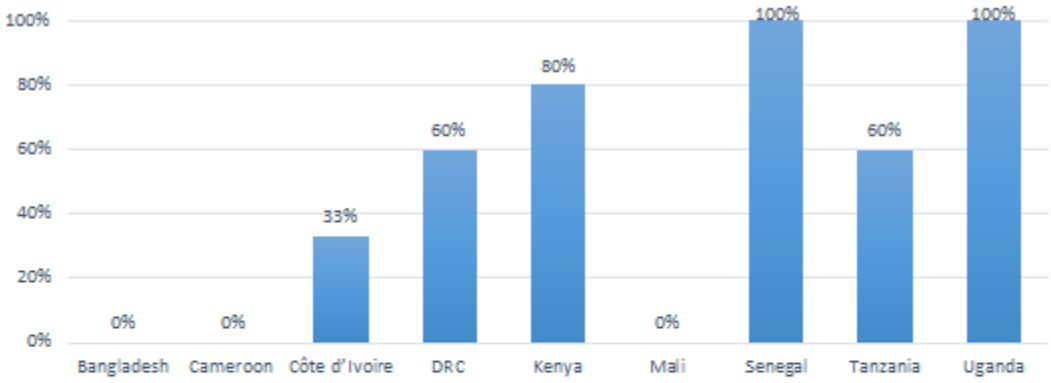
In **Kenya**, MTaPS provided technical and financial assistance during the final TWG meeting to develop the national IPC curriculum and review 19 training modules for technical staff, support staff, and health managers. The draft documents were circulated to a wider range of IPC stakeholders for input. Additionally, the curriculum and training materials for the IPC course to be delivered through professional associations for CPD were also finalized. Subsequently, over the course of the quarter, 3,011 health care workers who are members of the Kenya Pharmaceuticals Association, Kenya Medical Association, NNAK, Pharmaceutical Society of Kenya, and the Association of Kenya Medical Laboratory Scientific Officers were trained. The virtual trainings adopted a hybrid approach, and trainees received CPD points for their relicensure. The Kenya team also participated in an IPC webinar for 30 morticians organized by the MOH Division of Forensic and Pathology Services in October. Topics included chain of infection, COVID-19, post-mortem services and burial procedures, and data management.

During the reporting quarter, all nine of the countries where MTaPS provides support to health facilities in IPC had functional IPC committees (figure 6); in addition, facilities in six countries used continuous quality improvement (CQI) to monitor and improve performance in IPC practices (figure 7).




| | Bangladesh | Cameroon | Côte d'Ivoire | DRC | Kenya | Mali | Senegal | Tanzania | Uganda |
|---|---|---|---|---|---|---|---|---|---|
| Hospital | 50% (1/2) | 100% (6/6) | 20% (2/10) | 60% (3/5) | 79% (15/19) | 67% (6/9) | 100% (3/3) | 60% (6/10) | 100% (7/7) |
| Health Centers | 0% (0/0) | 0% (0/0) | 100% (2/2) | 0% (0/0) | 100% (1/1) | 68% (6/7) | 0% (0/0) | 0% (0/0) | 0% (0/0) |
| Total | 0% (0/2) | 100% (6/6) | 33% (4/12) | 60% (3/5) | 80% (16/20) | 75% (12/16) | 100% (3/3) | 60% (6/10) | 100% (7/7) |

Figure 6. Indicator P 6: # and % of MTaPS-supported facilities with functional IPC committees




| | Bangladesh | Cameroon | Côte d'Ivoire | DRC | Kenya | Mali | Senegal | Tanzania | Uganda |
|---|---|---|---|---|---|---|---|---|---|
| Hospital | 0% (0/2) | 0% (0/6) | 20% (2/10) | 60% (3/5) | 79% (15/19) | 0% (0/9) | 100% (3/3) | 60% (6/10) | 100% (7/7) |
| Health Centers | 0% (0/0) | 0% (0/0) | 100% (2/2) | 0% (0/0) | 100% (1/1) | 0% (0/7) | 0% (0/0) | 0% (0/0) | 0% (0/0) |
| Total | 0% (0/2) | 0% (0/6) | 33% (4/12) | 60% (3/5) | 80% (16/20) | 0% (0/16) | 100% (3/3) | 60% (6/10) | 100% (7/7) |

Figure 7. Indicator IP 5: # and % of MTaPS-supported facilities implementing CQI to improve IPC

### BUILDING INSTITUTIONAL CAPACITY TO MANAGE ELEARNING PLATFORMS FOR IPC AND AMS TRAINING

MTaPS continued to build the capacity of governments and local training institutions to operate eLearning platforms for both preservice and in-service training on IPC and AMS. Overall during the quarter, MTaPS uploaded 10 IPC training modules to 4 platforms (3 in Mali and 1 in Burkina Faso). In Mali, MTaPS helped develop TOR for the official launch of the eLearning platform as well as the budget to train 40 technical staff to manage the platform. MTaPS' handover of the platform began, and the preparatory phase is ongoing. MTaPS Mali also met with the Hygiene sub-directorate of the General Directorate of Public Health and Hygiene to discuss using eLearning to build health care worker capacity in IPC and AMS. In Senegal, MTaPS and Empower conducted a third interactive virtual session to equip the eLearning teams with facilitation skills. During the virtual session, participants were oriented on approaches to online courses (asynchronous, synchronous, and blended learning), facilitation techniques, and the key functions of the Moodle platform.

### USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

**Developing and implementing AMS policy, plan, and guidance documents, including AWaRe categorization.** MTaPS/**Cameroon** helped the AMR MSC committee organize a three-day workshop to validate the multisectoral AMS NAP. This plan is expected to serve as a powerful advocacy tool to help mobilize funds to carry out priority AMS activities in all sectors. In **DRC**, MTaPS assisted the drug regulatory authority with validating the AMS action plan developed in September 2020 with MTaPS' support. Fifty participants from the human, animal, and vegetal sectors attended a two-day workshop to review the draft action plan, which was then presented to the ministry's technical coordination committee for approval. MTaPS also helped **Mali's** National MSC Group through the Directorate of Pharmacy and Medicines (DPM) to develop a national AMS action plan to strengthen AMS in the human and animal sectors. The action plan was validated at a workshop, and MTaPS/Mali, in collaboration with consultants, incorporated the feedback and finalized the plan. MTaPS provided technical and financial support to the One Health Permanent Secretariat and the AMR TWG in **Senegal** to organize a workshop to validate and finalize the AMS NAP. During a virtual meeting in December, the draft national guidelines for using antimicrobials in the animal sector were validated and will be disseminated to stakeholders in **Burkina Faso's** animal sector.

**Côte d'Ivoire** made significant progress in categorizing antimicrobials on its essential medicines list according to the AWaRe (access, watch, reserve) system with support from MTaPS this quarter. MTaPS helped the designated expert group follow the WHO methodology to gather and analyze the multicriteria evidence for decision making and will provide the templates and tools to support the expert group meetings. During the quarter, four meetings were held where participants reviewed the TOR. They decided to split into two groups and add experts from specialty areas, such as gynecology, pharmacology, pediatrics, dentistry, resuscitation, and surgery, and to work on a timeline and list of activities. In addition, the MTaPS/Côte d'Ivoire team met virtually with the MTaPS/DRC team to learn about their useful experiences with the categorization process. In **DRC**, MTaPS submitted a revised draft of the country's AWaRe categorization for review, and it has been approved and integrated into DRC's 2020 national essential medicines list. In two meetings during the quarter, the MTaPS/**Senegal** team continued working with the National Committee for Antibiotic Treatment to develop standard treatment guidelines for community infections in adults and children that include AWaRe categorization. A validation workshop that was postponed will be the next step.

The Communicable Disease Control Department in **Bangladesh's** Directorate General of Health Services established a core working group, including an MTaPS consultant that met virtually five times during the quarter to work on national treatment guidelines for infectious diseases. After a planned face-

to-face meeting to finalize the document, the group will share it for expert review. In **Tanzania**, MTaPS supported the National MTC to approve the AWaRe list of antibiotics, and in **Mali**, MTaPS reviewed and finalized the validated national standard treatment guidelines. The **Kenya** team provided technical and financial support to the National MTC to develop its three-year work plan that prioritizes the development of Kenya's first national formulary that will incorporate AWaRe and began collaboration on next steps in the formulary development. In a two-day workshop, MTaPS also supported the Jaramogi Oginga Odinga Teaching and Referral Hospital to finalize the hospital's formulary, which now incorporates the AWaRe classification.

**Assessing and/or reviewing AMS policies and practices.** During the quarter, the **Uganda** team conducted baseline antimicrobial usage and consumption surveys to inform interventions in 5 of 10 newly supported, private-not-for-profit health facilities. With MTaPS' help, these facilities will become centers of excellence for IPC and AMS. MTaPS used the WHO point prevalence survey methodology and the WHO methodology for measuring defined daily dose (DDD) for antibiotics consumed over a year. The results will be used to develop trainings in health facilities. MTaPS/**Kenya** participated in the national AMS TWG meeting to review the draft national AMS dissemination plan, implementation plan, and training modules. The team received feedback from external experts on the training materials that will be incorporated in the next quarter. Once finalized, the curriculum will be used to develop the capacity of health care workers countrywide on AMS practices.

**Developing individual and local capacities.** MTaPS continued working in several countries this quarter to establish and strengthen drugs and therapeutics committees (DTCs). For example, in **Cameroon**, MTaPS supported a meeting in November for 22 pharmacists and clinicians from the Department of Pharmacy, Drugs, and Laboratory and some health facilities to define a roadmap to establish DTCs in 12 selected health facilities. Participants performed an analysis of strengths, weaknesses, opportunities, and threats for existing DTCs and made recommendations. MTaPS in **Côte d'Ivoire** trained 19 health professionals from the Cocody University Teaching Hospital on DTCs. Participants developed a DTC action plan to track progress after the training. Now, both supported hospitals (the other being Bouake University Teaching Hospital) have finalized their DTC work plans. Through the quarter, MTaPS/**Mali** supported the DPM and the AMS TWG in establishing DTCs in 5 hospitals by training their 56 DTC members. During this training, DTC members received assistance with conducting a baseline assessment of their respective institutions. Leads for each committee will monitor the DTCs' activities. MTaPS also helped the DPM draft TOR for a workshop and field visits to kick off the expansion of DTCs to 11 more facilities.

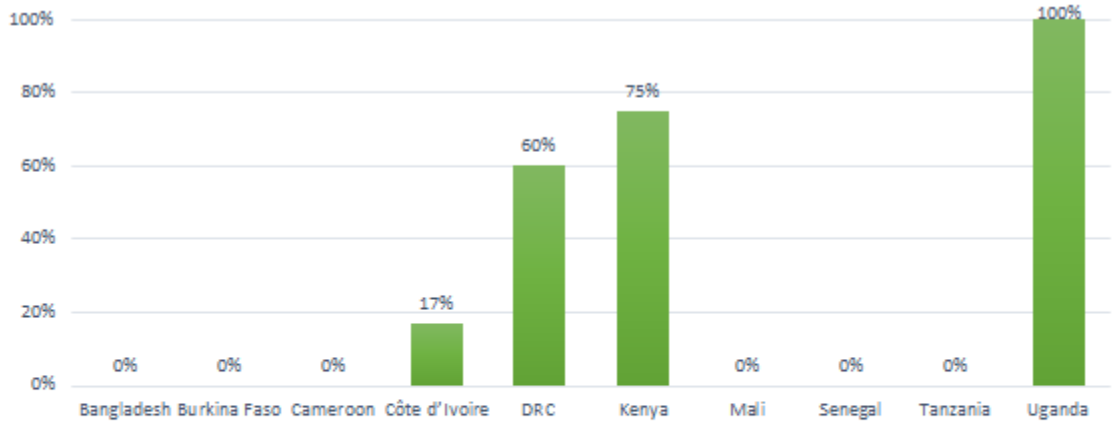
In **Burkina Faso**, MTaPS collaborated with the MOH Hospital Pharmacy Service to establish five DTCs in health facilities. Workshops for the new DTC members covered the basics of DTC objectives and functions. Participants analyzed issues, causes, consequences, and solutions related to DTCs and antimicrobial use and identified bottlenecks to operationalizing DTCs. The **Tanzania** team supported the review and approval of the MTCs' guidelines for establishing and implementing MTCs at national and health-facility levels.

The **Kenya** team continued to conduct follow-ups on implementing AMS activities in health care facilities in Nyeri and Kisumu Counties. The team also worked with Nyeri County officials to review, finalize, and launch the CASIC work plan on AMS. MTaPS sensitized at least 1,000 members from 3 professional associations on AMS (NNAK, Pharmaceutical Society of Kenya, Kenya Medical Association). In November, MTaPS collaborated with Kisumu County to officially disseminate the National AMS Guidelines and revised Kenya Essential Medicines List to health care workers digitally. County officials and the heads of eight health care facilities also received hard copies of the guidelines. The health care workers received CPD points that are a requirement for relicensure. MTaPS also met with the AMS committees at Kenyatta National Hospital and Gertrude's Children's Hospital to draft an AMS work

plan for next year. Both hospitals prioritized monitoring adherence to prescribing guidelines among other activities.


Launch of Nyeri CASIC work plan, November 2020, by Nyeri County Governor, H.E. Mutahi Kahiga (at left). (Photo credit: Oscar Agoro)

In addition, as figure 8 shows, health facilities in four countries that receive MTaPS support, Côte d'Ivoire, DRC, Kenya, and Uganda, used CQI to improve AMS practices during the quarter.




| | Bangladesh | Burkina Faso | Cameroon | Côte d'Ivoire | DRC | Kenya | Mali | Senegal | Tanzania | Uganda |
|---|---|---|---|---|---|---|---|---|---|---|
| Hospital | 0% (0/2) | 0% (0/8) | 0% (0/6) | 17% (2/12) | 60% (3/5) | 81% (17/21) | 0% (0/4) | 0% (0/3) | 0% (0/10) | 100% (7/7) |
| Health Centers | 0% (0/0) | 0% (0/4) | 0% (0/0) | 0% (0/0) | 0% (0/0) | 100% (1/1) | 0% (0/1) | 0% (0/0) | 0% (0/0) | 0% (0/0) |
| Pharmacy | 0% (0/0) | 0% (0/0) | 0% (0/0) | 0% (0/0) | 0% (0/0) | 0% (0/2) | 0% (0/0) | 0% (0/0) | 0% (0/0) | 0% (0/0) |
| Total | 0% (0/2) | 0% (0/12) | 0% (0/6) | 17% (2/12) | 60% (3/5) | 75% (18/24) | 0% (0/5) | 0% (0/3) | 0% (0/10) | 100% (7/7) |

Figure 8. Indicator AS 4: # and % of MTaPS-supported facilities implementing CQI to improve AMS

**Assessing antimicrobial use and consumption.** MTaPS/**DRC**, in collaboration with WHO, finished the technical report on the consumption of antimicrobials, which was coordinated by a member of the WHO global AMR surveillance system team from Geneva. Assessment findings included the following.

- 85% of antimicrobials are used in the private sector, 13% are used through development partners' support, and only 2% are used in the public sector.

- Beta-lactams, penicillin, and cephalosporins are the most heavily consumed, followed by fluoroquinolones, imidazole derivatives, co-trimoxazole, macrolides, and lincosamides.
- Aggregate consumption increased from approximately 12 DDD per 1,000 persons/year in 2018 to 16 DDD per 1,000 persons/year in 2019.
- At least 70% of the antibiotics consumed were in the access category, according to the AWaRe categorization; WHO recommends that at least 60% of antibiotics consumed be from the access category.

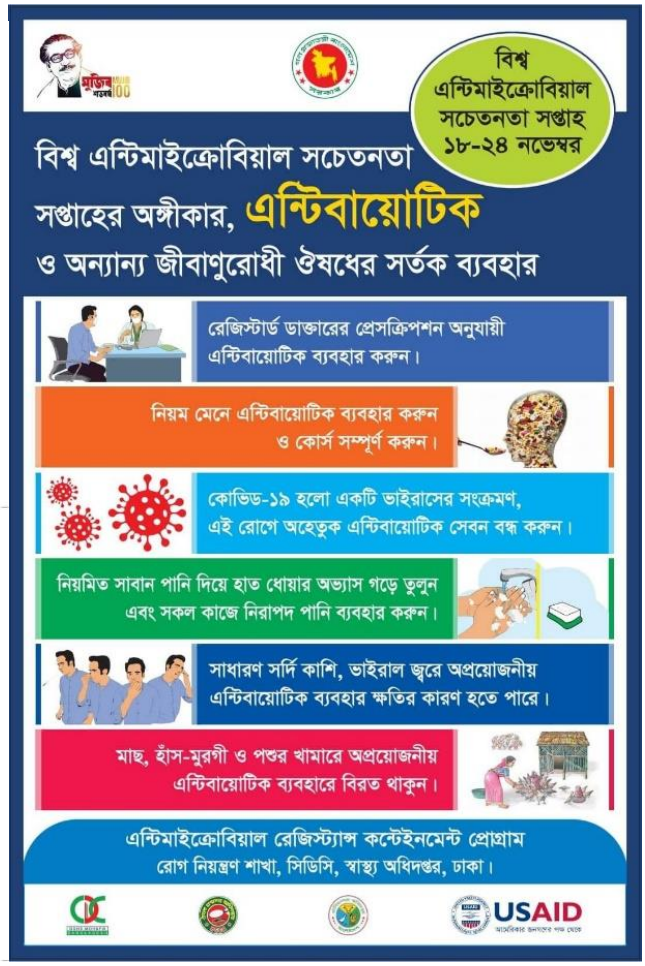
With coordination from the drug regulatory authority, MTaPS and WHO presented the preliminary assessment results at a meeting for 60 people, including medicine importers and suppliers, MOH, technical and financial partners who are involved in pharmaceutical supply chain, and investigators and survey supervisors. In December, USAID/DRC presented the final assessment results to government authorities at a meeting attended by 100 participants and chaired by the minister of health. Other attendees included the USAID health director, WHO country representative, and representatives from the Ministry of the Environment and the Ministry of Agriculture, Fisheries, and Livestock. Meanwhile, with MTaPS participation, the results of an antimicrobial use survey across six referral hospitals in **Tanzania** was published in BMJ Open. Two key findings: children under two years and admitted to surgical or pediatric wards had increased odds of being prescribed antibiotics and the lack of antimicrobial susceptibility testing services in hospitals is worrisome. This was the first published study from Tanzania that used the standardized WHO point prevalence survey methodology.

**Increasing awareness of AMR.** In **Uganda**, MTaPS identified five medical schools as targets to raise AMR awareness this quarter. During visits to these institutions, MTaPS identified student leaders and oriented them on the activity. Eventually, a link will be made to continuing medical education credits. The **Burkina Faso** team participated in the 20th Burkina Faso Health Sciences Day, whose theme was "Antimicrobial resistance, control of communicable and noncommunicable diseases." The team developed communication materials on AMR and distributed them at a kiosk, where they also engaged visitors through a quiz on rational use of medicines. MTaPS **Kenya** participated in the 62nd NNAK Annual Virtual Scientific Conference in December, making two oral presentations highlighting the core elements of AMS and IPC programs in health care facilities.

**WAAW, November 18-24, 2020.** MTaPS marked WAAW with many activities in-country and at headquarters.

- In **Bangladesh**, MTaPS collaborated with the Communicable Disease Control/Directorate General of Health Services, and other stakeholders to organize a number of activities. For example, MTaPS worked with the Communicable Disease Control to develop and post a video on AMR to its Facebook page. MTaPS also helped design and print posters and leaflets to sensitize patients about rational use of antimicrobials in humans, animals, and plants with messages about not taking medicines without a prescription from a registered practitioner, misuse of antibiotics during the COVID-19 pandemic, overuse of antibiotics in farm animals and agriculture, and sanitation in health care facilities, farms, and community settings. The 585 posters were distributed to health facilities.


Poster on rational use of medicines developed in collaboration with MTaPS




Coverage of the Bangladesh Government round table during WAAW in the Daily Kaler Kantho

MTaPS also facilitated two round table discussions on antimicrobial use—the first with participants from the Bangladesh Association of Pharmaceutical Industries, Bangladesh Chemist and Druggist Samity, national government entities, FAO, and other implementing partners. The discussion was covered by both electronic and print media. MTaPS and the daily newspaper *Daily Kaler Kantho* facilitated the second round table discussion on "arbitrary use of antibiotics and do's and don'ts." The minister of health and family welfare chaired the session along with other government counterparts and stakeholders, including WHO, Fleming Fund, and civil society organizations (see photo above). The participants developed a set of recommendations that included, among others, taking steps to control antimicrobial sales without prescription, introducing antimicrobial surveillance, and prioritizing IPC activities in health care facilities. The roundtable discussion is available here.

- MTaPS/**Uganda** collaborated with Makerere University School of Health Sciences to organize and participate in a five-day lecture series to increase awareness of AMR and highlight interventions being implemented for human and animal health in Uganda. The series reached a diverse audience of 150 people, including representatives from Ministries of Health and Agriculture, academia, health care workers, district veterinary officers, veterinarians, civil society, and members of the public. The first-day presentations were on MTaPS and GHSA and reached 80 participants.
- In **Kenya**, MTaPS participated in the National AMR Virtual Symposium on Human Health to commemorate WAAW. MTaPS made an oral presentation highlighting its activities in Kenya that

reduce the AMR burden at national and county levels and co-moderated symposium sessions. In addition to WAAW, MTaPS Kenya provided technical assistance during the International Infection Prevention Week 2020 celebrations held October 18-24. Eight MTaPS-supported facilities in Nyeri and Kisumu were involved in activities highlighting the role of IPC to protect health care workers and patients in the context of COVID-19. Events during the week included health talks to patients, a walk and dances, tree planting, among others. More than 200 patients and health care workers were oriented on IPC during the week. MTaPS also supported Kenyatta National Hospital for an event whose theme was "The nurse as a leader in breaking the chain of infection in COVID-19 era."

- The teams in **Tanzania** and **Côte d'Ivoire** helped country organizers plan the 2020 WAAW activities, and MTaPS **Mali** participated in the WAAW launch, which was organized by the One Health platform with WHO support.

MTaPS headquarters commemorated WAAW by creating a special WAAW website to share MTaPS' AMR work. MTaPS also developed a GHSA technical update to coincide with WAAW. This detailed technical update includes MTaPS' technical approach and program-supported progress toward MSC on AMR, IPC, and AMS, along with progress thus far in engaging the private sector, professional associations, and civil society.

MTaPS also used Twitter and Facebook to promote AMR-related messages throughout the week. The analytics during the WAAW campaign are summarized in Table 3.


Demonstration on proper hand washing at Ahero County Hospital during IIPW 2020. (Photo credit: Jael Aran, Ahero County Hospital)

Table 3. MTaPS WAAW campaign analytics

| TWITTER | | FACEBOOK | | WAAW PAGE | |
|---|---|---|---|---|---|
| Impressions | 27, 723 | Reach | 1,045 | Site views | 890 |
| Engagements | 465 | Engagements | 53 | | |



Examples of Facebook and Twitter posts published during the campaign.

# MATERNAL, NEWBORN, AND CHILD HEALTH

The MTaPS maternal, newborn, and child health (MNCH) portfolio contributes to achieving Sustainable Development Goal 3: Ensure healthy lives and promote well-being for all at all ages and prevent child and maternal deaths, by increasing global awareness of the barriers to access to essential maternal and child health (MCH) medicines and supplies and by providing technical assistance to reduce these barriers at both the global and country levels. The goal of the MTaPS MNCH portfolio is to ensure availability and appropriate use of safe, effective, and quality-assured medical products and effective pharmaceutical services to reduce maternal, newborn, and child mortality by strengthening pharmaceutical systems.

During this quarter, MTaPS focused on developing the scope of the year 3 work plan and started defining activities in discussion with USAID. One activity for the year 3 work plan was approved and started to advance this quarter, pending completion of the rest of the year 3 work plan. Since the year 2 work plan was approved in Q4 of year 2, MTaPS has been defining the scopes of work (SOWs) for four of the five activities, which follow on from year 1 activities, and one activity is already underway. Due to the delays in finalizing and approving year 2 and 3 work plans, year 2 and 3 activities will be implemented concurrently in project year 3.

### OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED

#### *Activity 1.3.1: Strengthen civil society engagement to increase access to and use of safe, quality MNCH medicines and technologies and effective pharmaceutical services (Year 2)*

MTaPS had proposed a rapid literature review on civil society engagement interventions with, or that hold promise for the inclusion of, a component on improving availability, affordability, and appropriate use of quality medical products, particularly for MNCH products. The draft literature search protocol and report outline were developed and shared with USAID MNCH team. Given the other work of USAID in social accountability, further discussion is planned in the next quarter with other USAID teams to ensure that this activity complements their work. MTaPS proposed redirecting the deliverable to a discussion paper instead of the rapid literature review originally proposed, that, in addition to considering other areas of USAID work, will focus more on the implications of what has been learned from research and initiatives for policy and practice.

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

#### *Activity 2.1.1: Review of registration of MNCH commodities (Year 1)*

MTaPS conducted a mapping exercise to identify challenges in registering MNCH medical products in nine countries (Bangladesh, DRC, Mali, Mozambique, Nepal, Rwanda, Senegal, Tanzania, and Uganda). During this quarter, all country reports documenting registration processes and challenges for MNCH medical products and highlighting key issues that national regulatory authorities could consider to further improve the process were finalized and shared with MTaPS country teams for validation. A technical brief that synthesizes the findings from the nine country studies, as well as interviews with pharmaceutical manufacturers on their perspectives on registering MNCH medical products and the barriers they encounter in low- and middle-income countries, was developed and shared for comment with USAID as well as the interviewed manufacturers. The considerations in the country reports and the technical brief will inform regulatory authorities and other policy makers of strategies to eliminate barriers and bottlenecks to further improve the registration process.

### *2.1.1: Support the streamlining of registration of MNCH medical products in at least one country (Year 2)*

As a follow-on to the year 1 registration mapping activity, MTaPS is planning some in-country work to streamline registration by using the findings and considerations from the mapping and to optimize registration of MNCH medical products by incorporating them into regional harmonization efforts. A SOW is under development.

### *Activity 2.1.2: Document quality assurance in local procurement (Year 1)*

This activity aims to document best practices to ensure quality of medicines when they are procured sub-nationally, which is often the case for MNCH medicines in LMICs, using examples from Tanzania and Nigeria. During this quarter, two consultants submitted their reports of the interviews with key contacts in selected states and regions, and a draft technical brief describing the best practices and lessons learned has been developed.

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

### *Activity 3.1.1: Support implementation of promising procurement practices to improve access to safe, effective, affordable, quality-assured medical products for women and children (Year 2)*

Contributing to MTaPS' sub-objective: Pharmaceutical systems strengthening (PSS) global learning agenda advanced, MTaPS is planning to improve subnational procurement in a country still under discussion (probably Nepal) by supporting decentralized procurement bodies in a specific geographic area of the country. This activity will use lessons learned from the technical brief developed under the year 1 activity to orient development of action plans and guidelines for improved subnational procurement. The SOW is under development and discussions are ongoing in country.

### *Activity 3.2.2: Global learning on pharmaceutical systems for MNCH (Year 1)*

As part of the global learning agenda on pharmaceutical systems for MNCH, MTaPS has developed a series of microlearning[2] seminars to raise awareness and promote understanding of why strengthening the pharmaceutical system is important for women's and children's health outcomes. These microlearning videos complement MTaPS' online and face-to-face training programs on PSS (PSS 101). During this quarter, MTaPS finalized all three videos: the first video is a general introduction to PSS; the second is on regulatory systems and their importance for improving access to safe, effective, and quality-assured medical products and improving MNCH outcomes; and the third is on financing pharmaceuticals and medical products for MNCH outcomes. The videos are posted as an integral part of the PSS101 e-learning course and have also been uploaded to the MTaPS YouTube page with Twitter and Facebook posts.

### *Activity 3.3.1: Map the institutionalization of pediatric amoxicillin formulations in countries (Year 2)*

Contributing to MTaPS sub-objective, PSS global learning agenda advanced, MTaPS and USAID had agreed on a mapping activity to study the uptake of amoxicillin by countries, but after reviewing the PATH asset tracker, it was agreed the proposed activity was not so relevant. (The asset tracker shows coverage and impact of key MNCH interventions or assets, including amoxicillin across approximately 80 countries.) Instead, after discussions with UNICEF, USAID and MTaPS agreed that a consultative meeting to review the current situation of access and appropriate use of amoxicillin and to determine

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

action steps and define the role for partners would be of greater value. MTaPS started to develop the SOW for this activity and a concept note for the meeting.

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

#### *Activity 5.1.1: Revise the reproductive, maternal, newborn and child health (RMNCH) quantification guide (Year 1)*

Quantification practices have a direct effect on product availability. MTaPS has completed revisions to the RMNCH forecasting supplement developed under UNCoLSC this quarter, including new WHO recommendations and some new medicines. MTaPS has started to plan a collaborative validation exercise with the USAID/Global Health Supply Chain Procurement Supply Management project in a few countries to inform the finalization of the supplement, which will continue under a year 3 activity.

#### *Activity 3: Validation of RMNCH forecasting supplement (Year 3)*

MTaPS and PSM jointly conducted an orientation on the guidance included in the forecasting supplement on post-partum hemorrhage (PPH) to familiarize country teams with the new recommendations so they can facilitate discussion with the MOHs in their countries on adopting new medicines and updated treatment guidelines. The session was conducted in English to PSM country teams and MOH colleagues from 12 countries and in French to PSM country teams and MOH colleagues from 3 countries. Each of the country teams left the session aware of the new WHO recommendations and able to advocate for revisions to the national PPH treatment guidelines as needed.

MTaPS has also been planning an orientation session to be held in January on the revised RMMCH forecasting supplement for PSM teams from six countries who will be conducting a RMNCH forecast in the first few months of 2021. The session will aim to equip the teams to use the forecasting supplement for their forecasting exercise and to provide feedback to validate the document.

#### *Activity 5.2.1: Improve adherence to amoxicillin DT for childhood pneumonia (Year 1)*

Many factors can affect adherence to amoxicillin dispersible tablets (DT) for childhood pneumonia. Using job aids and dispensing envelopes can address some of the barriers to adherence. MTaPS made minor edits to amoxicillin job aids and dispensing envelopes that were developed in 2015 by partners under UNCoLSC; the edits came from validation studies conducted at that time. A final package of tools for all age bands for treatment with amoxicillin DT and amoxicillin suspension in English, French, and Spanish (as a pdf for printing and as editable files adapted for printing as needed) was published on the MTaPS website and shared with key partners involved in amoxicillin work. The UNICEF Sprint project is using the job aids in Ghana and the UNITAID Tools for Integrated Management of Childhood Illnesses and Improving the Identification of Respiratory Distress in Children projects are considering how to incorporate the tools into their implementation.

#### *Activity 5.2.2: Define the essential respiratory package for newborns and children under 5 (Year 1)*

During this quarter, MTaPS finalized the mapping of partner support in the respiratory ecosystem, which showed what is being done by whom and where, to strengthen systems to ensure appropriate oxygen administration.

Looking across the different system elements of the respiratory ecosystem, the areas of procurement (including guidance on quantification), distribution, and training in both oxygen therapy and maintenance are supported by most organizations. This includes guidelines, manuals, and other documents developed at the global level by different partners as well as in-country support. It also includes tools and support

to countries so they can assess their options for distribution and delivery of oxygen considering public and private sector stakeholders.

Advocacy and policy guidelines have been developed at the global level, primarily by WHO with some advocacy documents developed by PATH. Country-level advocacy and policy discussions are supported primarily by UNICEF, PATH, and CHAI.

Regulation and quality assurance of medical devices and medical gases is a neglected area. This is a gap within the respiratory ecosystem where MTaPS could work, building on WHO guidelines on regulation of medical devices; supporting countries with guidelines, procedures, and training materials for assessors; and revising the country's legal framework to support regulation of medical devices and medical gases.

MTaPS compared guidance on the technical packages of medical devices and their technical specifications for the respiratory ecosystem to highlight discrepancies in these packages for administering oxygen therapy. Across the documents, there is no standard package of medical devices for oxygen therapy, as there are some discrepancies and inconsistencies across the package of medical devices and accessories for oxygen delivery cited in each document. MTaPS recommends that WHO and global partners focus efforts on producing a standard package of medical devices and accessories required for delivering oxygen to newborns and children. This standard package would help countries make selection and procurement decisions and redeploy devices and accessories as the COVID-19 emergency eventually subsides to manage children and newborns with hypoxemia.

*Completed deliverables this quarter*

- A microlearning course with three videos to raise awareness and promote understanding of why strengthening the pharmaceutical system is important for MNCH
- The Toolkit for Administration of Amoxicillin for Childhood Pneumonia (amoxicillin job aids and dispensing envelopes) to increase adherence to treatment with amoxicillin DT by caregivers of sick children as well as adherence of health care providers to proper treatment protocols
- Mapping of partner support in the respiratory ecosystem
- Comparison of packages of medical devices for the respiratory ecosystem for children and newborns

## ACTIVITIES FOR NEXT QUARTER

| ACTIVITY AND DESCRIPTION | DATE (2021) |
|---|---|
| A meeting will be held with Africa Bureau and the Democracy, Human Rights and Governance group in USAID to ensure alignment of this activity with other work in USAID. As a result of that meeting, it is hoped the scope can be clarified and work can progress on the discussion paper. | January |
| Country reports will be finalized, approved by USAID, and shared with the nine national medicine regulatory authorities and country missions. The technical brief will be completed and disseminated. | March |
| The SOW will be approved, and concurrence sought for the selected country, and a detailed plan will be developed in the country. | March |
| A technical brief on best practices of sub-national procurement will be finalized and disseminated. | March |
| The SOW will be approved, and concurrence sought for the selected country and a detailed plan will be developed in the country. | March |
| The PSS/MNCH microlearning videos will be disseminated to USAID missions and to global MNCH technical working groups. | March |
| The concept note for the consultative meeting on improving access and appropriate use of amoxicillin will be finalized, and preparations will be made for the meeting with the planning committee. | March |
| The forecasting guide is being copyedited and will be distributed to the six country teams for the validation exercise. | January |
| An orientation to the forecasting supplement will be held with six PSM country teams to familiarize them with the guide and provide guidance on their role in the validation exercise. | January |
| After finalizing the mapping of the global landscape of implementation and support on the respiratory ecosystem and the comparison of technical packages for oxygen therapy, the oxygen activity in year 2 and 3 will be defined | March |

# OFFICE OF HEALTH SYSTEMS, CROSS BUREAU FUNDING

This quarter was a period of transition, focused on refining the scope of work for year 3 activities and finalizing the work plan, which was approved December 17, 2020.

### ACTIVITY 1: MEASURING PHARMACEUTICAL SYSTEMS STRENGTHENING, INCLUDING ACCESS TO MEDICINES

MTaPS and the World Health Organization's (WHO) Access to Medicines and Health Products Division have agreed to collaborate to define the concept for the development of a qualitative Access Global Benchmarking Tool (GBT). The purpose of the tool is to enable countries to benchmark the performance of a set of pharmaceutical system functions and provide the basis for the development of an improvement plan for the national pharmaceutical system. Considerations for MTaPS include how to make the best use of the work that already exists and to ensure the alignment of concepts and measures to enable integration of PSS Insight with its quantitative measures for access to medicines and pharmaceutical systems strengthening (PSS) with the qualitative Access GBT.

The staff of WHO's Access to Medicines and Health Products Division continued to be heavily involved in the COVID-19 responses, and per the agreement between WHO and MTaPS, MTaPS and its partner Boston University School of Public Health (BUSPH) continued to take the lead on developing and elaborating a paper that defines the concept for Access GBT. In this reporting period, MTaPS and BUSPH held two meetings with WHO to refine the concept paper and plan next steps.

Feedback from the staff of WHO's Access to Medicines and Health Products Division on the first draft of the concept paper was very positive. MTaPS conceived and developed the concept note as a starting point for an expert consultation that could be shared in advance of the meeting and provide a point of departure for discussion. It discusses the importance and relevance of a benchmarking tool and provides information on prior efforts to measure pharmaceutical system performance and lessons learned from the development of other tools to enable the expert committee to consider how they can be harnessed going forward. The paper sets out options for the vision and purpose of the tool and includes questions to facilitate the consultation process.

WHO staff reported that the note hit the mark in terms of what they were looking for and agreed that it was well positioned as a starting point for the expert consultation. MTaPS revised the concept note to address some minor comments from WHO staff, such as additions to the lessons learned section, and incorporate feedback from the MTaPS Senior Management team. The paper was revised again to address comments from the second WHO review that focused on elaborating the steps in the development process and refining the timeline and benchmarks. The concept paper was submitted to WHO in November for discussion and review by WHO's Assistant Director-General, Access to Medicines and Health Products and WHO regional offices. At the request of WHO staff, MTaPS began collating an initial list of suggestions for the group of experts for the consultation. MTaPS is now on standby as WHO's Access to Medicines and Health Products Division and WHO offices and departments are fully focused on priority COVID-19 activities.

### ACTIVITY 2: PHARMACEUTICAL SYSTEM STRENGTHENING COURSE (PSS 101)

MTaPS took preliminary steps to have the PSS 101 e-learning course hosted on the Global Health eLearning Center (GHeL) platform. The Global Health Professional and Organizational Development team approved the course for GHeL and negotiated a scope of work with MTaPS, which will be executed in quarter 2.

### ACTIVITY 3: ROADMAP FOR HEALTH TECHNOLOGY ASSESSMENT (HTA) INSTITUTIONALIZATION

In year 2, MTaPS developed a policy and guideline document entitled *Practical Guide for Systematic Priority Setting and HTA Introduction in LMICs* ("Roadmap"). Formulated through an extensive literature and peer review process, the roadmap document provides a stepwise approach for HTA implementation. The roadmap is unique in its focus on the dynamic policy making process for HTA implementation in addition to strengthening technical capacities for HTA. It is a practical toolbox for low- and middle-income countries (LMICs) seeking to advance HTA implementation based on country context.

In October 2020, MTaPS hosted a webinar to launch the roadmap document. The launch provided an overview of the roadmap and included a panel discussion where LMICs shared learnings from their HTA implementation journeys. The panel discussion included HTA program leaders from Colombia, Kenya, South Africa, Taiwan, and Ukraine. More than 300 attendees around the world joined the webinar and participated in the discussion, including HTA practitioners, health economists, clinical experts, policy makers, and other global experts engaged in systematic priority setting. The recording for the webinar has had more than 18,000 views, and there have been more than 370 downloads of the roadmap from more than 200 institutions around the world. The launch has demonstrated the interest in and demand for HTA strengthening activities. It will help MTaPS identify potential countries and associated stakeholders interested in collaborating and implementing the approaches in the document.

Building on the core HTA roadmap, MTaPS is working on several publications in peer reviewed journals for further dissemination of the roadmap. Through Asia Bureau funding, MTaPS has developed an addendum that provides a deep dive into the status of HTA in nine Asian countries using a balanced scorecard. The balanced scorecard is based on research previously conducted by WHO's Asia Pacific Observatory on Health Systems that identified 18 important factors (milestones) conducive to the development of HTA in Asia. In this reporting period, MTaPS used Cross Bureau funds to begin developing a journal article focused on HTA in five African countries (Ethiopia, Ghana, Kenya, South Africa, and Tanzania) using a similar scorecard approach. Given the nascent nature of HTA in Sub-Saharan Africa, MTaPS will be assessing the progress of HTA using only a subset of the top 10 milestones from the scorecard. A draft of the publication is undergoing internal review. MTaPS also developed two journal articles based on the findings from the systematic literature review for the HTA roadmap and the roadmap development process. These manuscripts will be submitted in Q2 of PY3 and are targeting peer reviewed journals, including *Value in Health* and *Health Policy and Planning.* These publications will advance the understanding of country contexts, specific challenges faced, and potential areas for capacity strengthening and will be useful for MTaPS when developing content for the implementation of the roadmap.

### ACTIVITY 4: IMPROVE PHARMACEUTICAL EXPENDITURE TRACKING AND THE USE OF EXPENDITURE DATA FOR DECISION MAKING

In year 2, MTaPS and the Local Health System Sustainability Project (LHSS) initiated discussions with the Burkina Faso Ministry of Health point of contact for pharmaceutical expenditure data collection. We hired a national consultant to support the data collection from stakeholders in the health system, which has been completed. We have also organized all of the data into three databases (one for data from health programs and donors, another for the import data, and a third for pharmaceutical data from health districts and public hospitals). The aim for organizing the data into three databases is to enable pharmaceutical expenditure mapping following the SHA 2011 classifications. MTaPS and LHSS also started the data mapping, which we anticipate will be completed in February.

On December 4, 2020, MTaPS and LHSS had a virtual meeting with key policy actors in Burkina Faso, including the General Director of Health Products Access and the National Agency for Pharmaceutical

Regulation. The meeting objective was to discuss priority policy questions for pharmaceutical financing in Burkina Faso. The meeting was an opportunity for both projects to collect additional information to support the policy priority desk review. The purpose of the desk review was to understand how expenditure on pharmaceuticals has been tracked to date. The desk review also documents existing gaps in the expenditure data on pharmaceuticals to inform how the Health Accounts methodology can be customized and enhanced to fill these gaps and produce higher quality and detailed data on pharmaceutical spending.

In year 2, MTaPS and LHSS also developed a resource outline to support the development of the supplementary guidelines for SHA 2011. The team received feedback from USAID this quarter and has since assigned the various sections to each project.

### ACTIVITY 5: COMMON STANDARDS FOR REGULATORY INFORMATION MANAGEMENT SYSTEMS IN LMICS AND THEIR APPLICATION IN DESIGNING A SOFTWARE SUITE FOR NMRAS

#### *Sub-activity 5.A. Develop common standards for regulatory IMS used by NMRAs*

This quarter, MTaPS worked to conceptualize the scope of work for developing common standards for regulatory information management systems (IMS) used by national medicines regulatory authorities (NMRAs). After obtaining work plan approval from USAID, MTaPS developed an implementation plan, which includes developing a review strategy, conducting a literature search, collaborating with key stakeholders for information and dialogue, and generating a draft report for discussion with selected participants to involve global leaders in the regulatory space. The outcome of this work will provide guidance to countries on the standards to employ and steps to take to establish a regulatory IMS.

MTaPS shared the implementation plan with Promoting the Quality of Medicines Plus (PQM+) Program, a collaborator on the activity. We met with PQM+ to agree on expected roles for the activity, and the program agreed to contribute its expertise to various aspects, especially in the area of Laboratory Information Management Systems standards.

### ACTIVITY 6: ADVANCING EQUITABLE ACCESS TO QUALITY PHARMACY SERVICES IN THE PRIVATE SECTOR THROUGH RETAIL DRUG SELLERS

MTaPS developed the implementation plan for this activity and held preliminary discussions with BUSPH regarding support for this activity.

### ACTIVITY 7: INVESTIGATING THE USE OF INFORMATION FROM PHARMACEUTICAL MANAGEMENT INFORMATION SYSTEMS (PMIS) FOR EVIDENCE-BASED DECISION MAKING

MTaPS developed the implementation plan and completed a preliminary literature review in preparation for drafting the research protocol for the study.

### ACTIVITY 8. GENERAL PORTFOLIO MANAGEMENT

#### *Sub-activity 8.B. PSS TAG engagement*

No activities this quarter.

### *Sub-activity 8.C. Conference participation*

MTaPS prepared and submitted an abstract entitled *Philippines: Reconfiguration of the supply chain to balance equity and emergency response during the COVID-19 pandemic* to the Global Health Supply Chain Summit, which was held virtually November 17–19, 2020. The abstract was accepted. MTaPS/Philippines presented on some of the critical procurement and supply chain management challenges that emerged in the Philippines as a result of the COVID-19 pandemic and described how the national supply chain management system was successfully reconfigured to facilitate the country's emergency response.

MTaPS joined the leadership team of the Medicines in Health Systems Thematic Working Group of Health Systems Global. The goal of the thematic working group is to facilitate positive change in medicines availability, access, affordability, quality, and use by informing and facilitating dialogue among stakeholders in health systems, starting with members of Health Systems Global. The exact position on the leadership team will be decided at a meeting scheduled for next quarter.

MTaPS revised and resubmitted two accepted manuscripts: *Making the Investment Case for National Regulatory Authorities* and *National Health Insurance Fund's Relationship to Retail Drug Outlets: A Tanzania Case Study*, both to the *Journal of Pharmaceutical Policy and Practice.*

## EXTENDED YEAR 2 ACTIVITIES

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

This quarter, the technical report for the finalization of the PSS Insight indicators was completed. The report is currently undergoing final editing before submission.

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

Previously, MTaPS worked with AUDA–NEPAD to improve the Medicine Regulatory Harmonization Program management guidance tool. The tool aims at assisting Regional Economic Communities (RECs), such as ECOWAS, Intergovernmental Authority on Development, and Southern African Development Community, to implement medicines regulatory harmonization programs in a more effective, efficient, and sustainable manner. MTaPS had also worked with AUDA-NEPAD to develop and administer an online survey to the RECs and pharmaceutical industry to obtain information on the achievements, challenges, and lessons learned.

This quarter, MTaPS incorporated the survey findings on the achievements and challenges of RECs and the pharmaceutical industry in medicines regulatory harmonization into the guidance tool. We restructured the tool and are finalizing our internal review.

MTaPS also continued to participate in virtual meetings with AUDA-NEPAD to discuss the ongoing and potential support to harmonization of medicines regulation in Africa. MTaPS participated in the second virtual AMRH week in December 2020 to discuss the theme Regulatory Preparedness and Response During Public Health Emergencies in Africa – experience from COVID-19. The day's discussion centered mainly on the efforts made by countries to control the pandemic and deliver quality medical supplies for diagnosis, treatment, and prevention of the spread of COVID-19.

### ACTIVITY 8: SUPPORT AFRICAN REGIONAL HARMONIZATION EFFORTS FOR PHARMACOVIGILANCE

In the last quarter of year 2, MTaPS collaborated with the West Africa Health Organization (WAHO) to conduct a survey of the 15 ECOWAS countries being supported to develop an electronic platform for sharing pharmacovigilance (PV) data and data for other relevant activities. The survey results showed that all responding countries (12/15) are willing to share data related to aspects of their GBT assessment. Countries also indicated an interest in sharing aggregated data on PV indicators; number of signals detected and evaluated by countries; number of safety reports (periodic safety update reports, periodic benefit-risk evaluation reports); and risk management plans assessed.

This quarter, MTaPS finalized the report of the survey, translated the report to French, and shared it with the participating countries. We organized a meeting for December 2020 to present and validate the survey findings with the countries. However, we had to postpone the meeting to January 2021 due to low turnout of participants attributed to the holiday season. Additionally, MTaPS held several meetings with the ECOWAS PV and IMS working groups to discuss the best way to retrieve the required data from countries and present them on the platform. Some of the agreements reached at the meeting include the suggestion to have tiered access to the platform for different groups of people and to find out what platforms countries are currently using to collect their adverse drug reaction data, as this will affect how the aggregated data can be shared.

WAHO is working with a company called SIDMACH to develop a web-based platform called the Essential Medicines and Vaccines Portal to support sharing of data on all NMRA regulatory functions, including PV, within the region. WAHO agreed to MTaPS leveraging the existing portal to launch the PV platform. MTaPS approved WAHO's request for financial support to host the platform.

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

Previously, MTaPS had reviewed and analyzed 19 documents related to quality of care/quality improvement (QOC/QI) in the Bangladesh health system (with an emphasis on maternal, newborn, and child health) to characterize how infection prevention and control (IPC)/water, sanitation, and hygiene (WASH) is integrated. During the last quarter, MTaPS applied the same analysis to 19 QOC/QI documents from Côte d'Ivoire, DRC, Ethiopia, Senegal, Tanzania, and Uganda that our staff in those countries had identified. We compared these results to those from Bangladesh to provide some country-level comparison and to help contextualize the findings from Bangladesh. The team used the Bangladesh analysis results to draft a guide to interview key informants from the Bangladesh health system. This will be finalized with support from the MTaPS Bangladesh staff, who will also help finalize the list of the key informants and conduct the interviews. Also during the quarter, MTaPS completed a literature search and review of 14 articles that describe barriers, successes, and lessons learned in improving IPC/WASH using QOC approaches, particularly in maternal, newborn, and child health settings.

## ACTIVITIES FOR NEXT QUARTER

| ACTIVITY AND DESCRIPTION | DATE |
|---|---|
| Activity 1: Revise the draft concept note based on comments from Assistant Director-General, Access to Medicines and Health Products, WHO regional offices and other departments, USAID, and other selected stakeholders<br>• Continue to assist WHO to identify experts, implementers, and stakeholders that can serve on a network of experts to guide Access GBT development<br>• Work with WHO to define MTaPS support to the Access GBT tool consultation and development process | January–March 2021 |
| Activity 2: Pharmaceutical system strengthening course (PSS 101)<br>• Begin migration of the eLearning course to GHeL<br>• Plan for virtual training session for USAID staff | January–March 2021 |
| Activity 3: Roadmap for health technology assessment (HTA) institutionalization<br>• Submit two peer review publications<br>• Hold consultative discussions with USAID COR team to identify countries for regional workshop /webinar(s) on disseminating and applying the HTA roadmap in Sub-Saharan Africa<br>• Initiate and develop content for webinars | January–March 2021 |
| Activity 4: Improve pharmaceutical expenditure tracking and the use of expenditure data for decision making<br>• Complete the expenditure data mapping for Burkina Faso<br>• Draft supplementary guidelines | January–March 2021 |
| Activity 5: Common standards for regulatory information management systems in LMICs and their application in designing a software suite for NMRAs<br>• Share implementation plan with PQM+ to gain consensus on the roles and responsibilities of each partner and agree on a schedule of regular meetings<br>• Perform a literature search and gather documents on common standards for regulatory IMS<br>• Identify stakeholders to participate in virtual workshop, schedule workshop, and share draft report before the meeting | January–March 2021 |
| Activity 6: Advancing equitable access to quality pharmacy services in the private sector through retail drug sellers<br>• Conduct rapid literature review | January–March 2021 |
| Activity 7: Investigating the use of information from pharmaceutical management information systems (PMIS) for evidence-based decision making<br>• Develop research protocol | January–March 2021 |
| Activity 8. General portfolio management<br>• Sub-activity 8.B. PSS TAG engagement<br>• Redraft the terms of reference to expand the group to incorporate PQM+'s role and interests | January–March 2021 |
| Activity 8. General portfolio management<br>Sub-activity 8.C. Conference participation<br>• Draft and submit abstracts for Global Health Science and Practice Technical Exchange 2021 and 2021 American Public Health Association Annual Meeting and Expo | January–March 2021 |

## ACTIVITIES FOR NEXT QUARTER

| ACTIVITY AND DESCRIPTION | DATE |
|---|---|
| Year 2 Activity 8: Support African regional harmonization efforts for pharmacovigilance<br>• Meet with PV representatives of the 15 ECOWAS countries to present the report of the survey and the identified data elements to obtain their approval and commitment to share data on the platform<br>• Engage a consult to develop and implement the PV platform<br>• Meet with the relevant team in WHO Geneva to discuss the data elements for the platform and the possibilities for harvesting data from existing WHO platforms such as VigiBase and GBT Sharepoint<br>• Hold meetings with the PV and IMS expert working groups and WAHO IT team to review work done by the consultant on the PV platform | January–March 2021 |
| Activity 10: Identify gaps in integration of IPC/WASH critical conditions into the quality of care and quality improvement tools and processes<br>• Conduct key informant interviews | January–March 2021 |

# CROSS-CUTTING ACTIVITIES

## GENDER ACTIVITIES

The gender activities for this quarter focused on a survey assessment of the Gender Guide for Y3 work planning while trying to bring gender to the forefront of MTaPS by submitting an eLearning scope of work for Y3 gender work; reviewing approved Y3 work plans to identify opportunities for gender engagement; re-establishing the monthly gender working group (GWG) led by Overseas Strategic Consulting (OSC); and completing a final review of MTaPS gender indicators for the final monitoring, evaluation, and learning (MEL) plan.

A key activity this quarter was the development and launch of a survey to assess the use and usefulness of the gender integration guide for Y3 work planning, which was developed and led by MTaPS partner OSC with input from the Senior Management Team (SMT). The survey, distributed to SMT members, found that only one-third of respondents had a good understanding of sex and gender considerations in pharmaceutical systems strengthening (PSS). Important findings of the survey included that the guide was understandable, easy to read, of the right length, and had relevant entry points. However, it was less useful for work planning, training is needed to utilize the guide efficiently, only one-third of respondents used the guide, and only 25–30% of respondents added sex/gender-specific activities to Y3 work plans. If gender activities were added, they focused largely on "equal" participation and did not consider important sex/gender pharmacodynamics, especially within the Global Health Security Agenda portfolios. Based on survey findings, training is necessary for MTaPS staff on sex/gender considerations in PSS, and practical examples would be helpful for staff to integrate sex/gender into work planning.

A scope of work was written to propose eLearning opportunities for USAID in understanding how sex and gender should be integrated into PSS. Upon review by the COR, it is not possible for implementation until at least Y4.

The monthly GWG meeting was re-established and held in November 2020. Given the lack of gender activities in Y3 work plans, the group has opted to meet in 2021 only when there are pressing issues that need review, given the time commitments of group members.

Finally, sex and gender indicators in the MEL plan were finalized with the MEL team with careful review to ensure that sex and gender differences were noted and accounted for in relevant indicators.

# PROGRESS TOWARD OBJECTIVES

## OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED

Promoting transparency and accountability is a prerequisite for improving access to essential medicines and strengthening health systems to achieve universal health coverage.[3] Poor governance in pharmaceutical systems can reduce access to pharmaceutical products, inflate medicine prices, and waste scarce health system resources.[4] Governance plays a critical role in minimizing opportunities for corruption and mitigating other system inefficiencies. It also shapes the ability of the health system to respond to challenges. This section highlights selected areas of work on MTaPS governance activities in this reporting period.

### TRANSPARENCY AND ACCOUNTABILITY OF COUNTRY PHARMACEUTICAL SYSTEMS IMPROVED

To bolster stewardship of the pharmaceutical system at the provincial level, MTaPS is assisting North Kivu and Ituri provincial health divisions (*Division Provinciale de la Santé* [DPS]) in eastern **Democratic Republic of Congo (DRC)** to improve the functioning of their provincial technical working groups (TWGs) on medicines. The TWGs on medicines have an important role to play in coordinating development partners; managing and overseeing the provision and distribution of life-saving maternal, newborn, and child health (MNCH) and other essential medical products; and mitigating issues such as expiries that waste scarce health system resources. Important progress was made in this reporting period toward strengthening the governance structures of the TWGs. With support from MTaPS, North Kivu and Ituri convened meetings of their respective TWGs to validate the terms of reference (TOR) for the MNCH sub-groups, which are being set up to provide technical advice to help the DPS make informed decisions regarding operational activities related to the management of MNCH medical products. These activities include data collection and reporting, quantification and supply planning, distribution, and rational use. The validated TOR for the MNCH sub-groups were then submitted to the DPS authorities along with the updated standard operating procedures (SOPs) for the TWGs on medicines, which were also revised with assistance from MTaPS. The TOR and the SOPs have now been approved and signed by the respective DPS authorities. Additionally, MTaPS, in collaboration with the European Union and the Global Fund to Fight Aids, Tuberculosis, and Malaria (the Global Fund), supported Kivu and Ituri provinces to establish provincial quantification committees. MTaPS supported quantification training workshops for members of the DPS and regional distribution centers (*Centrale de Distribution Régionale*), which were linked to provincial quantification exercises and the creation of the new committees. Recommendations from the workshop include expanding membership of the new quantification committees to include more partners. MTaPS is helping to draft the TOR for the quantification committees, which are to be finalized and submitted to the TWGs on medicines for validation in the next quarter.

In the **Philippines**, MTaPS is providing technical assistance to build the capacity of the Department of Health procurement and supply chain management team (PSCMT) to steward, plan, implement, oversee, and sustain an integrated and well-functioning supply chain and provide shared services to support the

[3] Wirtz VJ, Hogerzeil HV, Gray AL et al. 2017. Essential medicines for universal health coverage. The Lancet 389(10067), 403–476.
[4] WHO. 2013. Good Governance in the Pharmaceutical Sector. Geneva: World Health Organization. Available at: http://www.who.int/medicines/areas/governance/EMP_brochure.pdf?ua=1

transition from a centralized model with fragmented PSCM functions to a decentralized and integrated system. An important step toward integration was achieved in this reporting period when as a result of an MTaPS-facilitated discussion, the National Tuberculosis Program (NTP) agreed to move the NTP Drugs and Supplies Unit under the leadership of the PSCMT. MTaPS will continue discussions with the NTP and PSCMT to define the roles and responsibilities of the NTP Drugs and Supplies Unit in line with this move and to formulate the policy amendments needed to implement the transition.

As part of efforts to promote coordination and collaboration among partners supporting the National Directorate of Pharmacy (DNF) to strengthen **Mozambique's** regulatory system, MTaPS and the USAID Mission proposed that the medicines working group establish a sub-group for regulatory systems strengthening. The DNF agreed to work with MTaPS and the Mission to adapt the TOR of the medicines working group for the new sub-group, whose proposed members include representatives from the DNF; donors; and implementing partners such as the World Health Organization (WHO), MTaPS, the Promoting the Quality of Medicines Plus (PQM+) program, and the Global Fund. Other anticipated benefits of the sub-group include improved opportunities for knowledge sharing among members, including sharing of best practices and a sharper focus on activities that can raise the maturity level of the DNF.

With **Asia Bureau** funding, MTaPS is partnering with WHO Geneva; the WHO Regional Office for South-East Asia (SEARO); and the WHO Collaborating Center for Governance, Transparency, and Accountability in the Pharmaceutical Sector in Toronto to develop a how-to manual on managing conflicts of interest (COIs) within public pharmaceutical-sector committees. Ethics approval for the study that MTaPS and WHO SEARO are conducting as a first step toward developing the manual was received in this reporting period. The study will identify what COI management policies are in place in the Asian region/sub-region; explore if and how policies are implemented, particularly in low-resource countries; collect copies of what exists; and solicit information on key challenges and examples of good practices. The online search and scan of ministry of health and relevant government websites was completed, and the next phase—verifying web scan findings and conducting key informant interviews—is expected to be completed in the next quarter. In addition to informing the development of the "how to" manual, the survey results will be used to develop a section on COI policies for inclusion in the next WHO annual publication that reviews progress in improving access to medical products in the South-East Asia Region. Additionally, the literature search to identify model guidance, policies, and procedures on managing COI in the pharmaceutical sector that can be applied or adapted for the Asia region was completed, and development of the report that will summarize the findings is under way.

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

Robust national pharmaceutical policies and legislation provide the enabling framework for advancing equitable and sustainable access to and appropriate use of safe and efficacious medicines of assured quality. MTaPS worked with countries to develop, update, review, and establish national policies for medical products and legislation for the regulation of medicines and other health products using best practice standards and guidelines. Support was also provided to develop and review guidelines required to provide direction and clarity on the statutory requirements for compliance by users.

**DRC**'s national medicine regulatory authority (NMRA) published the updated Directory of Registered Medicines on its website. The directory, updated with assistance from MTaPS in the previous reporting period, is used by customs officers and pharmacist inspectors at the regional level to track and confiscate unregistered products, including MNCH products. To facilitate dissemination of the directory, MTaPS supported briefings with pharmaceutical inspectors and customs officers and awareness meetings with pharmaceutical companies in Nord Kivu and Ituri provinces. Inspectors and officers were briefed on how to use the directory, copies of the register were provided to all inspectors and customs officers

in the provinces, and MTaPS worked with provincial health inspectorates to plan field visits to identify unregistered products. Pharmaceutical companies located in the two provinces were informed of the process for applying for market authorization of their products. These activities will contribute to reducing the number of unregistered medical products circulating in the markets of the two provinces.

In **Mozambique** and **Rwanda**, MTaPS is providing technical assistance to develop, review, and validate regulations and implementing guidance that support the newly enacted medicines acts in these countries and operationalize the new NMRAs established by these acts. In this reporting period, MTaPS worked with **Mozambique's** DNF to agree on and prioritize the list of regulations needed and drafted the regulation on imports/exports and distribution of medical products in line with the immediate needs of the DNF. The draft regulation includes provisions for special import of medicines for personal use, transportation of medical products, and maintenance of cold chain for applicable products. At a workshop in October, the **Rwanda** Food and Drug Administration (FDA) validated a number of documents prepared in the previous reporting period with assistance from MTaPS that will support the implementation of the Rwanda FDA's Quality Management System. Documents validated included the quality management manual, four documents related to the risk management framework, eight process flow documents, and two SOPs for medicines registration and approval of promotional materials.

Another important area of work is MTaPS' collaboration with the Ministry of Health (MOH), **Rwanda** FDA, and National Pharmacy Council to develop pharmaceutical service standards to complement the well-established clinical care standards. The Rwanda Pharmaceutical Service Accreditation Standards and Performance Tool Kit was finalized in this reporting period. Next, MTaPS will work with the MOH, the Council, and other stakeholders to disseminate and implement the standards.

In **Nepal**, MTaPS began working with the Department of Drug Administration and the Ministry of Health and Population to update the country's medicine pricing policy as part of efforts to advance equitable access to affordable medical products in the country. As a first step, MTaPS shared an overview of pricing regulatory mechanisms from other Asian countries, which will inform discussions on the development of a pricing policy regulation planned for the next quarter.

As part of efforts to strengthen pharmacovigilance systems and advance regulatory system maturity, MTaPS assisted **Bangladesh's** Directorate General of Drug Administration (DGDA) to develop SOPs for reporting, investigating, interpreting, and conducting risk management for adverse drug events and adverse events following immunization. The SOPs have been submitted to the DGDA for approval. MTaPS also supported a virtual workshop that enabled the **East African Community's** (EAC) expert working group on pharmacovigilance to validate the draft EAC harmonized pharmacovigilance SOPs for adoption by EAC member states. To build capacity among EAC pharmacovigilance experts and promote ownership, the development of the SOPs was led

**Results of MTaPS' governance activities in countries supported by the Global Health Security Agenda**

- Burkina Faso validated its first guidelines for the use of antimicrobials in the animal sector, which are now ready to be presented to ministerial policy makers within the Ministry of Animal Resources and Fisheries and subsequently to the Minister for endorsement.
- DRC's revised national essential medicines list, which now incorporates the WHO Access, Watch, Reserve (AWaRe) classification for antibiotics, was validated and approved.
- The formulary committee of Jaramogi Oginga Odinga Teaching and Referral Hospital in Kenya incorporated the AWaRe classification into its updated hospital medicines formulary.
- Tanzania's Medicines and Therapeutics Committee (MTC) guidelines, which provide guidance on formation of MTCs and implementation of activities at the national and health facility levels, were reviewed and approved.
- The AWaRe list of antibiotics was approved in Tanzania.

by the EAC, with MTaPS supporting the lead NMRA and EAC partner states.

For more detail on MTaPS' AMR activities and GHSA, refer to the GHSA section and Objective 5/AMR activities in this report.

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

As part of MTaPS' efforts to engage civil society organizations, journalists, and other nongovernmental stakeholders in country AMR and infection prevention and control (IPC) responses:

- A roundtable discussion on appropriate antimicrobial use delivered as part of Bangladesh's World Antimicrobial Awareness Week events received extensive electronic and print media coverage. A second roundtable discussion on antibiotic use "do's and don'ts", which MTaPS supported the DGDA to organize in conjunction with a renowned daily newspaper, included civil society representation and produced a set of recommendations for mitigating antibiotic misuse.
- MTaPS, in collaboration with Makerere University School of Health Sciences, organized and participated in a week-long lecture series and seminars as part of Uganda's World Antimicrobial Awareness Week to increase AMR awareness. The series reached about 150 participants, including civil society, members of the public, human health practitioners, and veterinary doctors and officers.
- MTaPS participated in the Burkina Faso Health Sciences Days in Bobo-Dioulasso. More than 100 participants visited the program's booth, which offered flyers, factsheets, and quizzes on AMR. Participants included teacher-researchers, researchers, students, and health professionals.
- More than 1,000 Kenyan health care workers who belong to Kenya Medical Association, National Nurses Association of Kenya, and Pharmaceutical Society of Kenya were sensitized on AMR through virtual continuing professional development talks. Additionally, more than 200 patients and health care workers at eight-MTaPS facilities were involved in activities that highlighted the role of IPC in protecting frontline workers and patients in the context of COVID-19.

# 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

### *Workforce Planning and Development*

In the previous quarter, MTaPS assisted the **Philippines** Department of Health (DOH) in creating a workforce capacity development plan as part of efforts to strengthen and institutionalize procurement and supply chain management (PSCM) and pharmacovigilance (PV) systems. In this reporting period, MTaPS convened a virtual forum with DOH and stakeholders and presented the plan and its key components, which includes measures for improving services related to PSCM and PV to help ensure uninterrupted access to pharmaceutical services and safeguard patient safety. This meeting provided the opportunity for all attendees to discuss recommendations for creating necessary positions, hiring staff to fill the positions, and building workforce capacity. The meeting culminated in the DOH agreeing to implement the plan.

### *Curricula and Training Materials*

In **Kenya**, the national infection prevention and control (IPC) curriculum and 19 training modules were finalized at a technical working group (TWG) meeting supported by MTaPS. The documents have been circulated to the wider group of IPC stakeholders in preparation for the validation process. In addition, the national antimicrobial stewardship (AMS) curriculum and training modules that the AMS TWG is developing with assistance from MTaPS were reviewed by external experts in this reporting period.

### *e-Learning Platforms and Course Materials*

MTaPS' support to Bangladesh, Burkina Faso, Cameroon, Jordan, Mali, Rwanda, and Senegal to establish and institute e-learning as part of pharmaceutical system strengthening (PSS) and GHSA-related capacity building and training activities encompasses several steps, including an e-learning assessment, selection of a suitable institution to host the e-learning platform, design of e-learning courses, and capacity building of local teams responsible for managing the platforms. Bangladesh and Rwanda are in the initial and intermediate stage respectively, while Burkina Faso, Mali, and Senegal have made tremendous progress in their e-learning program development and are at the stage of handover and roll out.

In **Bangladesh**, MTaPS held discussions with the Ministry of Health and Family Welfare (MOHFW) and initiated a digital assessment as a first step toward helping the ministry and its directorates set up an e-learning platform and design three PSS-related e-learning courses. This activity will allow the MOHFW and its directorates to deliver capacity building and refresher training sessions through distance learning. The e-learning platform will host highly interactive courses on procurement basics, generic logistics management, and e-TB Manager. Next, MTaPS will support the MOHFW in finalizing the digital assessment and subsequently use the results to select the host institution(s) best suited to implement the e-learning programs.

In **Rwanda**, MTaPS is supporting the Rwanda Food and Drug Administration (FDA) to develop e-learning courses as part of its regulatory and PV system strengthening activities. Course outlines for four modules on medicine dossier evaluation and registration, which will contribute to building the capacity of current and future medicine assessors, were developed in this reporting period. The modules are anticipated to be completed by June 2021. The completed e-learning package is expected to help

streamline registration of essential medicines and medical devices, including those used in maternal, newborn, and child health (MNCH) and family planning (FP) programs. A consultant has been hired to adapt the course outlines and training materials to e-learning scripts. Next steps will involve turning these scripts first into storyboards and then e-learning modules to be deployed through Rwanda University's Moodle platform. Work also continued on developing the PV e-learning course. The 11 mini-modules that make up the course are ready and are now being transformed into online learning materials. The course is expected to be ready to train students registered through the National Pharmacy Council in the third quarter of this year.

In **Mali**, MTaPS continues to support the government to strengthen the institutional capacity of local training institutions to manage e-learning on IPC and AMS for both pre- and in-service health care workers. The integration of the IPC modules into the three local e-learning platforms was completed in this reporting period. MTaPS Mali also held meetings with the Hygiene Sub-Directorate of the Direction Générale de la Santé et de l'Hygiène Publique (DGSHP) and the International Health Regulations (IHR) focal point to discuss the methodology and approach for the handover, roll out, and implementation of the e-learning programs. Due to the COVID-19 situation, the e-learning handover will occur through a virtual meeting with regional, district, and facility teams. In preparation for the handover, MTaPS helped to develop terms of reference (TOR), which have been disseminated to stakeholders. Following the launch of the course in the next quarter, MTaPS will help create an additional pool of 40 master e-learning facilitators through a series of virtual workshops to increase the number of facilitators competent in the e-learning platform.

Both **Jordan** and **Cameroon** have begun the process for transferring their e-learning Moodle platforms to local servers. The platform in Jordan will be utilized as a sustainable solution for continuing medical education as it can be expanded to other health programs and diseases, including any related AMS training materials that are produced through MTaPS support to capacitate Ministry of Health (MOH) central level and hospital staff.

After the institution selected to host the e-learning platform in Cameroon was no longer viable, MTaPS helped local stakeholders deploy the e-learning program through a temporary Moodle platform while another host institution was identified. MTaPS carried out a rapid e-learning assessment, after which the Department of Pharmacy, Drugs, and Laboratory (DPLM) was selected as a suitable e-learning institution. As part of next steps, Cameroon will support the DPLM in setting up Moodle on their server, training local e-learning teams (IT specialists and lead trainers), and transferring all e-learning modules developed, including those on IPC and COVID-19 to DPLM. In addition, MTAPS Cameroon will work with the DPLM to adapt drug and therapeutic committee (DTC) materials and resources to the e-learning platform to provide ongoing training and capacity building to pharmacists and other health care workers through distance learning.

These initiatives will help create pathways to enhance the sustainability of capacity building and training efforts for MOHs and their health workforces.

#### STRONGER CAPACITY OF GOVERNMENT TO MANAGE PHARMACEUTICAL SYSTEMS

##### *Competency-Based Training Activities*

To strengthen technical and managerial capacities of the Division Provinciale de la Santé (DPS), health zones, and hospital staff in the **DRC**, MTaPS supported the DPS in Nord Kivu and Ituri provinces to train 56 participants on inventory and supply management of essential medical products. The five-day competency-based training workshop on pharmaceutical management included field visits that enabled participants to reinforce the learning and prepare participants to better support facilities to improve practices. Participants from each health zone were supported to develop a post-training plan, which they are expected to implement upon return to their posts. MTaPS also supported a training workshop on

logistics data entry, analysis, and visualization using existing tools and platforms, as part of efforts to increase the visibility of logistics data in the two provinces. During the workshop, participants from DPS and health zone management teams learned how to enter logistics data into the DHIS 2 platform and carry out data analysis and visualization using the InfoMED platform. Participants were also coached on identifying appropriate actions to address weaknesses related to data collection and reporting.

Further, as part of efforts to increase the technical capacity of provincial medicine quantification committees in Nord Kivu and Ituri provinces, MTaPS helped organize training workshops that focused on addressing quantification-related weaknesses at the provincial and health zone levels. At the end of the workshop, which was organized in collaboration with the European Union and the Global Fund for AIDS, Tuberculosis, and Malaria (The Global Fund), participants who included eight DPS and one provincial warehouse staff from Nord Kivu and nine DPS and one provincial warehouse staff from Ituri province developed preliminary drafts of provincial forecasts for HIV, malaria, tuberculosis (TB), FP, and MNCH medical products. The provincial quantification committees are expected to finalize and submit the forecast reports to the medicine TWGs for validation by the end of January 2021.

To promote a self-improvement culture through local teams that uses continuous quality improvement methodologies for IPC, MTaPS/**Tanzania** supported the Ministry of Health, Community Development, Gender, Elderly, and Children (MOHCDGEC) to train 17 health care workers from 10 supported health facilities on the standards-based monitoring and recognition (SBMR) model of improvement for IPC. The intensive two-day workshop helped equip participants with knowledge about the SBMR approach, including how to use IPC standards for self-assessment and improvement. With these competencies, participants are better prepared to use these standards and assess themselves and report on a quarterly basis to the MOHCDGEC.

MTaPS **Mali** continued its assistance to the Directorate of Pharmacy and Medicines (DPM) to establish and strengthen the capacity of DTCs in five health facilities. MTaPS helped train 56 DTC members through a series of week-long workshops geared to staff from 4 hospitals and 1 health center. At the end of the training sessions, participants were able to conduct a baseline assessment by collecting and analyzing data from their respective institutions.

***Institutional Capacity Building***

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

An important benchmark was achieved in the **Philippines** in this reporting period where MTaPS is providing technical assistance to strengthen the capacity of the DOH's PSCM team (PSCMT) to effectively steward and sustain an integrated and well-functioning supply system. The National TB Program (NTP) participated in discussions facilitated by MTaPS and agreed to transition the NTP Drugs and Supplies Unit to the leadership of the PSCMT. MTaPS will continue discussions with the NTP and PSCMT to define the roles and responsibilities of the Drugs and Supplies Unit in line with this move and to formulate the policy amendments needed to implement the transition.

In Nord Kivu and Itari provinces in **DRC** where MTaPS is assisting the DPS in improving the functioning of their provincial TWGs on medicines, MTaPS supported TWG meetings where TORs developed for their respective MNCH sub-groups in the previous reporting period were validated. The TWGs on medicines have an important role to play in coordinating development partners, managing and overseeing the provision and distribution of lifesaving MNCH and other essential medical products, and mitigating issues, such as expiries, that waste scarce health system resources. The TOR for the MNCH sub-groups, which are being set up to provide technical advice to help the DPS make informed decisions

regarding operational activities related to managing MNCH medical products, were approved and signed by the respective DPS authorities.

### IMPROVED CAPACITY OF PRIVATE-SECTOR ORGANIZATIONS TO SUPPORT PHARMACEUTICAL OPERATIONS

In **Bangladesh**, MTaPS is supporting the NTP in increasing case detection from the private sector by linking the NTP's e-TB Manager with the JANAO app that is used by doctors in the private sector to report TB cases to NTP. In collaboration with Alliance for Combating TB in Bangladesh, MTaPS worked with NTP officials and International Centre for Diarrhoeal Disease Research, Bangladesh, staff to run a field test at six TB treatment centers to check interoperability between the app and e-TB Manager. Following the successful field test, MTaPS is now planning a live demonstration to NTP officials.

Large segments of the population use retail pharmacies and medicine outlets as the first point of care. In **Bangladesh**, up to 80% of people seek care from village doctors and retail outlets where overprescribing, selling unnecessary medicines, and issuing antibiotics without prescriptions are frequent occurrences. As part of efforts to improve access to safe, affordable, quality medicine and pharmacy services in the private sector, MTaPS is working with the Better Health in Bangladesh Project (funded by the UK Department of International Development) to optimize the pharmacy inspection and licensing system. These collaborative activities include developing an electronic pharmacy inspection and licensing system for the Directorate General of Drug Administration (DGDA). The preparatory work, which includes a review of the existing workflow, application form, and standard operating procedures (SOPs), has been completed, and development of the electronic system is underway. User acceptance testing is planned in the next reporting period.

In **Kenya**, MTaPS has been collaborating with medical, pharmacy, nursing, and other professional associations to develop continuing professional development (CPD) and relicensure-linked in-service courses in AMS and IPC for the associations to deliver to their members working in both public and private sectors. In this reporting period, over 4,455 health care workers from 5 national health professional associations participated in MTaPS-supported hybrid trainings on IPC and received CPD points toward their relicensure. Similarly, 1,125 members of these professional organizations were trained in AMS topics. Additionally, MTaPS finalized the IPC CPD curriculum and materials that were developed in collaboration with, and will now be delivered through, health professional associations.

MTaPS held an inception meeting with the Pharmaceutical Society of **Uganda** to discuss collaborating on developing continuous medication education and lectures aimed at increasing awareness on antimicrobial resistance (AMR) among members that work in both the public and private sectors and agreed to further meetings to develop a work plan. Similar discussions are planned with the Uganda Medical and Dental Practitioners Council, Allied Health Professionals Council, and Uganda Nurses and Midwives Council in the next quarter.

### STRONGER MEDICINE REGULATORY CAPACITY, INCLUDING THROUGH REGIONAL REGULATORY HARMONIZATION

#### *Improving the legal framework and establishing collaborative enforcement mechanisms*

An appropriate and updated legal and regulatory framework is crucial for effective regulation of the pharmaceutical market in countries. MTaPS support in this area is elaborated under objective 1.2. Refer to Objective 1, Evidence-Based Medicines Policies, Laws, Regulations, Guidelines, Norms, and Standards Improved and Enforced, for more details.

***Capacity to manage key functions of the regulatory system***

In **Bangladesh**, MTaPS, in collaboration with other implementing partners, such as WHO and the Promoting the Quality of Medicines Plus (PQM+) Program under the umbrella of the Coalition of Interested Partners Bangladesh, worked with the DGDA to implement the institutional development plan by using teams to address the gaps in four functional areas of interest, including PV, licensing establishments, marketing authorization, and regulatory inspection. The focus of the support is to enable DGDA to obtain WHO prequalification of vaccines and to strengthen the DGDA regulatory system in general.

MTaPS continued to offer countries support to put strategic plans in place. In **Mozambique**, MTaPS participated in a meeting on October 15, 2020, organized by the National Directorate of Pharmacy (DNF) to present the draft five-year strategic plan 2021-2025 and obtain inputs from partners to improve the document. MTaPS also provided post-meeting support through further review and feedback on the DNF's strategic plan (2021-2025). In **Rwanda**, to improve strategic direction and strengthen capacity at the Rwanda FDA, MTaPS continued to support the authority to develop its four-year strategic plan (2021-2024). The draft strategic plan was reviewed and organized under three strategic priority areas and 10 strategic objectives, each with identified key performance indicators aligned to the objectives.

MTaPS worked to validate the findings of the MNCH portfolio-funded survey conducted in nine countries to identify the barriers and bottlenecks in registering MNCH medical products. A technical brief that provides considerations for advancing medicine registration for MNCH medical products that are also applicable to other medical products was developed based on the survey results (for more detail, see section on MNCH portfolio).

MTaPS assisted Mozambique, Nepal, and Rwanda in strengthening use of electronic information technology for more efficient and transparent medicine regulatory processes. Information management system solutions speed up delivery of services and provide transparent processes with assurance of quality services. In **Mozambique**, MTaPS worked on the requirements for enhancing Pharmadex to follow the common technical document (CTD) format for medicine registration processes. The DNF's Registration Department SOPs will be used to provide information on the existing work procedures to enhance Pharmadex software. Enhancing Pharmadex to follow the CTD format will align Pharmadex to better comply with international standards and WHO and Southern African Development Community guidelines and will facilitate higher quality in the management of medical product applications filed for marketing authorization in Mozambique.

In **Nepal**, the new Department of Drug Administration (DDA) leadership accepted the option to deploy Pharmadex based on an option analysis provided by MTaPS. Efforts have been made to install the Pharmadex software, focusing on key regulatory functions, such as medicine registration. MTaPS worked with key personnel in the registration and inspection units to discuss and finalize the system requirement specifications for registering products and licensing manufacturers, importers, wholesalers, and pharmacies. The next step is to evaluate how best to adjust the Pharmadex registration module to Nepal's specific requirements. The new system will facilitate and expedite the registration process in Nepal and help to implement the dossier review, in line with international requirements based on WHO guidance.

The MTaPS team in the **Philippines** worked collaboratively with active drug safety monitoring and management (aDSM) stakeholders, such as DOH's Pharmaceutical Division, KMITS, NTP, and FDA, and other implementing partners to enhance PV monitoring system (PViMS) software to address the need for an aDSM framework. Assistance was also provided to harmonize PViMS processes with the integrated TB information system to streamline health facilities' TB PV reporting. MTaPS also guided

aDSM stakeholders on data and process requirements needed to fully use PViMS' analysis and signal detection functionality.

***Establishing a quality management system (QMS) to improve regulatory system capacity***

To develop NMRA institutional capacity, MTaPS is supporting countries in implementing quality management systems (QMSs)in accordance with ISO standard 9001:2015 and WHO guidelines.

The **Nepal** team finalized the TOR for the QMS TWG with the expectation of establishing the TWG during the planned training on QMS initiated this quarter. MTaPS worked with its partner, Celsian, to prepare QMS orientation sessions for next quarter as part of the process of QMS implementation. Participants for the basic and expert QMS training were identified, and training materials finalized. The basic training began at the end of this reporting period, and the expert training is planned to start in January 2021. Participants' knowledge will be tested before and after the training, and if satisfactory attendance can be verified, participants will receive a certificate.

In **Rwanda**, MTaPS continued to support the Rwanda FDA in developing documentation and guidance on the requirements and implementation of the QMS. Four documents on the risk management framework, eight process flow documents, and two SOPs for medicine registration and approval of promotional materials and the quality manual were among the documents reviewed and validated by Rwanda FDA in a workshop held October 26-30, 2020. The Rwanda FDA's quality manual will be tabled for approval before the Rwanda FDA Board of Directors at the end of January 2021.The main goal of the QMS orientation workshop is to create awareness for Rwanda FDA personnel on the need to implement QMS based on ISO 9001:2015 requirements, which have a critical role in strengthening governance and oversight, eventually increasing the Global Benchmarking Tool (GBT) maturity level of Rwanda FDA.

***Product registration systems improvements***

To protect public health, NMRAs must establish strong registration systems to ensure the quality, safety, and efficacy of medicines and other medical products before marketing authorization. MTaPS provided technical assistance to DRC and Rwanda to improve their medicine registration systems.

In **DRC**, MTaPS assisted DPM in strengthening medicine registration procedures and updating the directory of market-authorized products. The directory of registered medicines is available online at https://www.acorep.gouv.cd/download/repertoire-des-produits-pharmaceutiques-enregistres-et-autorises-par-la-dpm-en-rdc-edition-2020/ and is currently being used by provinces and border posts to verify and confiscate unregistered or non-authorized medicines.

In **Rwanda**, MTaPS is helping streamline the registration of essential medicines and medical devices, including those used in MNCH and FP programs. Following the capacity-building training workshop for 55 medicines assessors for Rwanda FDA staff in the previous quarter, MTaPS is supporting Rwanda FDA in developing an online e-learning course for medicine dossier evaluation and registration for building capacity of current and future assessors. Refresher courses and additional training are always needed by a recently established institution, such as Rwanda FDA, and the online modality is also important, given the challenges of staff retention in public institutions. Course outlines for four modules have been developed, and a consultant is being engaged to develop the e-learning course, anticipating that the course materials will be developed, approved, and available online for utilization by June 2021.

***Regulatory inspection, enforcement, and licensing of establishments***

In **Bangladesh**, MTaPS is collaborating with the Better Health for Bangladesh Program to develop an electronic pharmacy inspection and licensing system for DGDA. Prior to automating regulatory processes, it is particularly important to update the SOPs and ensure they are aligned with the regulatory framework and international best practices. A review of the existing workflow, application

form, and SOPs required for the licensing application process was completed, and the updated documented procedures will feed into the system development process. It is anticipated that the automated system will expedite the inspection and licensing process thus contributing to increasing customer satisfaction and improving the delivery of pharmaceutical regulatory services.

To facilitate enforcement activities in **DRC**, MTaPS supported DPS, inspectors, and customs officers in accessing and using the updated list of registered medical products for inspections and import control. The updated reference directory is now available online and copies have been distributed to all inspectors. MTaPS supported the dissemination meetings for inspectors and officers and events with manufacturers that provided guidance on the process for seeking marketing authorization. These efforts will facilitate the control of medical products imported and distributed in the country.

In **Nepal**, MTaPS visited two DDA provincial offices to discuss DDA's reorganization, important legislative changes, including the drug law, and Pharmadex implementation, specifically the registration module and piloting the new electronic Good Pharmacy Practice inspection tool.

***Improve PV systems in countries and regions***

Please refer to objective 5.3 for details

***Improving pharmaceutical services by enhancing pharmaceutical standards and workforce capacity for pharmacy and clinical staff***

MTaPS has been supporting the MOH in developing the **Rwanda** Pharmaceutical Service Accreditation Standards and Performance Tool Kit as part of the comprehensive quality assurance framework for rating, monitoring, and evaluating the performance of the sector as part of efforts to improve the quality of pharmaceutical services offered to patients. In this reporting period, MTaPS shared the final edited copy of the standards and the assessment toolkit with the Mission for approval.

In the **Philippines,** following the completion of the functional analysis of the workforce needs for PSCM and PV, MTaPS facilitated a virtual forum with 138 participants in November 2020 to present the report.

***Advancing regional regulatory harmonization efforts***

To support local manufacturers in Intergovernmental Authority on Development (IGAD)/East African Community (EAC) regions to improve compliance with regional and national pharmaceutical regulatory standards and requirements, MTaPS is assessing the local pharmaceutical industry to examine their capacities to adhere to good regulatory practices.

During the quarter, MTaPS continued to finalize the assessment of the local pharmaceutical industry to examine their capacities to adhere to good regulatory practices to facilitate sustained availability of critical essential medicines in line with international standards. MTaPS, in collaboration with the IGAD and EAC secretariats, organized a series of virtual workshops and webinars for local manufacturers in the EAC and IGAD regions where MTaPS provided preliminary feedback from the survey findings focusing on regulatory compliance by local manufacturers and guided discussions on the gaps and solutions for regulatory compliance. Recommendations and feasible solutions to address gaps were identified along with responsible parties for action. The importance of incorporating PV into the pharmaceutical industry, especially for their products, was emphasized during the workshop. Also highlighted were the roles and responsibilities for the different pharmaceutical sector stakeholders in promoting good regulatory practices to enhance and sustain local production of quality and safe medicines and other health products. Participants who attended the workshop held in December 2020 were drawn from key stakeholders involved in the pharmaceutical value chain within IGAD and EAC regions including the IGAD secretariat, NMRAs from IGAD and EAC member countries, professional associations, local manufacturers, pharmaceutical distributors, USP PQM+, civil society, and policy makers.

Also, in this quarter, MTaPS collaborated with the South East Asian Regulators Network (SEARN)/WHO South East Asian Regional Office (SEARO) and contributed to building the capacity of the pharmaceutical manufacturing industry in India as part of piloting the online current Good Manufacturing Practice (GMP) course hosted by JSS University India. Facilitators from MTaPS administered two courses: conducting stability studies and a comparative review of international GMP norms. The online course exposed the pharmaceutical industry to the latest developments in the pharmaceutical field and clarified the requirements for regulatory compliance.

MTaPS engaged in formal dialogue with the Association of South East Asian Nations (ASEAN) Pharmaceutical Products Working Group, USAID Asia Bureau, and PQM+ to determine areas of support for implementing harmonized technical standards and guidelines and facilitating joint review sessions and capacity building to assess biologics and vaccines among ASEAN/SEARN member states. The outcome of the discussions is awaited.

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

## INTEROPERABILITY OF PHARMACEUTICAL MANAGEMENT INFORMATION SYSTEMS THAT LINK PATIENTS AND PRODUCTS

MTaPS/**Philippines** continued to support the Department of Health (DOH) in establishing an electronic logistic management information system (**eLMIS**) Technical Working Group. MTaPS supported the procurement and supply chain management team to develop an eLMIS implementation readiness assessment tool to conduct a survey of the facilities intending to implement the eLMIS.

In **Bangladesh**, MTaPS participated in a meeting with the Implementation, Monitoring, and Evaluation Department and Health Service Management operational plan team to move the **electronic asset management system (eAMS)** implementation and functionality forward. The eAMS is designed to increase the efficiency of procurement, distribution, and maintenance of diagnostic and treatment equipment in medical facilities. A deputy program manager will be engaged to monitor eAMS implementation and functionality and to ensure government ownership. Ensuring eAMS functionality at the 61 district-level hospitals will help the Ministry of Health and Family Welfare make decisions based on correct medical equipment status in the case of repair needs or new procurement. Also during this quarter, MTaPS and UNFPA worked to support Directorate General of Health Services (DGHS) scale up the DGHS eLMIS for maternal, newborn, and child health in three additional districts. As part of this, the DGHS management information system (MIS) unit organized a training of trainers for participants from the three districts. As part of the **e-TB Manager** rollout nationwide, MTaPS has conducted training for 354 participants (70 female; 284 male) in the Chattogram division on the e-TB Manager app. MTaPS continued its remote support to e-TB Manager users across the country to ensure consistent entry and quality of TB patient data as well as effective monitoring for critical decision making to improve TB control in Bangladesh.

MTaPS teams in **Rwanda,** the **Philippines,** and **Mozambique** continued to roll out **PViMS** to improve spontaneous reporting of adverse events and promote patient safety. In **Rwanda**, MTaPS installed PViMS on the Food and Drug Administration (FDA) server and trained FDA staff as well as public and private health care workers on adverse event reporting. The system has been customized to meet local requirements from the Rwanda FDA, and an updated version will be installed in the next quarter. In **Mozambique**, MTaPS worked with the National Directorate of Pharmacy (DNF) to optimize existing data collection forms for reporting adverse events in anticipation of implementing PViMS in the near future. The **Philippines** also worked collaboratively to enhance PViMS software to address the need for an active drug safety monitoring and management (aDSM) framework and to harmonize PViMS processes with the integrated TB information system to streamline health facilities' TB-related pharmacovigilance reporting. MTaPS also guided aDSM stakeholders on the data and process requirements needed to fully use PViMS' analysis and signal detection functionality.

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

In the **Philippines,** MTaPS supported the rational allocation tool**,** which will help the DOH use existing supply chain management data to allocate commodities, and the National FP Program will start using the calculation tool in early 2021 to address the current faulty distribution practice.

In **Bangladesh**, MTaPS made changes to the warehouse management information system and electronic indenting tools as well as to the eAMS to allow logistics and equipment to be managed electronically,

which will help ensure more efficient and sustainable access to TB diagnostics and ultimately improving the outcome of TB cases in Bangladesh. MTaPS' support to the Directorate General of Drug Administration in uploading adverse drug reaction reports to the WHO Vigiflow database continued from the last quarter of FY20, increasing the total number of reports from 276 to 629.

In **Nepal** and **Mozambique**, MTaPS continued to work to install Pharmadex on cloud servers to manage the medicine registration process. In **Mozambique,** MTaPS continued to work with DNF counterparts to get approval from the DNF to transfer the existing Pharmadex application to a cloud-based solution. MTaPS and Link Informatica conducted an analysis to assess available internet access options in Mozambique for the DNF and have started working on the requirements for the enhancement of Pharmadex to follow the Common Technical Document format for marketing authorization dossiers. In **Nepal,** the Pharmadex implementation plan was finalized and shared with the newly appointed director general and Department of Drug Administration central and provincial staff following a visit to the two provincial offices, and a cloud server for Pharmadex that is hosted in Nepal has been identified. Pharmadex's registration module has been set up on the cloud server, and a plug-in for customization will be finalized by the end of January 2021. The next step will be to adjust the Pharmadex registration module to Nepal's specific requirements. The new system will facilitate and expedite the registration process in Nepal and help to implement the dossier review in line with WHO requirements.

## ADVANCEMENTS IN PHARMACEUTICAL SYSTEMS STRENGTHENING RESEARCH AND THE GLOBAL LEARNING AGENDA

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

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

### EVIDENCE-BASED MEDICINE STRATEGIES AND PHARMACEUTICAL BENEFITS PROGRAMS DEVELOPED

Following the development of the *Roadmap for Systematic Priority Setting and Health Technology Assessment (HTA): A Practical Guide for Policy Action in Low- and Middle-Income Countries*, MTaPS hosted a webinar this quarter to launch the roadmap. The webinar, which had more than 200 attendees, brought together a panel of HTA program leaders from Columbia, Kenya, South Africa, Taiwan, and Ukraine to lead the discussions. During this quarter, MTaPS/**Asia Bureau** developed an addendum to the roadmap and policy guide focused on Asian countries. The addendum was based in part on previous work done by the World Health Organization (WHO) using a balance scorecard approach to identify a set of factors conducive to the institutionalization of HTA in Asia. MTaPS adopted this balance scorecard approach to assess and score the performance of Asian countries on these predetermined factors for HTA, which enabled MTaPS to better understand country-specific contexts and capacity building needs. In the coming quarter, MTaPS will use a predefined criterion to identify two countries in which to apply the HTA document. MTaPS will assist these countries to progress along their HTA journey using approaches that align with their needs and stages of progression. MTaPS is also submitting four abstracts—two to peer reviewed journals and the other two to the 2021 International Society for Pharmacoeconomics and Outcomes Research conference next quarter.

As part of the effort to increase the availability of evidence for updating the National Essential Medicines Lists, MTaPS/**DRC**, in collaboration with WHO, conduct a rapid assessment of the consumption of antimicrobials. The assessment showed that 70% of the antibiotics consumed were in the Access category of the AWaRe categorization. This finding was in line with the WHO recommendation of at least 60% of antibacterial medicines used should be in the Access category. The results of this work provided evidence and input for the three-day review of the National Essential Medicines Lists, which serves as the public benefits drug package for DRC**.** In **Senegal** and **Kenya**, MTaPS is undertaking similar exercises to help support and provide evidence for inclusion of antimicrobials in their national medicines lists and to optimize antimicrobial medicines use.

### THE EFFICIENCY OF PHARMACEUTICAL RESOURCE ALLOCATION AND USE INCREASED

As countries roll out universal health coverage programs and work to optimize resources for medicines benefits, estimating the costs of benefits packages and assessing financial gaps for provided medicines remain key considerations for health systems. MTaPS/**Asia Bureau** undertook a series of meetings with the USAID Missions in the Asia region to share information about planned Asia Bureau activities for FY21 and to identify countries that had interest in or needed capacity building on the use of the One Health tool for costing pharmaceutical benefits. MTaPS will follow up with Bangladesh, Kyrgyzstan, Vietnam, Nepal, and Philippines, which all expressed interest in learning more about the use of the One Health costing tool. In the coming quarter, MTaPS/Asia Bureau plans to hold a regional One Health tool capacity building workshop and awaits inputs from Asia region USAID Missions to confirm the level of interest in participating in the course.

MTaPS/**Cross Bureau** also had a virtual meeting with key pharmaceutical policy makers in Burkina Faso, including the General Director of Health Products Access and the National Agency for Pharmaceutical Regulation. The meeting objective was twofold—to deliberate on priority policy questions for financing of medicines in Burkina Faso and to provide the opportunity for the Local Health System Sustainability Project and MTaPS to collect additional information to support the policy priority

desk review. Following the above activity, MTaPS hired a Burkina Faso-based consultant to support the data collection. MTaPS has organized all of the data received and has started mapping the data in line with SHA2011 classifications.

The degree to which health systems efficiently allocate resources for and contain the rising cost of pharmaceuticals also underlies a health system's ability to sustainably enhance access to vital medicines to its populace. To provide more flexible options for enhancing efficiency in resource allocation and use for pharmaceuticals, MTaPS/**Philippines** continued its support to the Department of Health (DOH) by providing capacity building and orientation programs to DOH program managers on extending the current single year procurement framework to multiyear framework contracts for drugs and medical devices, such as GeneXpert equipment and cartridges. The capacity building efforts extended beyond the national level to 17 additional regional Center for Development offices that will be focused on using framework agreements through pooled procurement mechanisms.

During the quarter**,** MTaPS/**Rwanda** supported development of a multiyear national pharmacovigilance costed plan. The plan was reviewed by the Rwanda FDA and other stakeholders and is currently undergoing editorial review prior to submission to the Rwanda FDA for validation and approval.

MTaPS/**Nepal** initiated work to develop an evidence-based policy on a price control mechanism for pharmaceutical products in Nepal. This activity was to be supported by a pricing study, but the Ministry of Health and Population later determined it was no longer needed. However, to support the drafting of a revised pricing regulation, MTaPS shared a summary of regulatory mechanisms from Asian countries and will continue support to the pricing policy regulation in the next quarter. An updated medicine pricing policy will enable the Government of Nepal to ensure continued and equitable access to affordable pharmaceutical products at all levels of care in the country.

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

### INCREASED AVAILABILITY OF ESSENTIAL MEDICINES AND OTHER HEALTH TECHNOLOGIES

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 local institutional and individual capacity.

In the **Philippines**, to consolidate DOH's initiative to establish a centrally integrated PSCM stewardship role, MTaPS facilitated a meeting with the NTP to bring the Drugs and Supplies Management (DSM) Unit under the leadership and management of the DOH's procurement and supply chain management team (PSCMT). After the meeting, an agreement was reached that will help ensure that PSCMT plays a stewardship role in managing and overseeing all aspects of all health programs' commodity PSCM functions while NTP and other national programs focused on health program implementations. It will also bring efficiency by avoiding fragmentation and redundancies of PSCM functions. MTaPS will continue working with NTP and PSCMT to redefine the DSM Unit's roles and responsibilities under PSCMT supervision and initiate the policy changes needed to implement the transition.

In this quarter, MTaPS/**Bangladesh** facilitated three high-level coordination meetings with various MOHFW directorates, health programs, and other key partners—coordination committee meeting for TB commodity storage assessment, meeting on updating the list of medical and surgical requisites, and a meeting on digitizing the table of equipment to be more dynamic and responsive to changes and provide a wider reach to health system managers and policy makers. The TB commodity storage assessment coordination meeting aimed to integrate TB peripheral storage under the government management system (currently being maintained by nongovernmental organizations) and lay a ground to optimize the TB supply chain network and storage. The overall activity will also be led by the coordination committee with the technical support of MTaPS in conducting the assessment. These committees and their regular meetings facilitate coordination between different stakeholders and decision makers as well as bring transparency to the processes.

In the **Philippines**, following the completion of the PSCM and PV workforce needs assessments, analysis, and development, this quarter, MTaPS facilitated a virtual result dissemination workshop to 138 participants from different DOH offices and implementing partners. During the workshop, the DOH agreed to consider implementing the PSCM and PV workforce development plan by creating positions, hiring necessary staff, and building workforce capacity. MTaPS will advocate for incorporating the plan into the DOH's Health Human Resources Master Plan for professionalizing the supply chain and PV workforces. To support workforce capacity development, MTaPS started developing and customizing e-learning modules on pharmaceutical system strengthening and warehouse operations management. When completed, they will be uploaded to the DOH e-Learning Academy.

In **Bangladesh**, after reopening the remodeled Barishal regional warehouse, which added 4,200 square feet of storage space, MTaPS worked closely with the warehouse staff and supported development of action plans in operationalizing warehouse functionalities. In this quarter, MTaPS provided on-the-job training to build capacity in warehouse operations and on the Warehouse Inventory Management System (WIMS). The warehouse staff were able to demonstrate producing system-generated invoices and reports and uploading data in a timely way to the web-based portal, which will allow efficient decision making and ultimately ensure availability of essential medical products. In addition, MTaPS co-facilitated a one-day refresher training on warehouse/store management in 17 districts and facilitated

technical sessions on the inventory management system, using data, and the decision-making process for 414 participants (282 male and 132 female).

Despite the COVID-19 situation, MTaPS **Bangladesh** provided remote support and facilitated virtual meetings with DGFP district- and sub-district-level managers to share and discuss the stock status of contraceptives at service delivery points (SDPs) and how to maintain adequate stock for better services. As a result of this remote support and monitoring mechanism, the stock-out rate of any contraceptive method at SDPs (n ~ 30,000) was reported to be less than 0.2% with a reporting rate of 100% during the last couple of months as presented in figure 9.

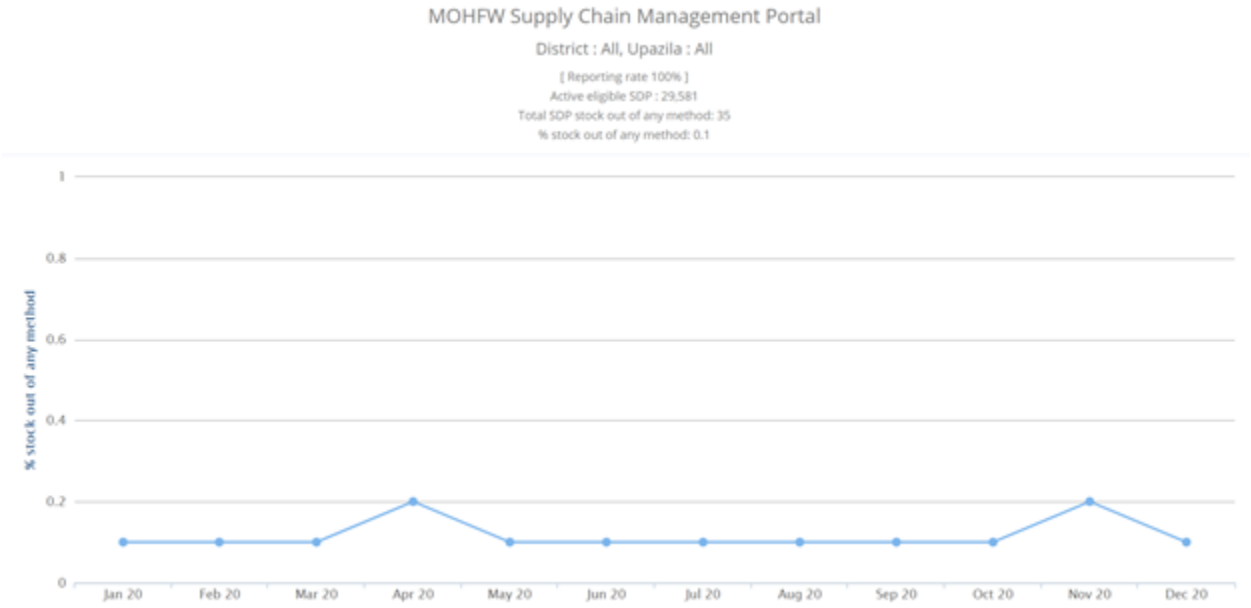



Figure 9. Percentage stock-out of any method
Source: https://scmpbd.org/index.php/sdp-report/stock-out-of-any-method

In the previous fiscal year, MTaPS/**Philippines** supported the DOH in developing guidelines and using framework agreements as a more flexible procurement method. In this quarter, MTaPS virtually oriented DOH program managers from the Disease Prevention and Control Bureau, including the NTP and National FP Program, which are responsible for budget allocation for procuring program commodities, on how to use framework agreements to procure selected health commodities. Through MTaPS support, by preparing the justification and other related documentation, NTP is undertaking a single-year framework agreement to procure GeneXpert cartridges and adult anti-TB drugs as an initial step to using this modality in 2021 with a plan to continue using multiyear framework agreements (two to three years) starting in 2022.

In addition, MTaPS oriented all 17 DOH regional offices (also known as centers for health development [CHDs]) and some LGUs on using framework agreements and pool procurement mechanisms to complement the procurement budget for anti-TB medicines. Using framework agreements and pooled procurement mechanisms is based on the NTP's call to action for regional and local governments, which is supported by MTaPS and other USAID implementing partner such as the USAID|TB Platforms. To further support this initiative, MTaPS partnered with Philippine Pharma Procurement, Inc., to act as a procurement agent for the DOH CHDs and LGUs to carry out pooled procurement in 2021.

To support the scale-up of TB-preventive treatment (TPT) and the introduction of a new TPT regimen, MTaPS/**Philippines** worked with NTP and other implementing partners to conduct a national

quantification exercise of TPT-related commodities. In addition, MTaPS continued to support DOH SCMS in performing an inventory analysis of health commodities being managed at the central and regional levels. SCMS aims to strengthen their role in this process by hiring additional staff to collect inventory and procurement data to generate inventory reports that DOH SCMS will use to inform DOH health programs whether the allocations they have provided are sufficient considering current stock and upcoming procurement.

#### IMPROVED PATIENT SAFETY AND THERAPEUTIC EFFECTIVENESS

In the effort to strengthen **Bangladesh**'s PV system and improve patient safety, MTaPS assisted the Directorate General of Drug Administration (DGDA) in developing procedures for reporting, investigating, interpreting, and conducting risk management for adverse drug reactions (ADRs) and adverse events following immunization (AEFI). MTaPS supported the DGDA in uploading ADR reports to the WHO VigiFlow database. A total of 629 reports were uploaded during the quarter compared to 276 reports uploaded during the last quarter. MTaPS also assisted in the review of about 460 ADR reports received from April to December 2020.

To ensure COVID-19 vaccine quality and safety, MTaPS/**Bangladesh** worked with the DGDA PV team and the National Working Committee for Assuring Safety of COVID-19 Vaccine to establish three committees—the district and city corporation AEFI investigation committee, the regional AEFI causality assessment committee, and the national AEFI expert review committee, with clearly spelled out TOR. These committees are set to investigate serious AEFIs in relation to COVID-19 vaccine, perform AEFI causality assessments, and propose regulatory recommendations to DGDA as appropriate.

Since PY1, MTaPS/**Mozambique** has supported the DNF and the national HIV program in establishing an active surveillance system to monitor the safety of the new HIV dolutegravir (DTG)-based regimen, tenofovir/lamivudine/dolutegravir (TLD). To date, a study protocol has been developed and approved; health care providers and DNF and national HIV program staff have been trained; data collection tools have been developed and deployed; and, as of November 18, 2020, 2,606 patients from 9 participating health facilities have been enrolled in the study. So far, only 1,228 (47%) of enrolled patients have had at least one follow-up visit documented. The DNF, HIV program, and MTaPS have developed a plan to address this challenge, which includes central-level monthly support supervisory calls and support supervision activities at participating health facilities.

MTaPS/**Mozambique** held several meetings with the USAID Mission and the Centers for Disease Control and Prevention (CDC) to plan and organize the establishment of an active PV program for safety monitoring of TPT regimens (isoniazid [INH] and 3HP [once-weekly INH and rifapentine for 12 weeks]). MTaPS also held meetings with the DNF to obtain approval to implement the active PV program, drafted a protocol for the study, assisted the development of the TOR for the program, and helped arrange a meeting between the NTP and the DNF to initiate its implementation processes.

MTaPS/**Philippines** also worked with active drug safety monitoring (aDSM) stakeholders, such as PD, Knowledge Management and Information Technology Service, the NTP, FDA, and implementing partners to enhance the electronic PV monitoring system (PViMS) software to address the need for implementing an aDSM framework. MTaPS is assisting in the harmonization of PViMS processes with the integrated TB information system to streamline health facilities' TB-related PV reporting. During the next quarter, MTaPS will support PD and other stakeholders to revise PViMS training materials that reflect the enhancements and to plan for the nationwide PViMS rollout to monitor patient safety related to TB medicines.

In PY2, MTaPS/**Rwanda** assisted the Rwanda Biomedical Center (RBC)/HIV Division-led assessment to identify existing gaps in transitioning clients from the tenofovir + lamivudine + efavirenz (TLE) regimen to the DTG-based regimen (TLD) as first-line treatment. The assessment was also to provide

information to guide MTaPS' support to improve implementation of TLD transitioning, multi-month dispensing, and ADR reporting for people living with HIV. MTaPS finalized the assessment report this quarter. Key recommendations include the need to improve service delivery in relation to using TLD. Based on the findings and recommendations, MTaPS will continue to support the MOH, Rwanda FDA, and RBC during PY3 by providing mentorship and supportive supervision to the 10 MTaPS-supported facilities to improve ADR reporting.

MTaPS Rwanda continues to provide technical support to Rwanda FDA and key stakeholders to strengthen the national PV system. Activities undertaken during this quarter include:

- Development of a multi-year national PV costed plan; the plan has been initially reviewed by Rwanda FDA and key stakeholders. Final submission to Rwanda FDA for their validation and approval is expected next quarter.
- Establishment of an active surveillance system for the new DTG-based regimen; in collaboration with RBC, a research protocol is being finalized for submission to the Rwanda National Ethics Committee and two SOPs have been drafted on client enrollment and electronic data entry. Approval of the protocol, possible enrollment of study participants, and data collection are planned to start in March 2021.
- Development of a PV e-learning course on medicines safety monitoring, targeting health care providers, marketing authorization holders, and staff of Rwanda FDA. In this quarter, 11 of 12 mini modules have been developed and are being transformed into online e-learning course materials. The first online batch of students will be registered during the April-June 2021 quarter through the National Pharmacy Council.
- Customization of PViMS to meet local requirements from the Rwanda FDA; an updated version will be installed in the next quarter. The PViMS user manual was finalized and made available to Rwanda FDA and other stakeholders interested in using the system. The user manual includes instructions on how to report medicine safety issues and perform data analysis.

From October 28 to December 6, MTaPS held several meetings with the **Intergovernmental Authority on Development (IGAD)** and the **East African Community (EAC)** Secretariat to plan and implement joint activities. Critical activities included:

- Training health care workers from facilities within the MTaPS IGAD priority cross-border areas of Kenya/Uganda (West Pokot/Amudat and Turkana/Moroto), Kenya/Ethiopia (Moyale), and Kenya/ Somalia (Mandera). The county/district health management teams of the cross-border sites were also sensitized on the importance and need to institutionalize PV and patient safety. Training participants were able to develop facility, sub-county, and county/district action plans to be implemented for institutionalizing and strengthening PV and patient safety. The trainings and sensitizations were geared toward creating PV awareness, promoting patient safety, and defining a clear reporting mechanism and collaboration at border areas.
- Consultative virtual meeting with the IGAD secretariat to discuss support to the member state of Djibouti to facilitate implementation of the PV baseline assessment using the Harmonized Indicator-Based Pharmacovigilance Assessment and Monitoring Tool. Virtual local manufacturers' stakeholder validation forums/workshops were also organized to provide preliminary feedback on assessment findings and to sensitize them on Good Regulatory Practices and PV.
- Engagement with the EAC secretariat to discuss the development and finalizing of the harmonized EAC PV SOPs, including a validation workshop led by the EAC Expert Working Group on PV (EAC EWG-PV) for the draft SOPs.

To promote ownership and ensure sustained capacity building for EAC-PV experts, MTaPS assisted the EAC Secretariat, the EAC EWG-PV, and the lead NMRA on developing and finalizing the draft harmonized PV curriculum and training modules and the draft harmonized SOPs to support implementing the PV compendium. Both the EAC harmonized PV compendium and SOPs will be

adapted for use in EAC and IGAD countries and cross-border areas. The harmonized PV curriculum will be used for training of trainers in IGAD and EAC countries who will further train more in-country health care providers using the curriculum.

### BETTER CONTAINMENT OF ANTIMICROBIAL RESISTANCE AND INFECTION PREVENTION AND CONTROL

In **Jordan**, MTaPS continued to coordinate with the national antimicrobial stewardship (AMS) committee throughout the quarter; for example, MTaPS and the committee members drafted a rollout plan to start AMS programs at selected facilities, which were chosen based on MOH priorities. First steps will be a meeting with the AMS technical working group followed by MTaPS visits to the hospitals to ensure engagement and buy-in. The hospitals have already received the hospital-level AMS committees' TOR, and an AMS program checklist was developed after being formally endorsed by the minister of health.

In addition, MTaPS started the process to transfer the e-learning Moodle platform that was developed under USAID COVID-19 support to the Jordanian MOH. The MOH will use the platform as a sustainable solution to provide continuous medical education because it can be expanded for other health programs, including AMS training materials that will be produced with MTaPS support and used by MOH central level and hospital staff.

### SUPPORT TO COUNTRIES' ACHIEVEMENT OF GLOBAL HEALTH SECURITY AGENDA OBJECTIVES

In addition to AMR-related activities under Objective 5, MTaPS supports GHSA/AMR activities in **Bangladesh**, **Burkina Faso, Cameroon, Côte d'Ivoire, DRC, Kenya, Mali, Mozambique, Nigeria, Senegal, Tanzania,** and **Uganda**, focusing on promoting AMS, infection prevention coordination, and multisectoral coordination. For more details GHSA portfolio progress, refer to the GHSA section of this report.

# PROGRESS BY REGIONAL BUREAU PORTFOLIO

## ASIA REGIONAL BUREAU

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

#### *Activity 1.1.1: Apply and disseminate the HTA roadmap guidance document in the region*

In year 2, MTaPS developed a policy and guideline document entitled Practical Guide for Systematic Priority Setting and HTA Introduction in LMICs (the "roadmap"). The roadmap document was developed through a comprehensive systematic review and by multiple external reviews by global experts. It adapts the stages (heuristic) model of the policy process to create a dynamic policy for HTA implementation. The document is structured around the four main stages of this process: agenda setting, policy formulation, adoption/implementation, and impact evaluation. It provides practical tools and frameworks to LMICs for advancing HTA based on country context and strengthening the technical foundation of implementation.

MTaPS hosted a webinar in October 2020 to launch the roadmap document, which included a panel discussion with HTA program leaders from Colombia, Kenya, South Africa, Taiwan, and Ukraine. Approximately 200 attendees joined the webinar. Participants included HTA practitioners, health economists, clinical experts, policy makers, and other global experts engaged in systematic priority setting. The launch helped identify potential countries and associated stakeholders interested in strengthening HTA systems in the region.

Building on the core HTA roadmap and guide for policy action in LMICs, MTaPS developed an addendum focused on Asian countries. The addendum provides a deep dive into the status of HTA in nine Asian countries using a balanced scorecard. The balanced scorecard is based on research previously conducted by WHO's Asia Pacific Observatory on Health Systems, which identified a set of 18 important "factors (milestones) conducive to the development of HTA in Asia". Countries were scored on each milestone to assess the progress made on HTA institutionalization. The addendum helped MTaPS understand country contexts, specific challenges faced, and potential areas for capacity strengthening and will be useful when developing training content for the planned regional workshops.

MTaPS and USAID Missions in the region have been discussing sharing the findings of the roadmap and whether countries are interested in participating in country-level capacity building. To date, Vietnam expressed interest, and MTaPS is following up with the respective stakeholders in the country to further engage in the planned activities.

MTaPS has proposed to apply the HTA roadmap document in at least two countries. Based on which stage or "step" the target countries are at on their HTA journeys, MTaPS will share specific approaches outlined in the HTA roadmap to assist the selected countries in advancing HTA in their settings. A regional workshop is planned in Q3 where MTaPS will provide targeted capacity building and assist countries in developing or advancing their country-level HTA roadmaps. Country participation and selection are based on 1) urgent need and demand from governments, 2) commitment to advancing HTA, 3) buy-in of USAID Mission and alignment with global USAID priorities, and 4) presence (or lack of presence) of other implementers or stakeholders in the HTA space (e.g., iDSI, WHO, etc.). MTaPS will develop the workshop structure and curriculum in Q2 once situational needs are identified.

MTaPS will develop and disseminate HTA strategic briefs focused on the synthesis of learning from previous project activities (i.e., HTA roadmap, contextualized addendum for Asia, and regional workshop). In the next quarter, MTaPS will conduct short webinars to share the findings from the HTA roadmap and addendum. The webinars will target specific countries or a set of two or three countries based on interest determined by ongoing discussions with Asia Bureau countries. These webinars will provide further feedback on the roadmap, generate interest in MTaPS activities on HTA, and identify areas for capacity building to inform regional workshop planning. MTaPS is also submitting four abstracts on the HTA roadmap findings, HTA roadmap development process, findings from the Asia-focused addendum and balanced scorecard, and findings related to HTA in the African region. Two of the abstracts are targeting peer-reviewed journals, including *Value in Health* and *Health Policy and Planning*. Two abstracts have been submitted to the International Society for Pharmacoeconomics and Outcomes Research 2021 conference for a poster and presentation session.

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

#### *Activity 2.1.1: Build capacities related to the use of the OneHealth Tool to cost pharmaceutical benefit packages*

In year 2, MTaPS created guidance on using the OneHealth Tool (OHT) to cost pharmaceutical benefit packages. This guidance will better enable stakeholders to: 1) use the OHT to derive coverage targets, costing, and impact information; 2) estimate the cost of a pharmaceutical benefit package; 3) assess government contributions and the financial/fiscal gaps to afford the overall drugs needed in the country; and 4) facilitate discussions regarding priority setting for drugs within each disease group and adjustments to each pharmaceutical package under each disease, intervention, or health condition. In Y3, MTaPS will use the pharmaceutical package costing guidance developed in Y2 to train key stakeholders in one or more Asian countries on using the OHT for costing pharmaceutical benefit packages.

MTaPS held a meeting with representatives of USAID Missions in the Asian region to share information about planned Asia Bureau activities for FY21 and to determine in which countries capacity building on the use of the OHT is relevant and valuable. Of these countries, Bangladesh, Kyrgyzstan, Vietnam, Nepal, and Philippines expressed interest. MTaPS will be following up with Mission representatives of those countries to further explore the possibility for collaboration.

MTaPS followed up with the Vietnam Mission after the call to share objective 2 deliverables on costing tools and using OHT to cost pharmaceutical benefit packages. MTaPS will initiate materials preparation and outreach to stakeholders and WHO in Q2. MTaPS awaits input from other Asian region Missions about participating in a regional OHT capacity-building workshop.

MTaPS continued working on PY2 deliverables for finalization and dissemination. The short report on coverage arrangements (activity 2.1.1) and the costing tool review (activity 2.1.2) have been submitted to USAID for feedback.

The brief on defining pharmaceutical benefit packages (activity 2.1.1), the second report including guidance for using the OHT to cost pharmaceutical benefit packages (activity 2.1.2), and the report on pricing policies within the Asian region (activity 2.2.1) are undergoing final internal review and will be submitted to USAID in Q2.

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

### *Activity 3.1.1: Collaborate with Asian networks, such as ASEAN and SEARN, to adopt uniform medicine registration processes*

Using a collaborative approach with major networks and stakeholders in the Asian region, MTaPS continued dialogue with ASEAN's Pharmaceutical Products Working Group (PPWG) to determine and agree on potential areas of support.

MTaPS, PQM+, and USAID Asia Bureau participated in a virtual meeting with ASEAN on November 6, 2020, to present potential areas of collaboration for the 30th Meeting of the ASEAN Consultative Committee on Standards and Quality (ACCSQ) PPWG; to present the MTAPS and PQM+ proposal on multiple activities for collaboration with the ACCSQ PPWG for consideration; to convey that MTaPS wants to receive their input on activities to be prioritized for support (or activities not to be considered); and to determine next steps for continued discussions.

The ASEAN PPWG acknowledged the information presented, including the launch of U.S.-ASEAN Health Futures Initiative on April 22, 2020, to expand partnership with ASEAN on public health issues and that USAID-funded projects work separately but in complementarity, providing technical assistance to advance regulatory system strengthening in different countries and regions worldwide. USAID-funded programs are planning to support ASEAN to strengthen policy processes over the next three to four years in two areas: encouraging adoption of harmonized international standards for pharmaceutical manufacturing and convergence of national policies on pharmaceutical product production, quality, and safety.

PPWG expressed appreciation to USAID for its comprehensive proposal, highlighted the importance of avoiding duplication of support with other dialogue partners, and promised to provide feedback by mid-2021. USAID requested a response in a shorter time frame to which ASEAN PPWG has yet to respond. For this reason, implementation of the following two activities awaits formal feedback from ASEAN PPWG: supporting implementation of harmonized technical standards and guidelines and facilitating joint review sessions and capacity building to assess biologics and vaccines among ASEAN/SEARN member states.

### *Activity 3.1.2: Establish collaboration between academic/research institutions to grow pharmaceutical regulatory expertise among the region's workforce in key regulatory functions*

MTaPS supported an online course on current Good Manufacturing Practices (cGMP) as a pilot to equip pharmaceutical manufacturers in India to comply with international GMP standards for regulating medicine manufacturing. Virtual platforms were used to communicate with selected manufacturers because of COVID-19.

MTaPS, in collaboration with PQM+, worked to develop an online cGMP course piloted in India with a plan to expand implementation to other SEARN member states. MTaPS and PQM+ selected and provided resource persons and experts in pharmaceutical regulation and GMP to deliver a virtual course to pharmaceutical manufacturers and regulators from SEARN member states in collaboration with the Jagadguru Sri Shivarathreeshwara Academy of Higher Education and Research, Mysuru in India. The e-learning course was delivered December 1-14, 2020, using a virtual platform and included key concepts of pharmaceutical manufacturing and regulatory strengthening, targeting manufacturers of active pharmaceutical ingredients and finished pharmaceutical products. MTaPS facilitated two sessions on stability studies and comparative review of international GMP norms, and PQM+ facilitated two sessions on the WHO certification scheme (COPP) and the concept of laboratory information management systems. The course was an opportunity to enhance training materials and methodology and provide regulatory training and technical support in cGMP for those engaged in manufacturing active

pharmaceutical ingredients and finished pharmaceutical products in India to promote availability and access to medicines. The training report is under development to be finalized in the next quarter.

### OBJECTIVE 4: PHARMACEUTICAL SECTOR GOVERNANCE IN ASIAN COUNTRIES STRENGTHENED

*N.B.: As approved by USAID, this objective was developed for PY3 to include governance-related activities. Previously, objective 3 included both the regulatory and governance activities.*

#### *Activity 3.2.1: Develop a how-to manual on managing conflicts of interest (COIs)*

*N.B.: This activity was carried over from the PY2 work plan, and it was previously included under objective 3 and sub-objective 3.2: Transparency and accountability in pharmaceutical systems increased.*

Ethics approval was received in November for the study that WHO SEARO and MTaPS are conducting as a first step to developing a how-to manual on COIs; the first phase—the online search and webpage scan—was completed in this reporting period. The objective of the study is to identify what COI management policies are in place in the Asian region/subregion; explore if and how policies are implemented, particularly in low-resource countries; and collect copies of what exists and examples of good practices. An online search and scan of MOH and government websites was conducted in ten south-east Asian region countries; the Democratic People's Republic of Korea was excluded because of the apparent lack of web presence.

Of the 85 publicly available documents identified (pharmaceutical legislation, rules and regulations, national medicine policies, essential medicine lists, health technology assessment handbooks, committee by-laws, and web pages of MOHs), 45 documents that described the purpose and functions of 41 public sector pharmaceutical committees were included for analysis. The committees spanned medicine registration, selection of essential medicines, procurement, pricing, and health technology assessment. Of these, 8 policy documents made specific reference to COIs; these documents tended to emphasize the need for transparency, objectivity, and independence in decision-making processes but provided little guidance on how to manage COIs. Several policy documents referenced committee terms of reference, codes of conduct, and by-laws, which could not be identified through web searches. In preparation for the next phase, namely verification of web scan findings and key informant interviews, WHO SEARO team members sent out an official email to the MOHs requesting nomination of key informants; nominations were received from three countries. The key informant interviews will focus on informants' experience with COI policies, including the need for such policies where they are missing and where they exist, enablers, challenges, and best practices.

In addition to using the survey results to inform the development of the how-to manual, WHO SEARO proposed and the regional committee agreed to include a section on COI policies in the next WHO annual publication that reviews progress in improving access to medical products in the south east Asian region [1]. The report currently does not include any parameters on governance. Inclusion of the study findings in this annual report is intended to raise awareness on the need for policies to guide the management of COIs of members that serve on pharmaceutical committees that make decisions on medicine registration, selection, pricing, and procurement and to motivate countries to give this area more attention.

The literature search to identify model guidance, policies, and procedures on managing COIs in the pharmaceutical sector that can be applied to or adapted for the Asian region was initiated in this reporting period. The WHO Collaborating Center for Governance, Transparency, and Accountability in the Pharmaceutical Sector, which is taking the lead on conducting the search, identified 2,336 articles and reports, of which 30 were identified as potentially useful to inform the development of the how-to manual. The report, which will summarize the rapid literature review and highlight case studies, will be finalized in the next quarter.

In view of the longer-than-usual times in getting responses from key informants and future anticipated delays because of MOH staff engagement in managing the COVID-19 response, MTaPS and WHO SEARO decided to begin developing the how-to manual in the next quarter based on the literature search and available survey findings.

***Activity 4.1.1: Support implementation and dissemination of the how-to manual on COIs***

No activities in this quarter.

**ACTIVITIES FOR NEXT QUARTER**

| ACTIVITY AND DESCRIPTION | DATE (2021) |
|---|---|
| 1.1.1. Hold consultative discussions with Missions to identify countries for HTA capacity-building training and roadmap dissemination; disseminate HTA roadmap and Asia-focused findings through webinars. | Jan.-Mar. |
| 2.1.1. Hold consultative discussions with Mission representatives to identify countries for OHT capacity-building training for costing pharmaceutical benefit packages; begin preparing training material | Jan.-Mar. |
| 3.1. Follow-up on the ASEAN and SEARN networks and Central Asia to agree on the areas of interest to support to improve regulatory system strengthening in the defined regions | Jan.-Mar. |
| 3.2.1 and 4.1.1. Complete key informant interviews and draft the report of study findings; finalize report of the rapid literature review; draft the submission for the WHO SEARO regional medicines report; prepare outline of how-to manual for review and develop the first draft | Jan.-Mar. |

[1] For the most recent report - see WHO. Regional Office for South-East Asia. (2019). Access to medical products in the South-East Asia Region 2019: Review of progress. WHO. Regional Office for South-East Asia. https://apps.who.int/iris/handle/10665/326829.

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

**IGAD countries**

*Djibouti*
*Eritrea*
*Ethiopia*
*Kenya*
*Somalia*
*South Sudan*
*Sudan*
*Uganda*

**EAC countries**

*Burundi*
*Kenya*
*Rwanda*
*South Sudan*
*Tanzania*
*Uganda*

## OBJECTIVE 1: IMPROVE PHARMACEUTICAL SECTOR GOVERNANCE

### *IGAD 1.1.1: Assist IGAD in establishing and operationalizing governance structures for PV*

During the past quarter, the MTaPS Program held several meetings with IGAD and EAC Secretariats to plan and implement joint activities. MTaPS worked closely with IGAD and EAC Secretariats and respective focal persons on the medicine regulatory harmonization agenda. MTaPS' collaboration with the IGAD Secretariats included planning meetings on October 28 and 30, November 20, and December 6, 2020, for implementing cross-border trainings and sensitizations targeting HCWs and HMTs, respectively, at identified priority IGAD/MTaPS cross-border areas. The trainings and sensitization were jointly implemented; MTaPS offered technical support and facilitated implementation.

MTaPS held a consultative virtual meeting with the IGAD Secretariat on November 20, 2020, to discuss and agree on support to the member state of Djibouti to facilitate implementation of the PV baseline assessment. The discussion was geared at strengthening the PV component and structures within the MOH in Djibouti to facilitate implementation and adoption of region-led activities.

MTaPS worked closely with the EAC and IGAD Secretariats to ensure that local manufacturers participated in the validation forums/workshops to provide feedback to the local pharmaceutical industry and national medicine regulatory authorities (NMRAs) on the assessment findings. The workshops were held October 22 and 29, respectively, and the stakeholders' sensitization conference was held on December 3, 2020.

MTaPS engaged the EAC Secretariat to strategize on developing and finalizing the harmonized EAC PV standard operating procedures (SOPs). They successfully organized and supported a validation workshop given by the EAC Expert Working Group on PV (EAC EWG-PV) for the draft SOPs on October 26-27 and November 10, 2020.

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

MTaPS engaged and provided technical assistance to the EAC Secretariat, the EAC EWG-PV, and the lead NMRA to develop and finalize the draft harmonized:

- PV curriculum and training modules; the curriculum will support training HCWs in partner states and will be used to develop materials for the various target audiences and stakeholders to create awareness on PV. The curriculum is currently undergoing country reviews, and a validation workshop is planned for quarter 2.
- SOPs to support implementing the PV compendium; a virtual workshop to validate the draft SOPs was held on October 26-27, 2020, and November 10, 2020. The objectives of the workshop were to discuss, review, and validate draft EAC harmonized SOPs for adoption by EAC member states.

The process of developing the above documents was EAC-led, with MTaPS closely working with the lead NMRA, the Kenya Pharmacy and Poisons Board (PPB), and EAC partner states to promote ownership and ensure sustained capacity building for EAC-PV experts.

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

### *EAC 2.1.1: Build capacity of NMRAs in EAC to analyze and use PV data for regulatory decision making*

No activities were planned or held this quarter.

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

MTaPS held several meetings with the IGAD Secretariat and EWG-PV from IGAD member states (with exception of Eritrea) to review progress on executing PV baseline assessment trainings, data collection, and report writing. The baseline assessment has been implemented in most of the partner states (Ethiopia, Kenya, Somalia, Uganda) with exception of Djibouti. Discussions with the IGAD Secretariat, Djibouti MOH, and MTaPS to undertake implementation are ongoing, and the assessment is slated to be implemented in quarter 2. There are ongoing discussions between the IGAD Secretariat and the World Bank to support Sudan and South Sudan, which are not supported by USAID, to undertake the PV baseline assessment. The assessment aims to highlight the status of the PV system in each IGAD member state and provide information to inform further interventions to support and improve PV and patient safety in the region.

MTaPS, in collaboration with the IGAD Secretariat and member state NMRAs, planned and implemented PV cross-border training and sensitizations for identified priority IGAD/MTaPS cross-border areas of:

- Amudat and Moroto districts of Uganda, which border West Pokot and Turkana Counties in the Republic of Kenya, respectively, November 9-13, 2020. This training was held in Moroto, Uganda and attended by 25 participants drawn from pharmacists, medical officers, and nurses. The IGAD and MTaPS teams also carried out sensitization meetings with both HMTs for Amudat and Moroto.
- Turkana and West Pokot Counties of Kenya, which border the Republic of Uganda, on November 16-20, 2020. This training was held in Kitale, Kenya and attended by 24 participants drawn from pharmacists, medical officers, and nurses. The IGAD and MTaPS teams also carried out a sensitization meeting with the HMTs for West Pokot County, and the sensitization for Turkana HMT is planned for quarter 2.
- Moyale border area between Kenya and Ethiopia December 7-11, 2020. This was a joint training for participants from both Kenya and Ethiopia, held in Moyale, Kenya and attended by 22 participants (8 from Ethiopia) drawn from pharmacists, medical officers, and nurses. The IGAD and MTaPS teams also carried out a sensitization meeting with the HMT for Marsabit County in Kenya, where the Moyale border area is found.
- Mandera border area between Kenya and Somalia December 7-11, 2020. This was a joint training for participants from both Kenya and Somalia, held in Mandera, Kenya and attended by 23 participants (9 from Somalia) drawn from pharmacists, medical officers, and nurses. The IGAD and MTaPS teams also carried out a sensitization meeting with the HMT for Mandera County, Kenya.

Sensitisation of private chemists on PV-Moyale. (Photo credit: Caroline Cherotich/IGAD)

The trainings and sensitizations are geared toward creating awareness on PV and promoting patient safety with a clear reporting mechanism and collaboration at the border areas to strengthen the health care system in terms of identification, monitoring, management, and reporting on adverse drug reactions and suspected falsified and substandard medical products. The participants were able to develop facility, sub-county, and county/district action plans to be implemented for institutionalization and strengthening PV and patient safety.

Throughout the quarter, MTaPS provided technical assistance and support to the IGAD Secretariat and NMRA PV experts on training material development and review, facilitation and training, and report writing for implemented activities.

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

During the quarter, MTaPS finalized assessment of the local pharmaceutical industry to examine their capacities to adhere to GRPs to ensure sustained availability of critical essential medicines in line with international standards. The assessment report has been finalized.

MTaPS, in collaboration with IGAD and EAC Secretariats, organized and held a webinar forum for local manufacturers in the EAC and IGAD regions on October 22, 2020. During the forum, MTaPS provided preliminary feedback from the survey on regulatory compliance by local manufacturers and guided discussions on gaps and solutions for regulatory compliance. The forum was attended by 21 manufacturers drawn from the IGAD and EAC regions.

A similar webinar forum for the NMRAs in the EAC and IGAD regions was held on October 29, 2020. During the forum, MTaPS provided preliminary feedback from the survey on regulatory compliance by local manufacturers; regulators were interviewed to provide information on the existing regulatory requirements. The forum discussed the gaps identified and solutions for regulatory compliance and explored ways of mutual reciprocity among NMRAs and support for the local manufacturers. The forum was attended by six NMRAs drawn from the IGAD and EAC regions.

Additionally, MTaPS organized a local manufacturers' stakeholders' conference on December 3, 2020, in support of adherence to GRPs and requirements. This conference sensitized stakeholders on the findings and recommendations from the survey carried out to assess regulatory capacities; introduced the importance of PV for regulation; and highlighted the roles and responsibilities for the different pharmaceutical sector stakeholders in promoting GRPs to enhance and sustain local production of quality, safe medicines, and other health products. A total of 38 participants attended the conference

and were drawn from key stakeholders involved in the pharmaceutical value chain within IGAD and EAC regions including the IGAD Secretariat, NMRAs from IGAD and EAC member countries, professional associations, local manufacturers, pharmaceutical distributors, USP PQM+, and civil society and policy makers.

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

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

MTaPS engaged the IGAD Secretariat and the member state of Djibouti to provide technical support for implementing the PV baseline assessment using the harmonized indicator-based PV assessment and monitoring tool. Implementation of the assessment has been delayed by changes within the MOH structure in Djibouti, nonetheless, the implementation is slated for quarter 2. There are ongoing discussions with the World Bank to support Sudan and South Sudan, which are not supported by USAID, to implement the PV baseline assessment.

During the quarter and jointly with IGAD EWG-PV experts, MTaPS provided technical support in developing the harmonized PV training and sensitization packages and training PV cross-border and facility focal persons in IGAD member states. The HMTs of the cross-border areas were sensitized on the importance of PV and the need to integrate PV into operational processes, including facility work plans and budgetary allocation. The following trainings were conducted using the harmonized draft training package:

- Amudat/Moroto cross-border area between Uganda and Kenya, where 25 participants were trained in November 2020
- West Pokot/Turkana cross-border area between Kenya and Uganda, where 24 participants were trained in November 2020


Figure 2: Sensitization visit to Amudat district for the DHMT by NDA/IGAD/PPB teams (Photo credit: Rose Bonareri/IGAD)

- Moyale cross-border area between Ethiopia and Kenya, where 22 participants were trained in December 2020
- Mandera cross-border area between Kenya and Somalia, where 23 participants were trained in December 2020

MTaPS engaged the EAC Secretariat and EAC EWG-PV to develop, review, and validate the draft harmonized EAC SOPs; to support implementation of the harmonized EAC PV compendium; and to discuss the draft harmonized EAC PV curriculum. A virtual validation workshop for the SOPs was held on October 26-27, 2020, and November 10, 2020, while a meeting to validate the curriculum is scheduled for quarter 2.

The EAC harmonized PV compendium and SOPs will be adapted for IGAD to be used in EAC and IGAD countries and cross-border areas. The harmonized PV curriculum will be used for training of trainers (TOTs) in IGAD and EAC countries who will further train more in-country health care providers using the curriculum.

MTaPS held several meetings with the EAC/IGAD lead NMRA in PV (Kenya PPB) to offer technical support to develop draft documents for discussion with

other EAC/IGAD-PV experts as a way of building their leadership in PV within the EAC medicine regulatory agenda.

***IGAD/EAC 3.2.1: Support IGAD and EAC AMR containment initiatives (in years 2 and 3)***

No activities were planned or held during the quarter.

| **ACTIVITIES FOR NEXT QUARTER** | |
|---|---|
| ACTIVITY AND DESCRIPTION | DATES (2021) |
| Validate IGAD regional report on PV system | Jan.-March |
| Develop a harmonized EAC and IGAD PV training curriculum and package for training border sites in both IGAD and EAC | Jan.-March |
| Train PV TOTs from countries, including border sites | Jan.-March |
| Sensitize stakeholders in EAC and EAC partner states on the PV compendium and SOPs | Jan.-March |

# PROGRESS BY COUNTRY

## BANGLADESH

For progress on MTaPS/Bangladesh's COVID-19 activities, click here.

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 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.

The MTaPS Bangladesh program started its year three implementation in this reporting quarter after work plan approval at the end of November 2020.

### MISSION-FUNDED ACTIVITIES

#### OBJECTIVE 1: PROCUREMENT AND SUPPLY CHAIN SYSTEMS IMPROVED AND MODERNIZED

The main strategy in this objective is to work closely with the Ministry of Health and Family Welfare (MOHFW) and its key directorates while providing technical assistance to strengthen existing systems and build capacity to manage procurement and supply chain management effectively and efficiently.

Updating the list of Medical and Surgical Requisites (MSR), including more than 2,500 items for the Directorate General of Health Services (DGHS), continued in this quarter in the form of receiving feedback on the zero drafts of the list from stakeholders, incorporating input, and holding the second meeting of the committee established to make the modification. MTaPS' role was to facilitate the meeting and present key notes. The meeting ended with important decisions related to reorganizing item groups, means of receiving further input to finalize the draft, prioritizing the COVID-19 and medical waste items for finalization and sharing with health facilities, and forming a sub-committee to review the feedback periodically and recommend actions to the committee. MTaPS followed up on the implementation of the decisions. The activities will strengthen health facilities' procurement management systems, thereby contributing to better availability of products to diagnose and treat patients and ultimately save lives. In the next quarter, MTaPS will work on identifying a consultant to conduct a market analysis to develop standard price references for MSR and assign unit prices for the items on the list to facilitate procurement planning and processing at the MOHFW.

As a continuation of the previous year's work on the table of organization and equipment (TOE) under MOHFW leadership and with stakeholder participation, MTaPS facilitated a high-level meeting in November 2020. The work done so far by MTaPS was accepted in the meeting as an interim step up with a recommendation to introduce an electronic platform to make the TOE more dynamic and responsive to changes and provide a wider reach to health system managers and policy makers. The document is now under review. It is expected that the TOE will assist the MOHFW and DGHS to increase procurement efficiency and ensure sustainable availability of equipment at different levels. It will also help plan human resource distribution by health facility and department levels. Next quarter, MTaPS will work on developing a scope of work to engage a consultant to update the price guide for medical equipment and assign indicative prices for the items in the updated TOE.

No meeting was held this quarter to discuss the performance of the procuring entities. However, the Line Directors are reviewing their operational plans for modifications, and MTaPS is providing feedback in the operational plan revision process at the desk level and by attending related virtual events. Revised plans will contribute to continuous improvement of procurement performance and help ensure sustainable access to safe, effective, quality-assured, and affordable essential medicines and pharmaceutical services to the population of Bangladesh.

Despite the COVID-19 situation, the MTaPS technical team continued close communication with the Directorate General of Family Planning (DGFP) and provided technical assistance in procurement and supply management activities during this quarter. Most of the support was provided virtually following the instructions of the Government of Bangladesh and the MTaPS country leadership team. MTaPS technical advisors attended several virtual meetings with DGFP district- and sub-district-level managers to share and discuss the stock status of contraceptives at service delivery points (SDPs) and how to maintain adequate stock for better services. As a result of this virtual support and monitoring mechanism, the stock-out rate of any contraceptive method at the SDP level (around 30,000 SDPs) was reported to be less than 0.2% during the last few of months of 2020 (figure 10). (To see the trend, please visit https://scmpbd.org/index.php/sdp-report/stock-out-of-any-method)

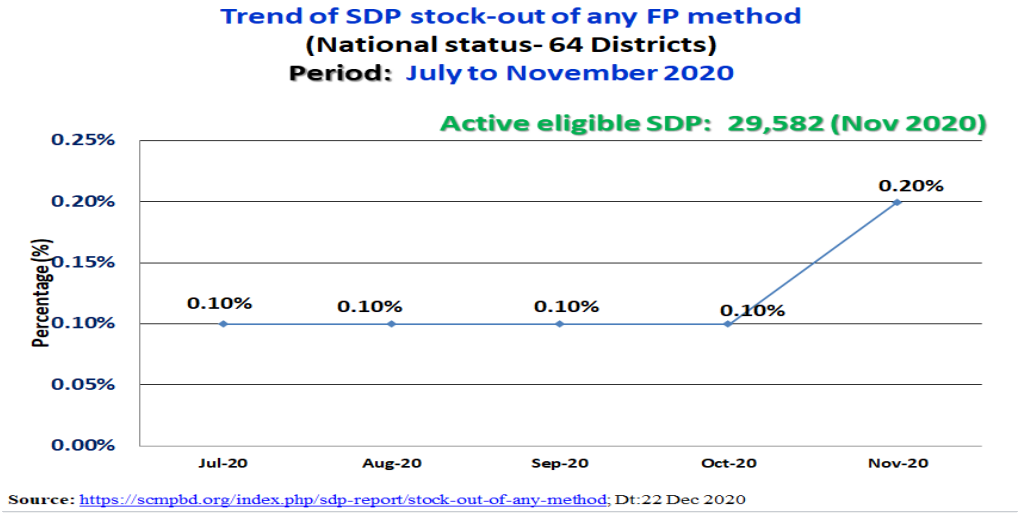



Figure 10. Stock status of family planning commodities at SDPs: July–November 2020

After reopening the remodeled Barishal regional warehouse, 4,200 square feet of storage space was added to the DGFP supply chain system, which accommodates family planning and reproductive health (FPRH) commodities and other essential medicines allocated for the region. During this quarter, MTaPS worked closely with the warehouse staff to assist them in operationalizing warehouse functionalities. MTaPS provided on-the-job training to build capacity in warehouse management and the warehouse inventory management system (WIMS). The warehouse staff were able to produce system-generated invoices and reports and upload data in a timely way to the web-based portal, which will allow efficient decision making and ultimately ensure availability of essential medical products for the population.

As part of self-reliance, the DGFP included most of the interventions initiated by MTaPS and its predecessor project in its operational plan and started implementation with its own resources. During the first quarter of FY21, MTaPS provided limited technical support in modifying the store management training curricula and facilitated technical sessions in response to the DGFP's invitation. MTaPS technical advisors attended the day-long warehouse/store management refresher training in 17 districts and facilitated technical sessions on the inventory management system, use of data, and the decision-making process. A total of 414 participants (282 male, 132 female) attended the trainings. The DGFP is

expecting improved performance from storekeepers and managers in managing the stores and maintaining product quality.

The National Tuberculosis Control Program (NTP) included MTaPS on a technical coordination committee for peripheral store assessment to optimize and integrate peripheral TB commodity storage (currently being maintained by nongovernmental implementing partners under the Global Fund grant) within the government system and to develop a transition planning for this integration. With support from MTaPS, the technical coordination committee designed the assessment methodology; drafted questionnaires; and coordinated with stakeholders, including the Global Fund and USAID mission, to agree on the methods and processes. The implementing partners will complete the questionnaires at the field level with support and leadership from government bodies. A service provider will be hired by MTaPS to enter and analyze data and facilitate stakeholder engagement in developing the peripheral TB storage optimization, integration, and transition plan. MTaPS is finalizing the scope of work for this consultant/service provider. The overall activity will be led by the technical coordination committee.

This quarter, MTaPS/Bangladesh took initial steps toward supporting the MOHFW with setting up eLearning platforms and developing three eCourses. This activity will allow the MOHFW and its directorates to receive the necessary initial or refresher training through distance learning. The eLearning platform will host highly interactive courses on procurement basics, generic logistics management, and e-TB Manager. As a next step, MTaPS will support the MOHFW to finalize the digital assessment and use the results to select the host institution(s) best suited to implement the eLearning programs. The virtual learning approach (potentially blended with face-to-face interactions when suitable) should help to address issues related to MOHFW staff turnover and restricted movement.

### OBJECTIVE 2: PHARMACEUTICAL REGULATORY SYSTEMS STRENGTHENED

MTaPS, in collaboration with partners, such as the World Health Organization (WHO), and the Product Quality Management Plus (PQM+) program, under the umbrella of the Coalition of Interested Partners Bangladesh, worked with the DGDA to identify 10 working teams for the 9 regulatory functional areas classified according to the WHO Global Benchmarking Tool (GBT). Support is tailored toward WHO prequalification of vaccines, as well as the DGDA regulatory system in general. MTaPS participated in discussions with DGDA teams to implement the 2021 action plan, drawn from the DGDA five-year strategic plan. In addition, MTaPS assisted the DGDA in reviewing the institutional development plan (IDP) and identified four functional areas to provide technical support—pharmacovigilance (PV), licensing establishments, marketing authorization, and regulatory inspection. All of these efforts are geared toward achieving maturity level 3 as per the WHO GBT and ultimately ensuring appropriate use of safe, effective, and quality-assured essential medicines and pharmaceutical services in Bangladesh.

MTaPS is collaborating with the Better Health in Bangladesh program to develop an electronic pharmacy inspection and licensing system for the DGDA and has already completed the review of the existing workflow, the application form, and standard operating procedures required for the licensing application process. After system development, user acceptance testing for license applicants will follow. This approach will help optimize pharmacy inspection and licensing systems, including reducing the time required to receive a license, improving and controlling access to medicines, and improving the DGDA's regulatory outcomes within the limited resources in Bangladesh.

MTaPS' support to the DGDA in uploading adverse drug reaction (ADR) reports to the WHO Vigiflow database continued from the last quarter of FY20, increasing the total number from 276 to 629. This will improve the global visibility of the DGDA's PV functions and provide important information on drug safety. The efforts will help the DGDA properly implement the PV system and analyze and manage data on its path toward sustainability.

MTaPS, as a member of the DGDA Adverse Drug Reaction Monitoring Cell, participated in the review of approximately 460 ADR reports received between April and December 2020. ADR reports were categorized as complete, incomplete, serious, or not serious to present at the upcoming technical sub-committee meeting for causality assessment. This effort will strengthen the DGDA's capacity in the primary assessment of ADRs and in the management of drug safety evaluation.

MTaPS provided technical assistance to the DGDA to develop procedures for reporting, investigating, interpreting, and conducting risk management for ADRs and adverse events following immunization (AEFIs). The GBT report and IDP recommendations were a guide to ensure that a risk-based approach is incorporated in all PV processes, including vaccine monitoring. Dissemination of the procedures was conducted within the DGDA, and they are now going through the DGDA approval process. Better management of ADRs and AEFIs will improve patient safety and increase the PV score toward GBT maturity level 3.

MTaPS worked with the DGDA PV team and the Working Committee for Assuring Safety of COVID-19 Vaccine to establish three committees: a district and city corporation AEFI investigation committee, a regional AEFI causality assessment committee, and a national AEFI expert review committee with terms of reference for all the three committees. Investigation of serious AEFIs of the COVID-19 vaccine will be done first by the district and city corporation committee, which will share its investigation report with the regional committee for causality assessment of AEFI. The national committee will then review all causality assessment reports and propose regulatory recommendations to the DGDA on AEFIs of the COVID-19 vaccines. This approach will help the country properly manage the process to ensure COVID-19 vaccine quality and safety.

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

The TB reference laboratory network within the NTP consists of one National TB Reference Laboratory (NTRL) and four Regional TB Reference Laboratories (RTRLs). This network is responsible for diagnostic processes related to TB drug resistance. To ensure that diagnostic processes remain uninterrupted, the lab equipment needs to be in working order, and the supply of lab consumables should be continuous. The existing manual systems in both equipment and logistics management are inadequate to address the needs of the program. MTaPS has provided a solution by combining two existing systems—the WIMS that includes electronic indent of TB drugs and the electronic asset management system (eAMS) to address constraints in logistics and equipment management in the NTP reference laboratory network. During this quarter, MTaPS made changes to the WIMS and electronic indenting tools, as well as to the eAMS to allow the logistics and equipment to be managed electronically, which will help ensure more efficient and sustainable access to TB diagnostics and ultimately improving the outcome of TB cases in Bangladesh.

MTaPS facilitated a workshop in coordination with the NTP and the USAID Infectious Disease Detection and Surveillance program and demonstrated both the WIMS and eAMS to laboratory network personnel. With data input into both systems, the NTP will be able to better manage the logistics flow of lab items and minimize the issues related to equipment management information, such as warranty, actual number and distribution of equipment, and repair and maintenance of equipment. This way, the DGHS will use the same system for multiple types of facilities and no new system was introduced. Because the NTP is part of the DGHS and is using the same asset management system, the DGHS and the MOHFW can now track the assets in the NTRL and RTRLs as well as in district-level hospitals, thereby avoiding duplication of actions and making the processes more efficient.

As part of the e-TB Manager rollout nationwide, MTaPS has conducted training for 354 participants (284 male, 70 female) in the Chattogram division on the e-TB Manager app. MTaPS continued its remote

support to e-TB Manager users across the country to ensure consistent entry and quality of TB patients' data and effective monitoring for critical decision making to improve TB control in Bangladesh.

MTaPS is collaborating with the Alliance for Combating TB in Bangladesh to establish interoperability between the JANAO app used by private doctors and the NTP's e-TB Manager. As part of the activity, a field test to check the interoperability of JANAO TB patient notification by doctors to e-TB Manager accounts at six DOTS centers in Dhaka was done by NTP officials and staff from the International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) and MTaPS on November 30.

The overall test was successful, and NTP officials were satisfied with the interoperability. As a next step, a live demonstration for NTP officials will need to be prepared and is planned for January 2021. The activity is expected to increase case detection from the private sector and the number of cases under treatment in Bangladesh.

MTaPS participated in a meeting with the Implementation, Monitoring and Evaluation Department and Health Service Management operational plan team to move eAMS implementation and functionality forward. Health Service Management took the lead and promised the Implementation, Monitoring and Evaluation Department that they would engage a Deputy Program Manager to monitor eAMS implementation and functionality to ensure government ownership. Making the eAMS functional at the 61 district-level hospitals will help the MOHFW make decisions based on correct medical equipment status in the case of repair needs or new procurement at the health facility and national levels.

MTaPS is one of the DGHS development partners working to increase access to maternal, newborn, and child health (MNCH) commodities and other lifesaving medicines by strengthening the system that provides information on their stock status and promotes the effective use of data for program development. MTaPS and the United Nations Population Fund (UNFPA) facilitated the Technical Working Committee meeting for the DGHS eLMIS on MNCH priority commodities. The main discussion points were scaling up the eLMIS by UNFPA with technical assistance from MTaPS and taking the newly developed eLMIS dashboard (beta version) online. UNFPA will scale up the DGHS eLMIS in its districts, the DGHS Management Information System (MIS) unit will take the lead on national-level scale-up, and MTaPS will make the beta version of the dashboard live. MTaPS will continue to support the MIS for future scale-up by MIS or another development partner. Scaling up the DGHS eLMIS for MNCH will allow for better stock monitoring that results in data-driven decisions and helps minimize stock-outs and overstocks at the facility level.

During this quarter, MTaPS and UNFPA worked to support the DGHS in scaling-up the DGHS eLMIS for MNCH in three more districts (Gaibandha, Bhola, and Bagerhat). As part of this, the DGHS MIS unit organized a training of trainers for participants from the three districts. MTaPS technical staff facilitated a technical session for the trainers who will in turn conduct local-level training. A total of 57 participants (52 male, 5 female) from three districts attended the training. The trainees will provide training to more than 500 system users at the sub-district level in the next quarter. MNCH commodities stock data from these three districts will then be available at scmp.bd.org, and managers will be able to use the data to take actions related to stock status, procure MNCH commodities, and improve the overall MNCH program.

As part of a three-day training on health systems conducted by the MOHFW for district-level health managers, MTaPS led a two-hour session on eAMS as part of the procurement management training session. Trainees learned the usefulness of eAMS and how to use it to follow up with hospitals to ensure proper allocation and use of medical-related assets at all levels.

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

MTaPS started the review process of the National Strategy for Antimicrobial Resistance (AMR) Containment in Bangladesh in collaboration with the Communicable Disease Control/DGHS. This activity was limited to an informal discussion with stakeholders and will be continued in the next quarter.

**ACTIVITIES FOR NEXT QUARTER**

| ACTIVITY AND DESCRIPTION | DATE |
|---|---|
| Continue technical assistance to DGFP in supply chain management of FPRH and MNCH commodities, including warehousing and distribution, and analyzing data for decision making | January–March 2021 |
| Activity 1.3.2: Develop eLearning courses on procurement basics, generic logistics management, and e-TB Manager and introduce them within the MOHFW and its directorates to contribute to institutional capacity building<br>• Complete eLearning technology assessment<br>• Complete content development to customize eLearning modules | March 2021 |
| Activity 2.1.1: Assist DGDA to institutionalize periodic monitoring system through implementation of IDP to attain WHO GBT maturity level 3<br>• Conduct group work for addressing IDPs in the areas of marketing authorization, licensing, and regulatory inspection<br>• Draft and finalize procedures/terms of reference/etc.<br>• Carry out electronic documentation as per WHO GBT requirements | February 2021 |
| Activity 2.1.2: Work with DGDA in collaboration with Better Health in Bangladesh to develop an electronic pharmacy inspection and licensing system<br>• Disseminate and pilot electronic system<br>• Write report as a deliverable | February 2021 |
| Activity 2.2.1: Work with DGDA to address relevant GBT IDPs (e.g., development of investigation and risk-based management procedures for PV activities) and continue to support ongoing PV activities<br>• Conduct workshop on the Technical Sub-committee and Adverse Drug Reaction Advisory Committee for ADR evaluation and regulatory recommendations<br>• Address the IDPs | March 2021 |
| Activity 3.1.1: Collaborate with USAID partners and other development partners to scale-up DGHS eLMIS for MNCH commodities in selected districts | March 2021 |
| Activity 3.1.2: Assist NTP to roll out e-TB Manager to Dhaka division | March 2021 |
| Activity 4.1.1: Support national counterparts to update the National Strategy for AMR Containment in Bangladesh<br>• Hold stakeholder meeting on the strategy update<br>• Draft technical reports with stakeholder input on the deliverable | March 2021 |

## GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

### RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

In collaboration with the Communicable Disease Control (CDC), DGHS, and Fleming Fund, MTaPS developed the plan for endorsement of the monitoring and evaluation (M&E) framework for the National Action Plan on Antibiotic Resistance Containment (NAP-AMR) during the upcoming National Technical Committee meeting to be headed by the Director General of the DGHS. After endorsement, implementation of the M&E framework will begin.

MTaPS provided technical support on designing and organizing World Antimicrobial Awareness Week 2020 activities November 18–24 in collaboration with the CDC, DGHS, WHO, Fleming Fund, and other stakeholders. MTaPS designed and printed posters and leaflets to sensitize patients about rational use of antimicrobials in humans, animals, and plants, which are the main drivers in the development of drug-resistant infections. Messages included not to take any medicines without a prescription from a registered practitioner and not to take antibiotics for symptoms of viral fever, common cold, and viral diarrhea because antibiotics kill bacteria but cannot kill viral infections such as colds and flu. Other messages were about the misuse of antibiotics during the COVID-19 pandemic; overuse of antibiotics in farm animals and agriculture; the importance of clean water and sanitation in health care facilities, farms, and community settings; and adequate infection prevention and control (IPC) practices. MTaPS distributed 585 posters to health facilities up to the upazila level.

MTaPS also supported the DGDA in celebrating World Antibiotic Awareness Week by facilitating a roundtable discussion on important aspects of antimicrobial use. Participants from the Bangladesh Association of Pharmaceutical Industries, Bangladesh Chemist and Druggist Samity, CDC, Institute of Epidemiology Disease Control and Research, PQM+, icddr,b, and Food and Drug Organization participated in the roundtable discussion, which garnered extensive electronic and print media coverage. Media coverage is a powerful tool to amplify the message from any event. Print, radio, and TV media attention creates awareness, enthusiasm, and public support for activities. The Deputy Director, DGDA, presented the DGDA's AMR response to a wider audience, and journalists helped establish DGDA activities on AMR as credible and notable.

To create awareness among health practitioners and officials to develop antimicrobial use policies, MTaPS supported its national counterpart to organize a second roundtable discussion during World Antibiotic Awareness Week 2020 in collaboration with a renowned daily newspaper, *Daily Kaler Kantho*. The topic was "Arbitrary use of antibiotics and do's and don'ts." The Minister of Health and Family Welfare, Zahid Maleque, chaired the discussion along with Government of Bangladesh counterparts and stakeholders, including WHO, the Fleming Fund, and civil society organizations. The discussion produced a set of recommendations for:

- Taking steps to control antimicrobial sales without prescription
- Ensuring rational use of antimicrobials by effectively introducing antimicrobial surveillance
- Establishing reference labs, high-quality research centers at the national level, and a lab network
- Prioritizing IPC activities in hospitals, clinics, and health centers
- Raising awareness of retail drug sellers
- Enforcing laws and regulations on antimicrobial production, quality control, and marketing under the supervision of the DGDA

### RESULT AREA 2: INFECTION PREVENTION AND CONTROL

MTaPS organized two sharing workshops on IPC and antimicrobial stewardship assessment findings at Munshiganj District Hospital and Cumilla Medical College Hospital. Objectives of the workshops were to share the two assessment reports, including status and gaps; provide evidence-based recommendations; list IPC and AMS priorities to develop specific plans and guidelines relevant to the facilities; and form IPC committees with terms of reference to address the identified gaps.

The workshop sensitized hospital authorities to the importance of strengthening IPC activities for better patient safety. The IPC committees have been revitalized in the two facilities and now include multidisciplinary members and a focal person responsible for overseeing IPC procedures. The terms of reference for the IPC committee and team included the formal assignment of responsibilities and capacity-building plans for physicians and nurses in collaboration with the CDC, DGHS, and MTaPS. IPC and antimicrobial stewardship assessment reports are under review and will be finalized and shared in the next quarter.

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

The CDC and DGHS established a core working group that includes a consultant engaged by MTaPS to formulate a methodology for developing standard treatment guidelines (STGs) for infectious diseases. A consultative workshop was held to share the proposed methodology and come to consensus. Nine experts from different disciplines were selected to work as a group and provide input on the development methodology. The technical working group met virtually five times during the quarter. Core group members proposed holding a face-to-face meeting to finalize the STGs before sharing them with senior representatives of different medical societies. MTaPS will then support the CDC to develop a printed version and a mobile phone app version of the STGs to increase the use of the WHO AWaRe (Access, Watch, Reserve) classification among physicians.

### ACTIVITIES FOR NEXT QUARTER

| ACTIVITY AND DESCRIPTION | DATE |
|---|---|
| 1.1.1: Continue strengthening national-level multisectoral coordination mechanisms to facilitate operationalization of the NAP-AMR and its roadmap<br>• Hold one joint stakeholder meeting in collaboration with the CDC, DGHS, and other stakeholders | March 2021 |
| 2.2.1: Develop training materials based on the hospital IPC manual and other guidelines and checklists issued by Quality Improvement Secretariate (QIS)/MOHFW and train health care workers using those materials<br>• Adapt and update training materials in collaboration with the CDC, DGHS/MOHFW, and stakeholders | January 2021 |
| 2.5.1: Continue to strengthen IPC activities in the two participating facilities and scale up similar initiatives in two new facilities; support CDC/DGHS to develop/execute nationwide rollout plans<br>• Organize five training sessions on IPC for health care practitioners in collaboration with the CDC and DGHS to strengthen and implement IPC systems and practices at two supported facilities<br>• Select facilities to scale up IPC strengthening interventions (one district hospital and one upazila health complex) | March 2021 |
| 3.5.1: Support the finalization of the national-level STGs for common infectious diseases, including converting them into an app and facilitate its dissemination and training<br>• Progress from developed STGs to app version | March 2021 |

# BURKINA FASO

For progress on MTaPS/Burkina Faso's COVID-19 activities, click here.

## GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

### RESULTS AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

***Activity 1.1.2: Provide technical assistance to the AMR Technical Thematic Committee (AMR-TTC) to establish and capacitate the AMS sub-committee, including its human, animal, agricultural, and environmental sector technical working groups***

From December 14 to 17, the Association of Health Sciences of Burkina Faso organized the 20th edition of the Burkina Faso Health Sciences Days (JSSB) in Bobo-Dioulasso at the MURAZ Center. The theme of the event was "Antimicrobial resistance, control of communicable and noncommunicable diseases." Activities included lectures, presentations of scientific articles, symposia, poster presentations, and booth exhibitions. The participants were teacher-researchers, researchers, students, health professionals, and technical and financial partners.

MTaPS/Burkina Faso participated in the JSSB and organized a presentation booth to promote the fight against the emergence of AMR. Over 100 participants visited the booth, which offered a presentation of the MTaPS program, a presentation of MTaPS/Burkina Faso's objectives, and an overview of activities being carried out in the country. MTaPS printed out 1 poster and 200 flyers on MTaPS' support to GHSA, 200 fact sheets on MTaPS' work in Burkina Faso, and 200 quizzes as communication tools; 32 visitors participated in the questions and answers (quiz) session and shared their knowledge on AMR. In addition to the booth, MTaPS' representative to the JSSB attended the following presentations:

- "Antimicrobial resistance: epidemiology, management and cost" presented by Professor Abdoul Salam Ouedraogo of the Nazi Boni University
- "The regional approach to antimicrobial resistance" presented by Dr. Abdourahmane Sow of the West African Health Organization
- "Control of noncommunicable diseases" presented by Professor Kyelem Tenin

The JSSB of Bobo-Dioulasso were an opportunity to raise concerns on the accelerated emergence of AMR and to reaffirm awareness at regional and global levels.


Participants visiting the MTaPS kiosk during the JSSB 2020 (Photo credit: Dr. Hema Yacouba)

## RESULTS AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

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

In FY20Q4, MTaPS organized a two-day workshop that involved stakeholders from the public and private sectors and from civil society to finalize the draft national guidelines for using antimicrobials in the animal sector. Following the workshop, MTaPS worked with the Direction Générale des Services Vétérinaires to integrate all recommendations and suggestions to improve and finalize the national guidelines. A virtual meeting took place on December 9, 2020, to finalize the draft guidelines for rational use of antimicrobials in animal sector. The meeting was chaired by the technical advisor from the Ministry of Animal Resources and Fisheries and reported by the director of the National Livestock Laboratory. The Ministry's national antimicrobial resistance focal point and the director of the National Livestock Laboratory gave a presentation of the finalized national guidelines for using antimicrobials in the animal sector, followed by a plenary discussion session. The document was validated at the meeting and will be presented by a technical advisor from the Ministry of Animal Resources and Fisheries at the ministerial cabinet meeting to share it with ministry policymakers, obtain the minister's endorsement, and subsequently publish and disseminate it throughout the entire animal sector in the country.

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

Establishing DTCs is critical for the optimized use of antimicrobial medicines. From October 6 through November 14, 2020, MTaPS, in collaboration with the MOH's Hospital Pharmacy, facilitated establishment of five DTCs in the following hospitals/health care centers: Zorgho, Gaoua, Tenkodogo, Boulmiougou, and Ziniare. In each facility, MTaPS, in collaboration with the Hospital Pharmacy, presented basic information on DTCs, including their composition, organization, mission, roles, operations, and formalization; and facilitated selection of DTC members and installation of the committees. Then, participants in their respective workshops carried out a strengths, weaknesses, opportunities, and threats analysis for each of the five DTCs to ensure their effectiveness and sustainability. They also conducted a situational analysis of antimicrobial use to identify bottlenecks in combating AMR and to develop recommendations to address them.

**ACTIVITIES FOR NEXT QUARTER**

| ACTIVITY AND DESCRIPTION | DATE |
|---|---|
| Activity 3.1.1: Provide technical support to the AMR-TTC and stakeholders to develop a national plan to strengthen AMS in the human and animal health sectors | |
| • Task 3.1.1.2.a: Develop a national AMS plan that includes both the human and animal sectors | February 2021 |
| • Task 3.1.1.4.b: In collaboration with NDRA/CEDIM, print copies of the essential medicines list and organize three two-day workshops to disseminate the EML | January 2021 |
| Activity 3.5.1: Support implementation of guidelines and policies at the peripheral level | January-March 2021 |
| • Task 3.5.1.a: Train the five DTCs established in health care facilities | |

## PRESIDENT'S MALARIA INITIATIVE ACTIVITIES

To facilitate development of a work plan to support pharmacovigilance activities for introducing a new malaria treatment in Burkina Faso, MTaPS held virtual meetings with USAID Burkina Faso, the National Drug Regulatory Authority (NDRA), and the National Malaria Control Program (NMCP). The meeting with USAID Burkina Faso aimed to obtain more clarity on the USAID Mission's expectations. The meeting with the director of the Pharmacovigilance Center of the NDRA and the pharmacovigilance focal point of the NMCP aimed at agreeing on and prioritizing many selected activities to include in the pharmacovigilance work plan. Currently, MTaPS is developing a work plan to submit to USAID for approval.

# CAMEROON

For progress on MTaPS/Cameroon's COVID-19 activities, click here.

### RESULT AREA 2: INFECTION PREVENTION AND CONTROL

#### *Activity 2.1.1: Support the development, validation, and dissemination of IPC guidelines for the human health sector*

The lack of national infection prevention and control (IPC) guidelines in Cameroon was one of the factors that contributed to the inadequate level of IPC in most (88%) health facilities, as demonstrated by the scores on the last IPC assessment conducted in some health facilities in Cameroon in 2019. Following the validation of the national IPC guidelines, MTaPS supported national stakeholders to finalize the IPC guidelines during this quarter, integrating input from the validation workshop as recommended. MTaPS is planning to support the translation of the validated guidelines into English as requested by the Ministry of Public Health (MOH). This will be followed by the printing and dissemination of the guidelines. The IPC guidelines will contribute to improving IPC practices and status in health facilities in Cameroon.

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

#### *Activity 3.1.1: Provide technical support to the AMR-CCM and stakeholders to develop a national plan to strengthen antimicrobial stewardship in the human and animal health sectors*

Following the review and finalization of the draft integrated antimicrobial stewardship (AMS) plan, MTaPS supported the antimicrobial multisectoral coordination committee (AMR-CCM) to organize a three-day workshop to validate the plan. The workshop took place October 7–9, 2020, and brought together 30 experts from the MOH and Ministries of Animal Husbandry, Agriculture, and the Environment. During this workshop, sections of the document were reviewed by experts from the different ministries, activities were prioritized, and the document was validated during a plenary session. The workshop ended with a recommendation for the action plan to be translated into English. This plan will serve as an advocacy tool to mobilize funds for the implementation of priority AMS activities in all concerned sectors.

#### *Activity 3.5.1: Support the establishment of effective and functional Drug and Therapeutics Committees (DTCs) in 12 selected health facilities*

To strengthen AMS in health facilities, MTaPS is supporting the MOH to establish effective and functional DTCs in 12 health facilities: Douala general hospital, Douala laquintini hospital, Bonassama district hospital, Bafoussam regional hospital, Foumbot District Hospital, Yaounde Jamot Hospital, Yaounde Gyneco-Obstetric Hospital, Yaounde Emergency Center, Cite-Verte District Hospital, Sangmelima Reference Hospital, Ebolowa Regional Hospital, and Limbe Regional Hospital Annex. MTaPS organized a one-day meeting on November 13, 2020, for 22 pharmacists and clinicians from the Department of Pharmacy, Drugs, and Laboratory (DPML) of the MOH and some first- and second-category health facilities from Yaounde and Douala to define a roadmap for the establishment of DTCs in the 12 selected health facilities. During the meeting, participants conducted a strengths, weaknesses, opportunities, and threats analysis of the existing DTCs and made recommendations to improve the functioning of DTCs. The roadmap includes:

- Identifying the health facilities
- Organizing a training workshop for health facility DTC champions
- Organizing the onsite training of DTC members in pilot health facilities

- Monitoring and evaluating DTCs in the 12 health facilities
- Establishing an e-learning platform to complement the face-to-face trainings

MTaPS expressed a desire to strengthen DTCs in the same MTaPS-supported health facilities in the area of IPC, but the DPML replaced four of the facilities from that group.

**ACTIVITIES FOR NEXT QUARTER**

| ACTIVITY | DESCRIPTION | DATES |
|---|---|---|
| Support the IPC and AMS Technical Working Groups to organize monthly coordination meetings | MTaPS will continue to support the organization of these routine meetings | January 2021 |
| Support the Technical Secretariat of the AMR-CCM to organize quarterly coordination meetings | MTaPS plans to support the organization of this routine meeting to improve the governance of AMR activities | January 2021 |
| Establish an e-learning platform | MTaPS plans to support the installation of the Moodle platform on the DPML website | February 2021 |
| Support the translation, printing, and dissemination of the national IPC guidelines | MTaPS will support the Directorate of Health Promotion (DPS) to translate the national IPC guidelines into English. Following the translation, MTaPS will support the DPS to organize a three-day workshop to disseminate the guidelines. | February–March 2021 |
| Support the drafting of the national IPC action plan | MTaPS will support the DPS to hire a national consultant to draft a national IPC action plan, which will subsequently be finalized and validated in a workshop. | January–February 2021 |
| Support the establishment of IPC committees in six additional health facilities | MTaPS will support the DPS to carry out onsite training of IPC committees in six additional health facilities | February 2021 |
| Putting in place and training DTCs in 12 selected health facilities | MTaPS will work with the DPML to establish/strengthen DTCs in MTaPS-supported health facilities and will support the DPML to develop tools to build capacity of these DTCs | February–March 2021 |

# CÔTE D'IVOIRE

For progress on MTaPS/Côte d'Ivoire's COVID-19 activities, click here.

### RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

#### *Activity 1.1.2: Strengthening functionality of the MCC—organize effective coordination through regular meetings of the Antimicrobial Resistance Technical Working Group (AMR-TWG)*

MTaPS supported the following capacity-building activities of the AMR-TWG.

An online meeting of the AMR Secretariat took place on November 16, 2020, with stakeholders and implementing partners to discuss the organization of World Antibiotics Awareness Week; 21 participants attended. Discussions focused on the event's agenda and budget.

A meeting between MTaPS and the AMR national focal point took place on November 26, 2020, to discuss strategies to enhance year 3 activity implementation and AMR program sustainability. The meeting focused on:

- Ensuring that AMR structures complied with the governance manual by issuing documents for each entity that outline members' roles and responsibilities
- Providing TORs for each AMR structure
- Ensuring the functionality of the AMR Secretariat through an annual work plan and continuous stakeholder engagement
- Appointing one of the Pasteur Institute secretaries to manage the AMR-TWG's documentation
- Establishing the Governance and Regulatory TWG
- Preparing priority activities for meetings with partners

A meeting of the AMR Secretariat was held on November 27, 2020, to review the AMR-NAP and list priority activities to be submitted by the AMR focal point to partners (FAO, Bio-Merieux, Sanofi, and Pfizer). Ten participants attended the meeting.

On October 8, 2020 MTaPS supported the AMS TWG (MTC 5) in organizing a meeting with nine participants. The aims of the meeting were to review activities implemented between May 2019 and September 2020 and to discuss activities to be conducted in quarter 1 of FY21 (October-December 2020).

Highlights from the review included (i) recommendations from participants to develop strategies and partnerships to expand trainings of DTCs and health care professionals, (ii) periodic reviews of JEE milestones and monitoring progress made, (iii) work on implementing eLearning activities, and (iv) dissemination of the National AMS Plan for use by stakeholders.

The following priority activities were identified from the planned October-December 2020 activities: AWaRe categorization of the essential medicines list (EML) and joint visits to evaluate the functionality and capacities of the DTCs.

An online meeting of the AMS-TWG took place on December 29, 2020, with 10 participants. Points discussed were the functionality of the AMS-TWG; a review of WHO benchmarks to monitor progress made in 2020 and planning activities for the next quarter (January-March 2021. The key highlights from this meeting include:

- Functionality of the AMS-TWG: All activities and meetings planned for 2020 took place. AMS-TWG members highlighted the challenges encountered in 2020 with COVID-19, which resulted in limited availability of the TWG's president and secretary because of their involvement in COVID-19

activities. Participants discussed the importance of AMS-TWG members' availability for upcoming AMS events.

- Review of WHO benchmark actions: Following a presentation of level 2, 3, and 4 benchmarks, participants noted that Côte d'Ivoire completed three of four level 2 actions and one level 3 action in 2020. One level 2 action and two level 3 actions are scheduled for 2021.
- Activities planned for January-March 2021 include:
  - Preparing for the AWaRe categorization
  - Organizing joint visits to four regional hospitals to assess the existence and functionality of DTCs
  - Developing modules on AMS to train staff at two targeted veterinary health facilities
  - Organizing a one-day meeting with private sector pharmacists, in collaboration with Pfizer
- Importance of collaborating with the Communication TWG to develop communication materials (flyers, posters, etc.) to be displayed in health facilities

MTaPS supported the MTC 4 in organizing a remote meeting on November 27, 2020. The meeting was attended by 15 participants, including the deputy director general of health in charge of public hygiene, members of the Ministry of Health and Public Hygiene, Ministry of the Environment, Directorate of Veterinary Services, and the Pasteur Institute of Côte d'Ivoire. The meeting included a presentation by the president of the MTC 4 on the IPC activities that MTaPS will support in year 3 of the project and a discussion of the IPC benchmarks. The main recommendation was to organize a presentation of the WHO benchmarks for CTM 4 members to ensure that they have a thorough understanding of the benchmarks and to highlight the need to carry out year 3 activities to move from IPC capacity level 3 to level 4.

MTaPS supported the MTC 4 in organizing a meeting on December 14, 2020. The meeting was attended by 11 participants, including members of the Ministry of Health and Public Hygiene, Ministry of the Environment, Directorate of Veterinary Services, and Pasteur Institute of Côte d'Ivoire. The meeting included a presentation by the MTaPS senior technical advisor (STA) for IPC on the WHO Benchmarks for International Health Regulations (in terms of IPC). The STA also presented the different actions required to move from one milestone to another. For IPC, Côte d'Ivoire has progressed toward level 3 in 2020 and is targeting level 4 in 2021. This requires the completion of six actions, three of which have already been carried out. All the participants understood the need to consider benchmarks when conducting activities; the activity TOR will now include the relevant benchmarks in the expected results section. Participants also planned the activities that will be implemented in quarter 2 of FY2021.

MTaPS supported the AMR-TWG in participating in the national action planning for health security (NAPHS) assessment workshop and completion of the Resource Mapping Tool (REMAP). This support led to the updating of the implementation rate level of AMR activities in the NAPHS, which increased from 0% to 40%.

These efforts contribute to progress toward the following level 3 and 4 actions of WHO benchmark 3.1 for IHR capacities:

- Effective coordination through regular meetings (level 3)
- Develop TOR for a multisectoral governance mechanism, with clear lines of accountability between the AMR coordinating committee and the high-level One Health group making strategic and resourcing decisions (level 3)
- Review plans and progress through regular meetings of the AMR governance committee (level 4)

This activity also contributes to achieving the following level 5 action of WHO Benchmark 3.3 for IHR capacities: Provide effective support to health care facility IPC programs nationwide (Level 5).

## RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

### *Activity 3.1.1: Support the AMR-TWG in improving the national EML using the WHO antibiotic access, watch, and reserve (AWaRe) categorization*

*Support the AMR-TWG in engaging the necessary entities to update the national EML using the WHO antibiotic AWaRe categorization*

The updated EML was signed on November 11, 2020, by the minister of health.

MTaPS supported the AMR-TWG in holding a preliminary one-day stakeholders' meeting to prepare for the AWaRe categorization. Members and staff of the National Therapeutic Commission (NTC), Ivorian Pharmaceutical Regulatory Authority (IPRA), and Directorate of Pharmaceutical Activities (DPA) attended the meeting.

On November 12, 2020, the AMS-TWG held an online meeting with 13 participants to prepare for the antibiotic categorization workshop. The points discussed were determining the structures responsible for the activity at the technical level; defining the preparatory steps with the execution dates; and proposing a tentative agenda and methodology for the workshop. Participants agreed on the following:

- DAP will serve as the technical lead for the AWaRe categorization, and the AMR-TWG will do the coordinating.
- AWaRe categorization of antibiotics will use the 2019 EML.
- The preparatory steps for the workshop will include:
  - Preliminary meetings with the NTC
  - Meeting with stakeholders and MOH directorates involved in the national EML review committee
  - Practical organization of the workshop: A group of 12 experts will lead the preparatory phase of the AWaRe categorization. They will draft the TOR, which will include the steps, timeline, and agenda of the workshop and will advise on the methodology.

MTaPS supported the expert group in gathering and analyzing evidence for review and decision making based on the WHO methodology. Utilizing the WHO approach to conduct the AWaRe categorization in resource-limited settings, MTaPS provided the templates and tools to support the expert group meetings on decision making based on the best evidence available. The group of experts designated to lead the preparatory phase of the AWaRe categorization organized three meetings (two online and one face-to-face):

- The first meeting was held on November 18, 2020, and brought together 10 participants, who made the following recommendations:
  - Organize the categorization workshop on January 21-22, 2021
  - List potential workshop participants
  - List supporting documents for decision making that will be available for the workshop
- Conduct an orientation meeting for the NTC
- The second meeting took place on November 24, 2020, with seven participants to review the draft TOR for the workshop. Participants decided to expand the categories of workshop participants to include additional areas of expertise, namely, gynecology, pharmacology, pediatrics, dentistry, resuscitation, and surgery.
- The third meeting took place on December 4, 2020, with 15 participants; highlights include:
  - Orientation of the experts' group by MTaPS (methodology and categorization steps recommended by WHO)
  - Establishment of two sub-groups to work on the steps of the categorization process (sub-group 1 will work on steps 1 and 4; sub-group 2 will work on steps 2 and 3)

Gynecologists, pediatricians, dentists, and surgeons will join the group of experts for the remaining preparatory meetings for the workshop. The next meeting is scheduled for February 3, 2021.

This activity contributes to progress toward the following level 3 action of WHO benchmark 3.4 for IHR capacities: Develop/update and disseminate national stewardship and clinical/treatment guidelines that include EML AWaRe categorization for antibiotics and promote the appropriate use of antimicrobials

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

*Support the AMR-TWG in monitoring the effective implementation of AMS policies, guidelines, and existing standards*

During FY20, MTaPS supported the AMR-TWG in training the DTCs at the university teaching hospitals in Bouake and Cocody on AMS. Following the training, in this quarter, MTaPS monitored the development and finalization of continuous quality improvement plans of the two trained DTCs. The work plans for the two hospital DTCs have been finalized. The DTC at Bouake University Teaching Hospital established a sub-committee within the DTC to conduct AMS activities.

## ACTIVITIES FOR NEXT QUARTER

| ACTIVITY AND DESCRIPTION | DATES (2021) |
|---|---|
| Hold a three-day workshop with the participation of high-level decision makers from the various sectors to review progress made in implementing the NAP-AMR 2019-2020 | February 8-11 |
| Organize a five-day workshop to revise the NAP-AMR | March 22-26 |
| One quarterly meeting of the AMR-Secretariat | March 16 |
| One meeting of the IPC-TWG | March 25 |
| One meeting of the AMS-TWG | February 10 |
| Site visits at eight additional health facilities to conduct IPC baseline assessments by using IPCAF | January 11-16 |
| Site visits in eight additional health facilities to conduct capacity evaluations of the IPC committees | January 11-16 |
| Site visits in eight additional health facilities to establish/ reactivate IPC committees and develop their capacity-building plans | January 26-February 6 |
| Eight three-day onsite training sessions, with 20 participants each, conducted at the facilities by IPC master trainers; if needed, MTaPS will provide virtual support | February 15-27 |
| Hold a preliminary, one-day stakeholders' meeting attended by the expert group members, IPRA, and DPA, in preparation for the antibiotic categorization workshop | February 3 |
| Hold a preliminary, one-day stakeholders' meeting attended by the NTC members, IPRA, and DPA, in preparation for the antibiotic categorization workshop | February 24 |
| Through the DPA, organize a three-day workshop to categorize antimicrobials | March 29-30 |
| Organize a joint visit to evaluate the capacities and functionality of DTCs of the Yamoussoukro and Daloa regional hospitals | January 18-22 |
| Organize a joint visit to evaluate the capacities and functionality of the DTCs of Angre and Treichville university teaching hospitals | January 27-February 4 |
| Organize a joint visit to evaluate the capacities and functionality of the DTCs of the Aboisso and Abengourou regional hospitals | February 8-12 |

# DEMOCRATIC REPUBLIC OF CONGO

## GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

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

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

On October 7, 2020, MTaPS, in collaboration with the World Health Organization (WHO) Geneva and Kinshasa technical teams, supported the organization of a working session to analyze the data from the rapid assessment on the consumption of antimicrobials. MTaPS also collaborated with WHO to finalize the technical report of the assessment.


USAID Health Director presenting to the DRC's Minister of Health the report of the rapid assessment, as well as other deliverables achieved under MTaPS

Photo credit: Junior KIAMA

The analysis showed that:

- A total of 377 antimicrobials have been recorded in 377 presentations, including generics and branded products
- Among antimicrobials, 85% are used in the private sector, 13% are used in the public sector through partner support, and only 2% are used in the public sector through government funding
- Of those antimicrobials, beta-lactams, penicillins, and cephalosporins are the most consumed, followed by fluoroquinolones, imidazole derivatives, cotrimoxazole, macrolides, and lincosamides
- There was an increase in the aggregate consumption in terms of the Anatomic Therapeutic Chemical (ATC)/Defined Daily Dose (DDD) from around 12 DDD per 1,000 persons/year in 2018 to 16 DDD per 1,000 persons/year in 2019
- At least 70% of the antibacterial medicines consumed were in the Access category of the AWaRe categorization (which is higher than WHO's recommendation that at least 60% of antibacterial medicines consumed fall in the Access group)

On October 30, 2020, MTaPS and WHO supported the Drug Regulatory Authority (DRA) to hold a one-day meeting for 60 people to present the preliminary results of the survey. Participants included medicines importers and suppliers, technical and financial partners of the Ministry of Health involved in the pharmaceutical products supply chain, investigators, and survey supervisors. The meeting was also an opportunity to sensitize all stakeholders, particularly importers and suppliers, on their role in the fight against antimicrobial resistance through improving antimicrobial management-related data.

On December 4, 2020, the DRA presented the final results of the assessment, and the USAID local Mission handed over the deliverable of MTaPS' achievements to DRC government authorities. DRC's Minister of Health chaired the presentation ceremony, which was attended by more than 100 participants, including the USAID DRC Mission Health Team Director; WHO country representative; and representatives of the Ministry of the Environment and the Ministry of Agriculture, Fisheries and Livestock.

During the previous quarter (PY2Q4), MTaPS supported the DRA to use the findings from two rapid assessments (AMS policies and regulations and antimicrobial consumption) to develop a three-year AMS action plan. This quarter, MTaPS supported the DRA to organize a two-day workshop October 20–21 for 50 people to validate the AMS action plan, which was developed in September 2020 with MTaPS' support. The participants included experts from the three health sectors (human, animal, and vegetal). During the validation workshop, discussions focused on the defined areas of intervention, specifically promoting the rational use of antimicrobials, strengthening the fight against illicit markets (sales) of antimicrobials, organizing a surveillance system for the rational use of antimicrobials in the human and animal health sectors, and managing antimicrobial consumption data. The AMS action plan was validated pending the modifications suggested by participants/experts.

On November 20, 2020, MTaPS and WHO supported the DRA to present and defend the plan during a meeting of the technical coordination committee of the Ministry of Health, which approves all technical documents before dissemination. This plan has been approved and will be disseminated next quarter.

*Activity 3.1.2 Integrate AWaRe classification into revised essential medicines list (EML)*

MTaPS, in collaboration with WHO and the World Bank, supported the MOH to organize a three-day meeting to validate the revised national EML. Participants included experts from various professional groups, including clinicians, trainers, and health corporations. At the end of the workshop, the list with AWaRe categorization was approved; it will go to editorial before dissemination.

**ACTIVITIES FOR NEXT QUARTER**

| ACTIVITY AND DESCRIPTION | DATE |
|---|---|
| Provide technical and logistical support to the National Commission on Antimicrobial Resistance ( NC-AMR) for effective monitoring and planning of AMR interventions | February 18–19, 2021 |
| Support the AMS and infection prevention and control (IPC) technical working groups (sub-committees) of the NC-AMR to coordinate AMR interventions at the national, provincial, and facility levels | February 11–12, 2021 |
| Support the NC-AMR to conduct a rapid assessment of IPC practices, including the implementation of guidelines and regulations in both the animal and human health sectors | January 27–29, 2021 |
| Establish/strengthen DTCs to oversee implementation of AMS interventions and conduct stewardship practices at designated health care facilities | January-March 2021 |

## OBJECTIVE 1: PHARMACEUTICAL SECTOR GOVERNANCE STRENGTHENED

### *Activity 1.1.1. Assist the Directorate of Pharmacy and Medicine (DPM) in strengthening medicine registration procedures and updating the directory of market-authorized products*

MTaPS supported the Drug Regulatory Agency (DRA) in finalizing the revision of the Directory of Registered Medicines. The directory is now available and in use by provinces and border posts. The DPM has also published the electronic copy on its web site: https://www.acorep.gouv.cd/download/repertoire-des-produits-pharmaceutiques-enregistres-et-autorises-par-la-dpm-en-rdc-edition-2020/.

The new directory includes 4,948 products that have been registered to date in DRC, and 89% of a set of 18 key MNCH tracer medicines have at least one registered product.

The directory is an important tool that aids pharmacist inspectors and customs officers track and confiscate all unregistered products, including MNCH products.

### *Activity 1.1.2. Improve the functioning of provincial TWGs on medicines in Nord Kivu and Ituri*

To improve coordination among partners in Nord Kivu and Ituri and as a first step to strengthen the Division Provinciale de la Santé's (DPS) capacity to better steward the pharmaceutical system at the provincial level, MTaPS supported DPS in conducting Provincial Technical Working Group (TWG) meetings on November 20 in Ituri (29 participants) and November 27 in Nord Kivu (31 participants). The agenda of these meetings included reviewing medicine stock status, validating quarterly orders from health zones (HZs), and validating the TOR of the MNCH sub-group.

Participants analyzed LMIS data, and all HZs were requested to submit orders for end-of-year supply before CDRs (Centrales de Distribution Régionales) close for inventories. The revised standard operating procedures for the TWGs, as well as the final version of the TOR for the MNCH sub-group, were also submitted, approved, and signed by the DPS.

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

### *Activity 2.2.1. Support DPS in strengthening technical and managerial capacities of health facility staff in pharmaceutical management*

To address capacity gaps in inventory and supply management at service delivery points, MTaPS supported a five-day training workshop on pharmaceutical management for DPS, HZs, and hospital staff in Ituri and Nord Kivu. During this training:

- 56 participants (28 in Ituri and 28 in Nord Kivu) received training on inventory management of essential medical products
- A one-day field visit was conducted at three health facilities in Ituri (HGR Bunia, CS Bigo, and CS Adventiste) and in four health facilities in Nord Kivu (HGR Virunga, CS Himbi, BCZs Goma, and CDR Asrames) to expose participants to the realities at the facilities and to be able to appropriately support facilities
- Each HZ developed a post-training plan

### *Activity 2.4.1. Assist DPS, inspectors, and customs officers in accessing and using the updated list of registered medical products for inspections and import control*

To facilitate identification and confiscation of unregistered medical products that may compromise treatment outcomes or even harm patients, MTaPS supported dissemination of the Directory of Registered Medicines in Nord Kivu and Ituri provinces on December 3 and 7, 2020, respectively. This dissemination consisted of:

- Briefing 50 participants (30 in Nord Kivu and 20 in Ituri), including pharmacist inspectors and customs officers on appropriate use of the directory
- Holding awareness meetings for pharmaceutical companies in Nord Kivu and Ituri on how to request a marketing authorization
- Planning field visits to identify unregistered products, focusing primarily on MNCH products
- Providing printed and electronic copies of the directory to all inspectors and customs officers

The next steps will include supporting the Provincial Health Inspectorate (Inspection Provinciale de la Santé) at the provincial level in conducting inspection visits and controlling the use of the directory. Key findings will be documented, reported, and published at the provincial and national levels.

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

### *Activity 3.2.1. Assist DPS and HZs to strengthen the paper-based data collection system to improve availability, quality, visibility, and use of logistics data*

To increase logistics data visibility using existing tools and platforms, MTaPS, in collaboration with the CORDAID/Global Fund project and PNAM (Programme National d'Approvisionnementen Médicaments), continued supporting DPS and HZs in Nord Kivu and Ituri to roll out InfoMED, which is the logistics and patient data visualization platform for DRC. To this end, following the workshops held in previous quarters on using paper-based tools, MTaPS supported a training workshop on entering logistics data into DHIS 2 for DPS and HZ management teams. The workshop also included training on data analysis and visualization through the InfoMED platform. This workshop was an opportunity to coach DPS and HZ staff on identifying appropriate actions to address weaknesses in data collection and reporting. Next steps will include supporting supervision visits and briefing health facilities, focusing on data collection and reporting and data analysis and validation within the TWGs and thematic sub-groups.

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

### *Activity 5.1.1: Assist DPS in establishing and increasing the technical capacity of provincial medicine quantification committees*

To address quantification-related weaknesses at the provincial and HZ levels in Nord Kivu and Ituri, MTaPS supported a quantification training workshop for DPS and CDR members. The training was coupled with a provincial quantification exercise and the creation of a provincial quantification committee, in collaboration with the European Union (EU) and Global Fund, in both provinces.

The provincial quantification committee includes seven people from DPS, one from CDR, and three delegates from partners, including MTaPS and Global Fund (SANRU and CORDAID) in Nord Kivu. In Ituri, the provincial quantification committee includes nine people from DPS, one from CDR, and four delegates from partners, including MTaPS and Global Fund (SANRU, CORDAID and CARITAS).

During these workshops, preliminary drafts of provincial forecasts were developed for HIV, malaria, TB, FP, and MNCH. The provincial quantification committees are expected to submit the final forecast

reports to the medicine TWGs for validation by the end of January 2021. Key recommendations include expanding the quantification committee to other partners and finalizing and submitting the TOR (currently under development) to the medicine TWGs for validation no later than January 2021.

***Activity 5.1.2. Improve the availability of commodities needed for iCCM and treating women and children in selected HZs***

To explore the underlying issues that hinder the delivery of the iCCM package at community care sites, MTaPS provided technical assistance to DPS in Nord Kivu and Ituri provinces and worked with key implementing partners supporting the ten HZs to identify options to address these issues. MTaPS supported awareness raising meetings in Ituri and Nord Kivu on the lack of iCCM medicines and supplies, in collaboration with DPS and partners (SANRU, CARITAS, UNICEF, ASRAMES). These meetings revealed that the primary weaknesses and bottlenecks that contribute to the delivery of incomplete iCCM packages include:

- Security issues, which make it difficult to access all sites
- Lack of funding and donors supporting iCCM activities
- Incomplete MNCH package for iCCM in all MTaPS-supported HZs, for example:
  - No donor for MNCH products for iCCM in MTaPS-supported HZs in Nord Kivu
  - In Ituri, SANRU supports supply-only malaria products for iCCM, whereas UNICEF supplies ORS-zinc and amoxicillin dispersible tablets in only two MTaPS-supported HZs
- Lack of consumption data to quantify iCCM needs
- Lack of community involvement in iCCM activities

To address these weaknesses and bottlenecks, stakeholders have made the following recommendations:

- Involve all stakeholders who donate iCCM products in the MNCH sub-group to coordinate needs and supply
- Estimate the annual need requirements for ORS-zinc and dispersible amoxicillin for community care sites
- Advocate with partners through the DPS to supply iCCM sites located in MTaPS-supported HZs with MNCH products

***Activity 5.2.1. Support DPS in strengthening MNCH health care capability by disseminating updated MNCH treatment protocols and job aids to health facilities and training health care providers on their appropriate use***

To improve the availability and use of MNCH treatment protocols and job aids at the point of service, MTaPS completed the dissemination of MNCH treatment protocols and job aids in all 166 USAID-supported health facilities (86 in Nord Kivu and 80 in Ituri) and trained 86 health care providers in Nord Kivu and 83 in Ituri on their appropriate use. To date, health care providers in all MTaPS-supported health facilities are capacitated on the use of lifesaving products for maternal, newborn, and child health. As a next step, MTaPS will advocate for new maternal health medicines for the management of post-partum hemorrhage to be considered and evaluated as part of the review of the treatment guidelines.

## ACTIVITIES FOR NEXT QUARTER

| ACTIVITY AND DESCRIPTION | DATE |
|---|---|
| Enhance the role of CODESAs (health area development committees) and CACs (community outreach units) in medicine management at the health center and community levels | February 28, 2021 |
| Finalize the provincial quantification and submit the final forecast reports to the medicine TWGs for validation<br>Expand the quantification committee to include other partners<br>Finalize the TOR of the quantification committee and submit to the Medicines TWG for validation | January 31, 2021 |
| Advocate for new maternal health medicines for managing postpartum hemorrhage to be considered and evaluated as part of the review of the treatment guidelines | January 2021 |

# KENYA

For progress on MTaPS/Kenya's COVID-19 activities, click here.

## RESULTS AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON ANTIMICROBIAL RESISTANCE

### *Activity 1.1.1: Continue strengthening NASIC's capacity for coordination, policy direction, and M&E of the national AMR plan*

MTaPS provided technical assistance to the validate and finalize the monitoring and evaluation framework for the NAP. Two meetings were held for the validation exercise on October 26 and 28, 2020.

MTaPS provided technical and financial assistance during the final technical working group (TWG) meeting held on November 9 and 10 to develop the national IPC curriculum and review 19 training modules for technical and support staff and health managers. The documents were finalized and circulated to a wider range of IPC stakeholders for inputs pending validation.

MTaPS provided technical and financial assistance during the finalization of the national IPC policy, (2020) and strategic plan (2020-2024) for health care settings.

MTaPS provided technical assistance in the planning of and participation in the annual World Antimicrobial Awareness Week (WAAW) events that were held November 18-24, 2020. MTaPS also facilitated and made presentations during the technical symposium held on November 20, 2020; various stakeholders in line with the One Health approach participated.

MTaPS, in collaboration with NASIC, the County Government of Murang'a and the Food and Agriculture Organization of the United Nations (FAO) held a workshop November 9-12, 2020, to develop a comprehensive One Health costed CASIC work plan for 2020-2022. The workshop was attended by 30 participants. Key in attendance were the county executive committee member (CECM) for health; CECM for agriculture; country team leader and deputy country team leader cum national coordinator for AMR Programme; FAO Emergency Centre for Transboundary Animal Diseases; USAID Infectious Disease Detection and Surveillance; and MTaPS representatives. The work plan will guide implementation of AMR activities in the county from a One Health perspective.

MTaPS participated in reviewing and finalizing the Nyeri CASIC 2020-2022 work plan. The work plan was officially launched by His Excellency, Mr. Mutahi Kahiga, Governor, Nyeri County, during the WAAW celebrations on November 19, 2020.

## RESULTS AREA 2: INFECTION PREVENTION AND CONTROL

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

MTaPS and the Division of National Patient and Healthcare Worker Safety conducted the quarterly National IPC Advisory Committee meeting held December 22, 2020. Over 15 officers attended, including implementing partners, who gave updates on IPC activities implemented during the reporting quarter. The national MOH IPC program provided the status of IPC activities across the country, achievements, and areas of improvement in the context of COVID-19.

MTaPS, in collaboration with the county IPC focal contact in Kisumu, provided the IPC midterm assessment report to the county health management team (CHMT) during a virtual meeting held

December 7, 2020, in Kisumu. The county and facility IPC work plan will be updated following the findings of the midterm assessment.

MTaPS continued to provide technical assistance and mentorship to the county and facility IPC committees in implementing their IPC work plan during the reporting period.

***Activity 2.2.1: Provide technical assistance to implement a CPD and relicensure-linked in-service IPC training course for delivery through the relevant professional associations.***

MTaPS participated in the 62nd NNAK Annual Virtual Scientific Conference held December 16, 2020, whose theme was "Nurses: A voice to lead, nursing the world to health". The hybrid conference was physically attended by 92 participants and others used virtual platforms; they were sensitized on IPC and AMS by MTaPS, which made two presentations.

MTaPS and the PSK conducted an IPC and AMS CPD virtual training for association members on December 15, 2020.The training focused on implementing integrative IPC and AMS programs in health care delivery; 240 PSK members attended.

MTaPS, in collaboration with NNAK, held a CPD webinar on implementing integrative AMS and IPC programs in health care delivery during the association's monthly meeting on November 19, 2020; 123 officers attended. NNAK's monthly meetings are also coordinated by representatives from Jomo Kenyatta University, Moi University, and Mt. Kenya University and are held every third Thursday of the month, with participating members allocated CPD points.

MTaPS, PSK, and AKMLSO, conducted IPC CPD virtual trainings for association members. Over 400 PSK members were trained December 1-2, 2020, and 23 AKMLSO members on December 3, 2020, respectively.

MTaPS coordinated and participated in the KMA-led IPC CPD virtual webinar for KMA members. The training was held October 19 and 21, 2020, and was attended by 57 KMA members who were awarded CPD points. The MOH's Division of Safety and Health Care Worker Safety conducted a session to sensitize the members on the International Infection Prevention Week (IIPW) and the role of infection control in reducing and preventing transmission of infections.

MTaPS coordinated and participated in the KPA-led CPD virtual webinar for KPA members. The training was held October 7 and 8, 2020, and was attended by 1,968 KPA members who were awarded CPD points.

***Activity 2.5.1: Support county-, sub-county, and facility-level IPC/OSH/WASH activities***

MTaPS, in collaboration with the county and facility health management teams in Murang'a and Kilifi, held virtual planning meetings on December 14 and 16, 2020, respectively. At the meetings, both counties developed IPC and AMS work plans for year 3 (Y3); they were attended by the county and facility IPC focal contacts.

MTaPS held an introductory meeting with the county and facility health management teams on December 8, 2020, in Murang'a and December 10 and 11, 2020, in Kilifi, respectively. Kilifi and Murang'a counties are two additional counties that MTaPS will be supporting during implementation of the Y3 work plan. During the meeting, the CHMT selected two health care facilities for MTaPS to support in each county and identified the county focal contacts for IPC and AMS activities.

MTaPS worked with the IPC focal contact in Kisumu County to provide the IPC midterm assessment report to the CHMT during a virtual meeting held December 7, 2020, in Kisumu. MTaPS, in collaboration with the Kisumu County Health Department conducted midterm assessments on IPC and AMS in eight MTaPS supported facilities November 16-20, 2020. The assessments aimed to review the

continued relevance of IPC/AMS interventions and the progress made toward achieving the planned objectives in the county and health facility work plans. The assessments will provide an opportunity to modify work plans to ensure the achievement of IPC/AMS objectives within the lifetime of the MTaPS Program support in Kisumu County.

MTaPS administering the questionnaire during the IPC midterm assessment at Chulaimbo County Hospital (Kisumu). (Photo credit: Dr. Collins Jaguga, MTaPS)

MTaPS provided technical assistance during the IIPW 2020 celebrations held October 18-24, 2020. Eight MTaPS-supported facilities (Othaya County Hospital [CH], Naromoru Health Center [HC], Kombewa CH, Mt. Kenya CH, Ahero CH, Karatina CH, Nyeri County Referral Hospital, and Mukurweini CH) in Nyeri and Kisumu were involved in activities that highlighted the role of the infection preventionist in protecting frontline HCWs and patients in the context of COVID-19. Activities conducted throughout the week included continuing medical education, health talks to patients, walks and dances, tree planting, among others. Over 200 patients and HCWs were sensitized on IPC and the theme for IIPW 2020. The program also supported KNH whose theme for the day was "The nurse as a leader in breaking the chain of infection in COVID-19 era".

(Left) Demonstration on proper hand washing at Ahero County Hospital during IIPW 2020. (Photo credit: Jael Aran, Ahero County Hospital). (Right) A health talk at Mukurweini Sub-County Hospital. (Photo credit: Mukurweini Sub-County Hospital)

MTaPS continued to participate in and provide technical IPC expertise for the IPC and case management COVID-19 taskforce and the IPNET-K meetings held in collaboration with the MOH and CDC. The meetings provided updates on IPC efforts to contain occupational exposure among HCWs, especially in the context of COVID-19. Other topics covered included "Rising HCW infections, do we need to review our IPC measures?" and included a presentation from health facilities that shared their experience on IPC implementation.

MTaPS participated in the USAID-led ventilator distribution in Nyeri and Kisumu Counties on December 17 and 22, 2020, respectively. The program provided support on videography and photography covering the event and handing over the ventilators to JOOTRH, Mt. Kenya Sub-County Hospital, and KNH-Othaya Complex.


(Left) demonstration of ventilators for the governor in Nyeri County. (Right) USAID handing ventilators over to the governor of Kisumu County. (Photos credit: MTaPS-Kenya)

MTaPS continued to offer technical assistance and support to the facilities in Kisumu and Nyeri in implementing IPC activities in their work plans. Review and update of the facility work plans will be informed by the findings of the IPC midterm assessment.

## RESULTS AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

### *Activity 3.1.1: Strengthen national and county AMS governance structures*

MTaPS participated in the national AMS TWG meeting held on October 1, 2020, to review the draft national AMS dissemination plan, implementation plan, and training modules. The team agreed to involve external AMS experts to review the training content. Feedback from external experts was received and will be incorporated in quarter 2 (Q2) of Y3. Once finalized, the curriculum will be used to develop the capacity of HCWs countrywide on AMS practices with the aim of optimizing antimicrobial use and containing antimicrobial resistance (AMR).

On November 19, 2020, MTaPS, in collaboration with the Kisumu County Department of Health and Sanitation, held a virtual meeting to officially disseminate the National Antimicrobial Stewardship Guidelines for Healthcare Settings in Kenya, 2020, among HCWs in Kisumu County. The event was graced by Dr. Gregory Ganda, Chief Officer for Health, Kisumu County. Hard copies of the guidelines were given to the County Executive Committee member for health, chief officer for health, county director for health, and heads of eight MTaPS-supported health care facilities. Soft copies of the guidelines were distributed to HCWs in general in the county via digital media.


St. Elizabeth Hospital in-charge receiving copies of the National AMS Guidelines, KEML, and AMR Communique. (Photo credit: Doris Bota.)

MTaPS held an introductory meeting with the Murang'a County Health Department on December 8, 2020, attended by 20 members of the CHMT. Murang'a County is one of two additional counties that MTaPS will be offering technical and financial support for implementing AMS activities (besides Kisumu and Kilifi Counties). During the meeting, the CHMT identified two health care facilities (Murang'a County Referral Hospital and Maragua Sub-County Hospital) where AMS and IPC activities will be implemented. Shortly thereafter, MTaPS held a meeting with the county AMS and IPC focal persons to develop a work plan for activities to implemented from Q2 of Y3.

MTaPS held an introductory meeting with the county and facility health management teams in Kilifi County on December 10 and 11, 2020. Kilifi County is one of the two additional counties that MTaPS will be supporting during implementation of its Y3 work plan. During the meeting, the CHMT selected two health care facilities (Kilifi County Referral Hospital and Malindi Sub-County Hospital) to be supported by the program and identified the county focal contacts for IPC and AMS activities. MTaPS representatives also made a courtesy call on the Kilifi County Executive Committee member (minister) for health to brief him on the program's AMR activities at large.

MTaPS team with the pharmacist in charge at Kilifi County Hospital (Photo Credit: Doris Bota, MTaPS)

***Activity 3.1.2: Support the National Medicines and Therapeutics Committee in institutionalizing and implementing AWaRe categorization of antibiotics***

On October 14, 2020, MTaPS held a one-day meeting with representatives of the MOH's Division of Health Products and Technologies (DHPT) to plan a two-day workshop of the National Medicines and Therapeutics Committee (NMTC) to develop its 2020/21 work plan. The work plan was going to include the development of Kenya's first National Medicines Formulary (NMF) that incorporates the access, watch, reserve (AWaRe)

categorization of antibiotics and its implementation strategy. MTaPS provided technical and financial support to NMTC for developing its annual (2020/21) and three-year work plan at a workshop held October 15-16, 2020; 19 participants (11 males and 8 females) attended the workshop. The development of the NMF was included in the work plan among other priorities. This categorization of antibiotics for managing common infectious diseases in Kenya aims to prevent and contain AMR.

MTaPS, in collaboration with the Kisumu County Department of Health and Sanitation, held a virtual meeting to disseminate the KEML among HCWs. The event was graced by Dr. Gregory Ganda, Chief Officer for Health, Kisumu County. Hard copies of the KEML were issued to the County Executive Committee member for health, chief officer for health, county director for health, and heads of eight MTaPS-supported health care facilities.

On December 21, 2020, MTaPS held a meeting with representatives of MOH DHPT to plan for the development of the NMF. The meeting deliberations focused on scope of the NMF, NMF TWG membership, NMF TWG terms of reference, timelines and immediate next steps. This activity is to commence in January 2021.

***Activity 3.2.1: Develop health care human resource capacity to manage AMS through pre- and in-service trainings***

MTaPS, in collaboration with various professional health associations, conducted virtual AMS CPD (in-service) talks to sensitize HCWs on the practical aspects of AMS in health care settings to prevent and contain AMR in Kenya. HCWs participating in these talks earned CPD points that were crucial for renewing their annual practice licenses. These talks were held at least once a month and will continue in Q2 of Y3. Below are highlights of the virtual AMS CPD events held in Q1 of Y3.

- MTaPS, in collaboration with NNAK, held part 2 of the AMS CPD series for its members on October 14, 2020. This was a virtual talk titled "Components of Antimicrobial Stewardship Programmes"; 77 participants (48 females and 29 males) attended.
- MTaPS, in collaboration with PSK, held part 2 of the AMS CPD series on October 27, 2020, for its members. The title of the talk was "Components of Antimicrobial Stewardship Programmes"; at least 250 participants attended.
- MTaPS, in collaboration with KMA, held part 1 of the AMS CPD series on October 28 for its members. The title of the talk was "Introduction to Antimicrobial Stewardship"; at least 35 participants attended.
- MTaPS, in collaboration with NNAK, held a virtual AMS CPD talk on "Core Elements of Health Facility Antimicrobial Stewardship Programmes" on November 11, 2020; at least 31 participants attended the talk.
- MTaPS, in collaboration with KMA, held a virtual AMS CPD talk on "Core Elements of Health Facility Antimicrobial Stewardship Programmes" on November 18, 2020; at least 47 participants attended the talk.
- MTaPS, in collaboration with NNAK, held a CPD webinar on "Implementation of Integrative AMS and IPC Programs in Health Care Delivery" during the association's monthly meeting. The webinar took place on November 19, 2020 and attracted at least 123 participants.
- MTaPS participated in the National AMR Virtual Symposium on Human Health on November 20, 2020, to commemorate WAAW. The theme this year was "United to Prevent Drug Resistance". MTaPS made an oral presentation highlighting its activities in Kenya that contribute to reducing AMR at national and county levels and also participated in co-moderating sessions of the symposium.
- MTaPS, in collaboration with PSK, held a virtual AMS CPD talk on "Core Elements of Health Facility Antimicrobial Stewardship Programmes" on November 24, 2020; about 230 participants attended.
- On December 15, 2020, MTaPS collaborated with PSK to conduct an IPC and AMS CPD virtual training for its members. The training focused on "Implementation of Integrative IPC and AMS Programs in Health Care Delivery"; at least 240 participants attended.

- MTaPS participated in the 62nd NNAK Annual Virtual Scientific Conference held on December 16, 2020. The theme of the conference was "Nurses: A voice to lead, nursing the world to health"; at least 92 participants attended. MTaPS made two oral presentations highlighting the core elements of AMS and IPC programs in health care facilities.

***Activity 3.5.1: Support county-, sub-county-, and facility-level AMS activities***

MTaPS, in collaboration with the Kisumu County Health Department conducted a midterm assessment of AMS activities in eight MTaPS-supported health care facilities and one community pharmacy between November 16 and 20, 2020. The aim of the assessment was to determine progress made in implementing AMS interventions with reference to county and health facility work plans. The midterm assessment results will provide an opportunity for Y3 work plans to be modified with risk and feasibility in mind.

MTaPS, in collaboration with the Formulary Committee of JOOTRH conducted a two-day meeting on November 25-26, 2020, to review and finalize the hospital's medicine formulary. The review incorporated AWaRe categorization of antibiotics. The goal of AWaRe categorization is to reduce the use of the watch and reserve groups of antibiotics (the antibiotics most crucial for human medicine and at higher risk of resistance) and to increase the use of access antibiotics where availability is low.

On November 26, 2020, MTaPS held a meeting with KNH AMS committee representatives to develop a work plan for AMS activities for 2020/21. The prioritized activities to improve antimicrobial use in the hospital included monitoring adherence to the hospital's surgical prophylaxis guidelines, auditing adherence to the hospital's guide to empiric antimicrobial therapy, generating data on antimicrobial use and antimicrobial consumption to guide the hospital's antimicrobial use policy, and developing human resource capacity on AMS.

On December 9, 2020, MTaPS held a meeting with the secretary of the AMS Committee at Gertrude's Children's Hospital to plan for AMS activities for Y3. It was agreed that the hospital will continue auditing adherence to prescribing guidelines in managing common infections presenting in the hospital with feedback to prescribers on best practices and gaps noted. The next educational session for offering feedback to prescribers will be held in the second week of February 2021.

MTaPS continued to conduct follow-ups on implementing AMS activities in health care facilities in Nyeri and Kisumu Counties. The current health facility work plans are to be reviewed in light of the priority areas revealed by the midterm assessment results.

## ACTIVITIES NEXT QUARTER

| ACTIVITY AND DESCRIPTION | DATES |
|---|---|
| Develop the CASIC orientation package for support to CASIC teams<br>Finalize and launch the NAP M&E framework<br>Implement the NAP M&E framework through selected indicator monitoring for NASIC | Jan.-March 2021 |
| Establishing County IPC Advisory Committee (CIPCAC) in Kisumu, Murang'a, and Kilifi Counties<br>Review/develop Murang'a and Kilifi CIPCAC work plan<br>Continue strengthening county and facility IPC committees | Jan.-March 2021 |
| Coordinate and participate in IPC CPD webinars and face-to-face trainings in collaboration with the professional associations<br>Disseminate the IPC curriculum among relevant stakeholders<br>Train IPC CPD champions who will scale up IPC CPD trainings | Jan.-March 2021 |
| Conduct midterm assessment of IPC activities in Nyeri County<br>Conduct baseline assessment of IPC activities in Kilifi and Murang'a Counties<br>Conduct IPC TOT trainings for HCWs in Kilifi and Murang'a Counties<br>Conduct IPC continuous quality improvement trainings for HCWs in Kilifi and Murang'a Counties | Jan.-March 2021 |
| Establish CASICs in Kisumu and Kilifi Counties<br>Finalize Murang'a CASIC work plan | Jan.-Jun. 2021<br>Jan.-March 2021 |
| Develop National Medicines Formulary<br>Draft regulatory brief on AWaRe concept implementation | Jan.-Jun. 2021<br>Jan.-March 2021 |
| Hold pre-service AMS trainings for undergraduate and postgraduate pharmacy students<br>Hold in-service AMS trainings for members of professional health associations | Jan.-Jun. 2021<br>Jan to Jun 2021 |
| Conduct midterm assessment of AMS activities in Nyeri County<br>Conduct baseline assessment of AMS activities in Kilifi and Murang'a Counties<br>Conduct AMS and MTC trainings for HCWs in Kilifi and Murang'a Counties | January 2021<br>February 2021<br>March 2021 |

# MALI

For progress on MTaPS/Mali's COVID-19 activities, click here.

### RESULT AREA 2: INFECTION PREVENTION AND CONTROL

***(Year 2) Activity 2.1.1: Strengthen IPC programming at the central and peripheral levels***

Following the validation workshop September 30–October 2, 2020, MTaPS supported the National Multisectoral Coordination Group (GCMN) and the National Directorate of Veterinary Services to finalize the infection prevention and control (IPC) guidelines and national IPC plan for the animal sector. The action plan will allow animal health stakeholders to advocate for more funding for IPC activities in this sector. IPC guidelines will allow the country to have these first guidelines in the field of animal health and to harmonize IPC practices in this sector. It also constitutes one of the key level 2 actions according to the WHO benchmarks for IHR capacities: Develop a national IPC policy and plan for animal health.

The next steps are:

- Signature of the documents by the government
- Dissemination of the IPC guidelines and the national IPC plan
- Training of animal health stakeholders to use and apply the guidelines

***(Year 3) Activity 2.5.1: Support the GCMN and Direction Générale de la Santé et de l'Hygiène Publique (DGSHP) to implement IPC programming in four new health facilities***

MTaPS met with the Hygiene Sub-Directorate of the DGSHP to discuss the implementation of IPC activities in four new health facilities. The discussion focused on the preparation of the activity, including developing terms of reference (TOR), scheduling the field visit, and updating the TOR of health facility IPC committees. The TOR are available, and the next step is the field visit to set up IPC committees in the four health facilities and train committee members.

***(Year 3) Activity 2.5.3: Strengthen institutional capacity building for local training institutions to manage e-Learning on IPC and AMS for both pre- and in-service health care workers***

During this quarter, MTaPS met with the Hygiene Sub-Directorate of the DGSHP to discuss the implementation of this activity. MTaPS also held discussions with the IHR focal point on the methodology and approach for the launch of the e-Learning platform. Due to COVID-19 in the country, the e-Learning handover will occur through a virtual meeting with regional, district, and facility teams. The preparatory phase is ongoing: the TOR have been developed, and the finalization is in progress with the GCMN. The next steps are:

- Meeting with the GCMN and the IHR focal point in January to confirm the date
- Organizing the launch of the platform
- Creating an additional pool of 40 master e-Learning facilitators through a series of virtual workshops to increase the number of facilitators competent in the e-Learning platform and the capacity of health professionals to implement national IPC guidelines

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

***(Year 2) Activity 3.1.1: Strengthen AMS***

In October 2020, MTaPS supported the GCMN through the Directorate of Pharmacy and Medicines (DPM) to validate the national antimicrobial stewardship (AMS) action plan, which includes interventions to strengthen AMS in both the human and animal sectors. The next steps are:

- Signature of the document by the Minister in charge of livestock and the Minister in charge of health
- Advocacy for the funding of this plan by other partners

The MTaPS team met with a small group from the AMS technical working group (TWG) on October 16, 2020, to finalize the treatment guidelines, considering all comments. The next step is to share the finalized documents with stakeholders.

***(Year 2) Activity 3.5.1: Support the DPM to establish the DTCs in the five selected sites***

During this quarter, MTaPS supported the GCMN through the DPM and the AMS TWG to establish Drug and Therapeutics Committees (DTCs) in the five selected facilities (four hospitals—PtG, Luxembourg, Sikasso, and Segou—and one health center—CSRef Koutiala). To do so, MTaPS organized:

- Three trainings of 39 DTC members September 25–October 2 in three sites (regional hospitals of Sikasso and Segou and district hospital of Koutiala)
- Two preparatory meetings with the deputy directors of the Point G and Luxembourg hospitals October 7–8, 2020
- Training of 17 DTC members October 19–23 in two sites (Hospitals of Point G and Luxembourg)

A total of 56 persons were trained. During these training sessions, DTC members conducted a baseline assessment by collecting and analyzing data from their respective institutions. MTaPS supported the development and compilation of the training reports of DTCs of the five targeted facilities.

DTC members at Point G Hospital participate in a training workshop and data collection.

Photo credit: Ousmane Traore, STA, MTaPS

***(Year 3) Activity 3.5.1: Support the GCMN, DPM, and ANEH to establish DTCs in 11 new sites***

The MTaPS team met with the DPM's director and team to discuss Year 3 activities. The DPM has drawn up a timetable for the implementation of activities. The preparation phase is ongoing:

- The terms of reference for this activity are available
- A working session has been scheduled for January 26, 2021, by the DPM team, which will support the implementation of DTCs in the 11 sites

| ACTIVITIES FOR NEXT QUARTER | |
|---|---|
| ACTIVITY AND DESCRIPTION | DATE |
| Activity 1.1.1 Provide technical and operational support to the GCMN-RAM and its IPC and AMS TWGs | January–March |
| Activity 2.5.1: Support the GCMN and DGSHP to implement IPC programming in four new health facilities | January–February |
| Activity 2.5.3: Strengthen institutional capacity building for local training institutions to manage e-Learning on IPC and AMS for both pre- and in-service health care workers | January–March |
| Activity 3.5.1: Support the GCMN, DPM, and the Agence National d'Evaluation des Hôpitaux (ANEH) to establish DTCs in 11 new sites | January–March |

# MOZAMBIQUE

For progress on MTaPS/Mozambique's COVID-19 activities, click here.

## MISSION-FUNDED ACTIVITIES

### OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED

#### *1.1.1: Support transformation of DNF to an autonomous authority, ANARME, through establishment of an effective regulatory framework (activity continuing from FY20)*

*DNF strategic plan review*

MTaPS participated in a meeting on October 15, 2020, that was organized by the National Directorate of Pharmacy (DNF) to present the draft five-year strategic plan (2021–2025) and obtain input from partners to improve the document. Following the meeting, MTaPS provided review and feedback on the DNF's strategic plan (2021–2025). Revisions were based on the:

- Situational analysis in DNF's strategic plan (2021–2025)
- Mozambique's self-assessment using the World Health Organization (WHO) Global Benchmarking Tool (GBT)
- DNF's institutional development plan (IDP)

MTaPS produced overall observations, recommendations, and specific contributions in the following components of the document:

- Risk management
- The analysis of internal and external factors
- Strategic objectives and related interventions

By reviewing the DNF strategic plan, MTaPS provided guidance on development and operationalization of pharmaceutical regulatory strategy and priorities in the Republic of Mozambique for 2021–2025. Development of the strategic plan will contribute to addressing GBT indicator RS03: Strategic plan with clarified objective in place.

*GTM sub-group for regulatory systems strengthening*

MTaPS, in collaboration with the Mission, proposed to the DNF the creation of a *Grupo de Trabalho de Medicamentos* (i.e., Medicines Working Group [GTM]) sub-group for regulatory systems strengthening to promote coordination and collaboration of partners working in the regulatory area, maximize opportunities for knowledge sharing, and advocate for a forum similar to a coalition of interested parties for development partners to convene and discuss areas that need support. It was suggested that this sub-group comprise the DNF; donors (USAID, Global Fund); and regulatory implementing partners (PQM+, MTaPS, WHO). The Mission, the DNF, and MTaPS agreed to use the GTM terms of reference (TOR) as a basis for the development of the Pharmaceutical Regulation sub-group.

The sub-group will allow better implementation of the MTaPS/Mozambique PY3 work plan with the following benefits:

- Regulatory cooperation, open discussion, work sharing, and sharing of best practices among members
- Steering and monitoring implementation of activities aimed at raising the maturity level of the DNF
- Identification of common needs for development of better strategies, information, and training

*Development of regulations and guidelines to operationalize law 12/2017*

To effectively plan for development and/or review of regulations and guidelines related to the PY3 work plan and to agree on the list of regulations and guidelines to be updated in line with the current needs of the DNF, MTaPS met with the DNF and defined priorities in the development of regulations. Priority regulations include:

- Regulation of Good Distribution Practices and Imports and Exports of Medical Products
- Regulation of Prices Control and draft Pricing Policy

Based on DNF priorities, MTaPS drafted the Draft Regulation of Good Distribution Practices. To align with the DNF request, MTaPS included provisions for import and export processes for medical products, vaccines, and biological products and for transportation and cold chain in the draft regulation.

The draft regulations prepared will enable elaboration of law 12/2017 and further allow *Autoridade Nacional Reguladora de Medicamentos de Moçambique* (ANARME), the national medicines regulatory agency, to regulate the pharmaceutical sector in terms of securing the pharmaceutical supply chain to ensure the quality and safety of medical products from manufacture through the various distribution channels up to the end user.

## OBJECTIVE 2: STRENGTHEN INSTITUTIONAL CAPACITY TO MANAGE PHARMACEUTICAL SYSTEMS

### *2.1.1: Enhance DNF management information systems by modifying Pharmadex to improve medicines registration and regulatory inspections processes (activity continuing from FY20)*

*Moving to a cloud-based solution to establish an online version of the Pharmadex software for medicines registration*

During this quarter, MTaPS continued to work with DNF counterparts to get approval from the DNF to transfer the existing Pharmadex database to the cloud-based solution. Previously, MTaPS submitted a nondisclosure agreement, which included an official letter to DNF senior leadership requesting permission to transfer the existing database to the internet-ready/cloud-based version of Pharmadex residing an Internet/cloud server.5 The DNF also requested MTaPS to improve general internet conditions at DNF offices and departments. MTaPS and Link Informatica conducted an analysis to assess available internet access options in Mozambique for the DNF to have better Pharmadex performance when working online. The findings showed that no internet service provider in Mozambique could provide sufficient internet speed on the existing physical infrastructure.

MTaPS organized a series of meetings with the DNF and the Ministry of Health (MISAU) IT Department (DICT) to identify an acceptable solution and location for the installation of the online version of Pharmadex. MTaPS and the DNF considered installing Pharmadex on the Mozambique Government Data Center under the governance of MISAU-DICT. The DNF requested that MTaPS initially upgrade the Pharmadex software to fully align with the Common Technical Document (CTD) format before moving the software to a cloud-based server. MTaPS provided the following information to the DNF for consideration:

- MTaPS is working on inclusion of the CTD format in the Pharmadex software but needs the DNF to provide the current Medicines Registration SOPs to collect information on the workflows that need to be included in the software. Based on the SOP, MTaPS can then perform actual software development to create the new version.

5 Available at www.pharmadexmz.org

- To perform the requested software updates, the team needs access to an internet-enabled/cloud-based server.
- Using the existing server is currently not a viable solution as the available service providers identified cannot supply sufficiently high internet speeds on the existing physical infrastructure at the DNF. MTaPS is looking into the cost of getting a fiber solution installed at the DNF, but this may have considerable cost for installation, subscription, and maintenance.

DNF colleagues from the Inspection, Registration, and Administration departments proposed the following way forward:

Step 1: Modify the Pharmadex software to fully align with the CTD format

Step 2: Provide costing of the internet upgrade (new physical infrastructure, new provider, and higher bandwidth)

Step 3: Install the new version of Pharmadex on the Government cloud environment

*Aligning Pharmadex to incorporate the CTD format for review of product dossiers*

During this quarter, MTaPS started working on the requirements for the enhancement of Pharmadex to follow the CTD format for marketing authorization dossiers. The DNF's Registration Department SOPs will be used to provide information on the existing work procedures to enhance the Pharmadex software. The enhancement of Pharmadex to follow the CTD format will align Pharmadex to better comply with international standards and the DNF, guided by WHO and Southern African Development Community (SADC ) guidelines, and will facilitate higher quality in the management of medical product applications filed for marketing authorization in Mozambique. The main challenge will be to migrate the existing data to the new structure.

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

### *3.1.1: Provide technical assistance to establish an active surveillance system for newly introduced medicines in HIV and TB programs*

*Support the DNF and HIV program to conduct supervision to health care facilities implementing active surveillance programs*

Since PY1, MTaPS has been supporting the DNF and the national HIV program to establish an active surveillance system to monitor the safety of the new HIV dolutegravir (DTG)-based regimen tenofovir/lamivudine/dolutegravir (TLD). A number of milestones have been achieved in the process, including developing an approved protocol; training health care providers and DNF and national HIV program staff on the protocol; developing and deploying tools for data collection SOPs; and enrolling and following up of patients in the cohort.

This quarter, MTaPS supported the DNF and HIV program to conduct central-level monthly support supervisory calls and to ensure that activities at participating sites are going well. This is in addition to monthly support supervision of participating health facilities by provincial focal points.

One important achievement of the support supervisory calls was the identification of implementation challenges faced by the health facilities and the joint development of mitigation strategies to overcome the challenges. The main challenges identified through the process that cut across many of the facilities include:

- Difficulty in synchronizing data collection forms entered offline in the PViMS tool in some health facilities

- Lack of collaboration by clinicians in the implementation of the active monitoring activity in some facilities
- Lack of monitoring of pregnant women in some facilities leading to poor documentation of pregnancy outcomes in the pregnancy and birth outcome form (Form C)
- Slow pace of entering data collected on the paper forms into the electronic data entry tool (PViMS)
- Incomplete and poor quality of data entered into PViMS

To address the challenges, MTaPS, in conjunction with the DNF and HIV program, is taking the following corrective actions:

- Synchronizing the active safety monitoring codes in PViMS with those at the health facilities to facilitate synchronization of Forms B and C with Form A
- Having ongoing conversation with clinicians in the affected facilities to identify any challenges hindering their participation and develop an improvement plan
- Providing nurses at the health facilities with a refresher on the procedures for active monitoring and collection of follow-up data using Forms B and C. The health facility will identify a focal point in its maternity wing who will be responsible for refreshing the rest of the nurses and providing updates on implementation to the HIV focal person at the Health Unit. The focal point will also find out how many pregnant women have been enrolled in the cohort and how many have already given birth and will complete Form C for all pregnant women in the cohort.
- Hiring data clerks to support data cleaning, coding, and completion in PViMS at the central level

The supervisory calls allowed the team to monitor the sites to ensure adherence to the protocol and support quality and consistency of the process, including data collection.

*Support the DNF and HIV program to follow-up enrolled patients*

During this quarter, the MTaPS team continued to support the HIV program in conjunction with the DNF and health facility staff to follow-up enrolled patients to ensure they complete all scheduled follow-up visits, and that clinical staff document any adverse events (AEs) reported by patients. A total of 2,606 patients were enrolled into the cohort in nine participating health facilities as of November18, 2020 (table 4).

One important challenge is that the number of enrolled patients with follow-up visit documented is still low at 1,228 out of 2,606 (47%) enrolled patients. To address this challenge, MTaPS, in collaboration with DNF and HIV program, plans to:

- Continue to use phone calls to provide support supervision to the health facilities and provinces to ensure that:
  - Clinicians are more involved in the process and complete the follow-up form for each patient
  - Patients receive reminder phone calls about returning to the health facility for follow-up appointments
  - Forms are attached to the master sheet to allow easy access during consultations with patients
  - Clinical staff and PV focal points will follow up with patients in differentiated models of care through phone calls and filling out Form B, even if patients have not experienced AEs
- Continue to implement regular monitoring of the number of patients coming back for follow-up visits
- Commence on-site supervision in February 2021, which will allow the DNF and the HIV program to:
  - Remind site teams of the importance of following established procedures for active safety monitoring activity in the field
  - Reinforce protocol training and assess understanding and implementation of the protocol by local teams in the field

- Work with the HIV and pharmacovigilance (PV) focal points to assess the situation with enrollment, follow up, and data entry and develop a plan for improving implementation in the field
- Meet with clinicians to discuss how to improve implementation of activities in the field
- Conduct physical counts of the number of Forms A, B, and C filled out for patients and cross check with the data in PViMS
    - Retrieve all signed informed consent forms and Forms A, B, and C from all facilities for storage at the DNF
    - Cross check that data collected on the paper forms and entered into PViMS are complete and of good quality
- Check whether the proposed measures to improve the registration of follow-up visits are being complied in the field
- Propose improvements and demonstrate how to implement the proposed improvement measures
- Support in the implementation of measures to improve the registration of follow-up visits in the field

Table 4: Patients enrolled since start of active surveillance system as of November 18, 2020

| Health facility | Date enrollment commenced | Number of enrolled patients (Form A) | Number of patients with follow up visit (Form B) | Number of patients with a documented pregnancy outcome (Form C) |
|---|---|---|---|---|
| CS Carmelo | April 27, 2020 | 285 | 133 | 1 |
| CS Cuamba | April 3, 2020 | 176 | 26 | 0 |
| CS Machava II | April 4, 2020 | 386 | 284 | 0 |
| CS Macia | April 2, 2020, | 312 | 30 | 10 |
| HG Marrere | March 23, 2020 | 327 | 152 | 3 |
| CS Mavalane | April 20, 2020 | 311 | 59 | 2 |
| CS Namacurra | March 19, 2020 | 314 | 68 | 0 |
| CS Ndlavela | May 3, 2020 | 190 | 24 | 0 |
| HD Gondola | March 17, 2020 | 305 | 452 | 0 |
| **Total** | | **2,606** | **1,228** | **16** |

*Supporting the DNF and HIV team to undertake data analyses*

MTaPS, in conjunction with the biostatistician/consultant, developed an initial report on the active surveillance system using data entered into PViMS. The data analyzed came from nine participating health facilities that are using tablets to capture data from Forms A, B, and C.

The first version of the report describes data/implementation status with respect to the following data elements:

- Number of enrolled patients
- Number of enrolled patients by health facility

- Age
- Laboratory tests
- AEs
- Type of AE
- Patient's condition vs AE

The report is being revised to provide more granularity as shown below:

- **Number of enrolled patients:** General; disaggregated by health facility, gender, time period, and age group; and cross checked with conditions and lab results
- **Number of follow up visits:** General; disaggregated by health facility, gender, time period, and age group; and cross checked with conditions and lab results
- Number of enrolled patients with a pregnancy outcome: General; disaggregated by pregnancy outcome
- **Frequencies of AEs:** General; disaggregated by health facility, gender, time period, and age group

MTaPS, in collaboration with the biostatistician/consultant, developed a data analysis plan/matrix that further elaborated on the statistical analyses to be done with PViMS data after causality assessment. The main analyses to be done are:

- Relative risk of adverse drug reaction (ADR)
- Frequencies of AEs in general
- Frequencies of adverse reactions by drug category using univariate analysis
- Incidence rate of AE and ADR
- Multivariate analysis to identify risk factors for AEs and ADRs.

These statistical analyses will help the team to meet the objectives for undertaking active surveillance:

- Characterize the AE and ADR profile among patients using TLD
- Estimate the incidence rate of AE taking in consideration new cases coming from health variation of conditions results and laboratory test results
- Identify and demonstrate association between the risk factors for the development of AEs and ADRs. The main risk factors that will be analyzed are:
    - Risk factors associated with the patient
    - Risk factors related to the drug
    - Risk factors related to substances

### *3.1.2: Develop and implement an active pharmacovigilance program for safety monitoring of TPT scale-up in Mozambique (new activity)*

MTaPS held a number of meetings with the Mission and the Center for Disease Control and Prevention (CDC) to plan and organize the start of an active PV program for safety monitoring of the TB preventive treatment (TPT) regimens (isoniazid [INH] and 3HP [once-weekly INH and rifapentine for 12 weeks]) in Mozambique. Following the meetings, MTaPS has developed:

- A draft protocol for active surveillance of the INH and 3HP TPT regimens
- A project timeline for TPT monitoring with activities, deliverables, responsible institutions, and expected months to perform the activities
- A detailed budget of expenses for the implementation of TPT active monitoring
- Site selection criteria and proposed sites to be engaged for the activity
- An implementation plan for the TPT active surveillance activity

MTaPS had a meeting with the DNF to obtain approval to implement an active PV program for TPT. During the meeting, MTaPS explained the need for active surveillance for INH and 3HP for TPT using

updated WHO and CDC recommendations for 3HP implementation. The team also explained that the activity will leverage its experience with active surveillance of DTG regimens.

After the meeting, MTaPS supported the DNF to prepare TOR for active surveillance of TPT and draft an invitation letter for the TB program to meet with the DNF and MTaPS to initiate implementation processes.

## ACTIVITIES FOR NEXT QUARTER

| ACTIVITY AND DESCRIPTION | DATE (2021) |
|---|---|
| Activity 1.1.1: Support the MOH in Mozambique to operationalize new legislation for establishing ANARME, a semi-autonomous regulatory authority<br>• Review SOPs for licensing and registration in line with Pharmadex<br>• Conduct virtual remote stakeholder consultation in agreement with the DNF<br>• Develop drafts of regulation of prices and price policy | January–March |
| Activity 2.1.1: Strengthen use of electronic information technology solutions for efficient and transparent medicine regulatory processes<br>• Implement new version of Pharmadex:<br>• Update Pharmadex to meet the CTD format of product dossiers and evaluate expansion into other priority health products | January–March |
| Activity 3.1.1: Provide technical assistance to establish an active surveillance system for newly introduced medicines in HIV and TB programs<br>• Follow up of patients enrolled on DTG<br>• Support the DNF to perform onsite supervision in the nine health facilities<br>• Data analysis and cleaning | January–March |
| 3.1.2: Develop and implement an active pharmacovigilance program for safety monitoring of TPT scale-up in Mozambique (new activity)<br>• Meet with national TB program to initiate implementation<br>• Complete the protocol and submit it for ethical approval<br>• Review/draft data collection tools, SOPs, and training materials; finalize and translate all materials<br>• Plan the training for health care providers on the protocol and their roles and responsibilities<br>• Plan the deployment of the data management system | January–March |

## GLOBAL HEALTH SECURITY AGENDA ACTIVITIES

### RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

MTaPS participated in a meeting for the implementation of One Health activities in Mozambique held in Maputo October 22, 2020, that was organized to facilitate the process of preparing the GHSA work plan. MTaPS presented on its GHSA mandate areas in Mozambique, strengths for GHSA activities, and key activities it will support to address antimicrobial resistance (AMR). During the working group discussion, representative of the Government of Mozambique National Institute of Health (INS) informed the group about the PNASS (the National Action Plan for Health Security), which will guide the implementation of One Health activities in Mozambique. The group was of the opinion that in general, the majority of MTaPS activities exist in the PNASS in the three areas of support (multisectoral coordination [MSC], infection prevention and control [IPC], and antimicrobial stewardship [AMS]), but there was a need to compare PNASS' and MTaPS' proposed activities in a more detailed way to ensure that the proposed activities align with PNASS priorities.

Subsequently, MTaPS worked with the Government of Mozambique INS representative and other members of the group to align MTaPS' proposed activities with those of PNASS. Some activities were accommodated in the FY21 work plan, but due to a lack of available budget, other activities will be planned for FY22.

MTaPS worked with other implementing partners such as the French Agricultural Research Center for International Development (CIRAD) to explore opportunities for collaboration to support the Government of Mozambique on facilitating AMR MSC activities. During the meeting, CIRAD recognized the scope of MTaPS' limited activities on AMR, primarily in human health and in supporting the government on AMR MSC. MTaPS sought to better understand CIRAD's contribution on AMR issues in animal health and agriculture. During the next quarter, MTaPS intends to engage CIRAD to complement an activity on rapid assessment of AMS policies in animal health to inform the development of the national AMS plan.

MTaPS had a meeting with the MISAU -focal point or One Health activities in Mozambique and an IPC representative from the Nursing Department of the National Directorate for Medical Care (DNAM) to present its key activities from the approved work plan. During the meeting, MTaPS discussed with the Ministry of Health MISAU (INS and DNAM) next steps for starting the implementation of AMR MSC, AMS, and IPC activities. MTaPS presented and agreed with the MISAU on the following GHSA work plan activities:

| GHSA AREA | ACTIVITY |
|---|---|
| AMR-MSC | Activity 1: Support the governance and organizational capacity of the AMR multisectoral coordination committee (MCC) |
| IPC | Activity 2: Support the national IPC committee in IPC oversight and management<br>Activity 3: Support implementation of prioritized IPC interventions in selected health facilities |
| AMS | Activity 4: Support development of AMS policies at the national level<br>Activity 5: Support the design and implementation of AMS interventions in priority health facilities |

## RESULT AREA 2: INFECTION PREVENTION AND CONTROL

MTaPS hired a consultant for the GHSA IPC area to facilitate the implementation of GHSA Mozambique. The consultant will work with the MOH to build the capacity of the national IPC Technical Working Group (TWG) members to provide technical support to provincial and health facility IPC programs. The consultant will also provide technical support to IPC TWG members to supervise provincial IPC committees and health facility IPC staff through a structured process.

MTaPS worked with the MOH to collect information about the existing government IPC assessment tools at the national and health facility levels and determine whether the Infection Prevention and Control Assessment Framework (IPCAF) and the national Infection Prevention and Control Assessment Tool 2 (IPCAT2) have already been implemented. The information collected showed that there are differences between the WHO IPCAF tool and the tool being used in Mozambique. The MISAU tool is more specific in the context of IPC and has different component areas than the IPCAF and IPCAT2.

## RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED

MTaPS worked to collect information regarding the updated number of hospital beds from the seven provincial hospitals that will be supported to implement AMS and IPC interventions in the GHSA work plan. MTaPS will initially focus on three provincial hospitals that will receive dedicated, onsite technical support for both IPC and AMS. MTaPS' support to the other four provincial hospitals will be via virtual support/remote mentoring. MTaPS defined the multiple criteria for selection of the three hospitals and presented them to the MOH focal point for One Health activities in Mozambique. The criteria are:

- Best chance of success
- Ability to obtain measurable results due to strong leadership and committed health facility staff
- Potential to serve as good models for the country
- Ease of travel based on project budget

| ACTIVITIES FOR NEXT QUARTER | |
|---|---|
| ACTIVITY AND DESCRIPTION | DATE (2021) |
| Result Area 1: Effective multisectoral coordination on AMR<br>• Organize the first quarterly meeting (workshop) of the AMR MCC<br>• Update mapping of stakeholder roles<br>• Identify other implementing partners who can support the AMR MCC in other activities | January–March |
| Result Area 2: Infection prevention and control<br>• Engage in introductory discussions with the national IPC committee<br>• Select the three hospitals for AMS and IPC activities<br>• Conduct IPCAT2 (national) assessment and elaborate IPCAT2 (national) assessment report<br>• Elaborate national IPC TWG action plan<br>• Conduct IPCAF health facility assessment and elaborate the report | January–March |
| Result Area 3: Use of antimicrobial medicines optimized<br>• Support development of AMS policies at the national level<br>• Support development of AMS policies at the national level | January–March |

# NEPAL

### OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED

Based on MTaPS partner Celsian's report on the reorganization comparative analysis, autonomy considerations, and organizational structure, MTaPS, in collaboration with the Department of Drug Administration (DDA), planned a workshop to discuss and build consensus on autonomy and restructuring decisions with representatives from the DDA, Ministry of Health and Population (MOHP), provincial organizations, the National Medicines Laboratory (NML), Promoting the Quality of Medicines Plus (PQM+), and MTaPS. However, the workshop was cancelled at the last minute due to the surge in COVID-19 cases. As a result, three working meetings with fewer participants in each meeting will apply an iterative process to optimize the DDA organizational structure February 1–5, 2021. MTaPS has prepared a virtual presentation of the comparative study, autonomy, and proposed reorganizational structures. Following the working meetings early next quarter, the DDA organizational structure should be finalized with terms of reference for key positions and proposed staffing norms. Once in place, the new structure will enable the DDA to better perform its role and key functions in regulating medicines and medical product. However, it is critically important that needed resources to implement the revised structure are made available.

The DDA's drafting of the new drug law was stalled due to reshuffling of staff and appointment of a new Director General (DG). A conference call between the DDA and MTaPS partner ILI-ACLE is planned in early February to revitalize and strengthen the collaboration and present the gap analysis and the zero draft drug law, which are strong resource documents for the new DDA management staff. When finalized, the revised drug law will be translated into English to enable ILI-ACLE to review and provide comments. The legislative mapping that includes a prioritized list of regulations to be revised is ready to be finalized and shared with the DDA for input; therefore, the translated existing codes and guidelines that were uploaded to the DDA website are unofficial translations. The scope of work for the technical working group (TWG) to coordinate and advise on the policy, legislation, and reorganization was drafted and will be finalized early in the next quarter. The new drug law and revised regulations are fundamental for increasing the maturity level of the DDA, and the new drug law will provide the required legal framework to improve health products regulation in Nepal, along with other activities supported by MTaPS.

During this quarter, MTaPS started working with the Government of Nepal (GoN) to update the medicine pricing policy so that the GoN can develop an evidence-based policy on a price control mechanism for pharmaceutical products. MTaPS was asked to help carry out a policy study using the World Health Organization (WHO) Medmon tool to explore pharmaceutical prices and price control mechanisms with the goal of reducing out-of-pocket expenditures on medicines. To clarify the study's scope of work and objectives, MTaPS implemented a desk review and held several discussions with the DDA, MOHP, MSH home office experts, and USAID. Nepal regulates medicines prices using a maximum retail price system but is having challenges in setting the maximum retail price and implementing the policy. ILI-ACLE's zero draft drug law includes price regulation, and the revision of the regulation on medicines prices is a high priority. The MOHP has already outlined the regulation's mechanisms; how the maximum manufacturers' prices for local production and imported generic, branded, and innovator medicines will be established; and the composition of the pricing committee. The MOHP determined that a pricing study was no longer needed. To assist in drafting a revised pricing regulation, MTaPS shared an overview of regulatory mechanisms from Asian countries and will continue its support to the pricing policy regulation in the next quarter. An updated medicine pricing policy will enable the GoN to ensure continued and equitable access to affordable pharmaceutical products at all levels of care in the country.

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

The draft WHO Global Benchmarking Tool verification report that measures the DDA's regulatory maturity level was finalized in June. A meeting with WHO, the DDA, PQM+, and MTaPS to discuss the report and create the institutional development plan (IDP) and strategies is still pending. The DDA has had too many competing tasks related to COVID-19, including the upcoming vaccine. The new DDA DG has committed to meet with WHO to finalize the report and start developing the IDP as soon as possible. MTaPS will continue supporting the DDA to reach the next maturity level, and MTaPS' planned activities all support this increase in maturity.

Linked to the DDA's personnel shifts, there were also some delays in the planned quality management virtual training for DDA and NML staff. This training is important to establish the quality management system (QMS) and interpret the ISO 9001:2015 requirements. All participants for the basic and expert trainings have been identified, and training materials have been finalized. The basic training started at the end of the quarter, and expert training will start on January 22. Participants' knowledge will be tested before and after the training, and if satisfactory attendance can be verified, participants will receive a certificate. The terms of reference for the QMS TWG were finalized, and it will be established following the training. With the QMS TWG in place, the QMS can be implemented, resulting in increased DDA maturity level.

The MTaPS team visited DDA provincial offices in Birgunj and Biratnagar and the Provincial Health Logistics Management Center in Biratnagar. The two provinces were selected as they are situated in the same direction and reachable within the same travel and by vehicle. The aim of the visit was to provide an overview of MTaPS; discuss the DDA's reorganization, important legislative changes including the drug law, and Pharmadex implementation including the registration module; and pilot the new electronic good pharmacy practices (GPP) inspection tool. In addition, the need to separate the functions of wholesalers and pharmacies and the requirement of having a pharmacist own and manage a pharmacy or wholesaler full time was discussed, as was the need to establish a new category of retail outlet such as a drug shop that can be managed by lower cadres of trained staff. MTaPS shared a trip report of the visit with the DDA and briefed USAID.

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

The new DDA leadership has decided to transition the product registration system and the future DDA management information system (MIS) to Pharmadex as soon as possible. The decision was based on MTaPS' options analysis of the usability of and user satisfaction with the existing MIS platform (DAMS) and the information technology infrastructure, combined with a number of demonstrations of Pharmadex's functionality. The Pharmadex implementation plan was finalized and shared with the newly appointed DG and DDA central and provincial staff following a visit to the two provincial offices. A cloud server for Pharmadex that is hosted in Nepal has been identified. Pharmadex's registration module has been set up on the cloud server, and a plug-in for customization will be finalized by the end of January 2021. MTaPS procured the hardware needed for the transition and organized a workshop with DDA managers and staff in the registration and inspection units to discuss and finalize the system requirement specifications for registration of products, manufacturers, importers, wholesalers, and pharmacies. The next step will be to evaluate how best to adjust the Pharmadex registration module to Nepal's specific requirements. The new system will facilitate and expedite the registration process in Nepal and help to implement the dossier review in line with WHO requirements. The DDA website update was completed, and DDA staff were oriented on it. The USAID Procurement and Supply Management program provided electronic logistics management information system reporting module

accreditation (login and password), enabling the integration of national- and provincial-level health commodity stock status into the DDA weekly report, which will facilitate effective decision making to ensure availability of essential commodities at all levels of care. The data will also be used to report on the monitoring, evaluation, and learning indicator on availability.

| **ACTIVITIES FOR NEXT QUARTER** | |
|---|---|
| ACTIVITY AND DESCRIPTION | DATE |
| Assist DDA in organizational restructuring (Sub. Obj.1.1; activity 1.1.1.)<br>• Revise structure for DDA/Food and Drug Administration central and provincial levels; organize work meeting for February 1–5<br>• Discuss and develop terms of reference for coordination, oversight structure, and staffing norms at work meeting February 1–5<br>• Support DDA/Food and Drug Administration and MOHP to implement the new organizational structure with revised roles and responsibilities at all levels | February<br>February<br>Ongoing |
| Update drug law, regulations, rules, and guidelines (Sub. Obj. 1.2; Activity 1.2.1)<br>• Organize remote consultations for the new DDA management on the importance and proposed legal revision of the drug law and regulations<br>• Initiate revision and update of priority regulations, rules, and guidelines needed to implement the revised drug law | February–March<br>Ongoing |
| Support development of an updated regulation on medicine prices and price control mechanism | Ongoing |
| Support meeting with WHO and DDA to finalize the assessment report and assist in developing a five-year strategic plan and the IDP to increase regulatory system maturity | Ongoing |
| Strengthen regulatory systems for medical products registration and good distribution and good pharmacy practices (Sub. Obj. 2.2; Activity 2.2.2)<br>• Strengthen, develop, and update guidelines for drug registration and good review practices<br>• Develop guidelines for pharmacovigilance, including reporting by market authorization holders, and develop pharmacovigilance strategy/plan<br>• Draft and pilot updated DDA guidelines and inspection tool for GPP and good dispensing practices (GDP)<br>• Draft updated DDA regulations for GPP | Ongoing |
| Finalize QMS training and develop quality management manual | Ongoing |
| Develop system requirements and technical specifications for registration, importation, and pharmacovigilance modules for a future regulatory MIS | Ongoing |
| Engage and orient private-sector pharmacies and wholesalers on new GPP and GDP requirements | Ongoing |
| Design and implement problem analysis of medicines management and GPP in public sector facilities | Ongoing |

# NIGERIA

The Global Health Security Agenda (GHSA)-related goal of MTaPS/Nigeria is to strengthen technical and managerial capacities within the human and animal health systems to contain the emergence and propagation of antimicrobial resistance (AMR). MTaPS/Nigeria will focus on supporting three result areas: appropriate use of antimicrobials, strengthening infection prevention and control (IPC) practices, and consolidating multisectoral coordination (MSC).

## YEAR 3 WORK PLAN DEVELOPMENT:

The MTaPS/Nigeria GHSA work plan was approved on October 9, 2020, and the narrative work plan was approved on December 29, 2020.

**Recruitment of in-country MTaPS staff**: Two technical staff will be onboarded in January 2021. The two-person team office has been set up, and the start-up procurement of computer equipment and furniture has been completed. MTaPS/Nigeria will operate out of the MSH Nigeria offices and will access key finance and administrative staff to support MTaPS program implementation.

## PLANNED ACTIVITIES

### RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

#### *Activity 1.1.1: Work with the AMR-TWG to prioritize and cost key actions on the NAP-AMR 2017–2022*

The national AMR situational analysis showed that poor coordination among key stakeholders has had an effect on all sectors of AMR, including public awareness, animal and human national disease surveillance systems, research, and regulation. Work plan activities include:

- A workshop to review the implementation of the national action plan on AMR (NAP-AMR), identify areas of progress, and analyze challenges so as to revise or update the implementation roadmap for AMR containment
- Prioritizing NAP-AMR activities to focus on those that will directly contribute to move Joint External Evaluation (JEE) scores to a higher level, as outlined in the WHO benchmark tool.
- Working with the national AMR Secretariat and the AMR-TWG to develop a costed operational plan for the prioritized activities identified in the activity above and to assign implementation roles and responsibilities for key stakeholders

#### *Activity 1.1.2: Strengthen MSC and functionality of the AMR-TWG and its sub-committees*

One of the major issues that must be addressed to enhance the multisectoral approach to AMR is the lack of coordination of all actors through regular meetings. Work plan activities include supporting:

- The Nigeria Centre for Disease Control and the national AMR Secretariat to strengthen the capacity of the AMR-TWG. This will help improve coordination among the different sectors (a highlighted weakness in the JEE report, the One Health National Strategic Plan, and the NAP-AMR).
- In consultation with the AMR Secretariat and USAID Mission, MTaPS will select one state in which to support the establishment/strengthening of AMR MSC at the state level.

**RESULT AREA 2: INFECTION PREVENTION AND CONTROL**

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

The national AMR-TWG, in collaboration with the CDC, conducted a baseline IPC assessment of the core components of IPC in the country, and the report is being finalized. Work plan activities include supporting:

- The AMR Secretariat alongside CDC to use the results of the assessment to strengthen the six WHO IPC core components at the national level and the eight facility-level IPC core components in the three MTaPS-targeted facilities
- The AMR Secretariat and the Federal Ministry of Health (FMOH) to review and update the existing IPC national guidelines in the human health domain to align with the most recent WHO guidance incorporating lessons learned from the national response to COVID-19

***Activity 2.2.1: Strengthen capacity of health care providers to implement IPC guidelines (NAP Activity 3.1.3)***

One of the weaknesses in implementation of IPC in countries is inadequate technical and managerial capacity of individuals and institutions to champion IPC work. Work plan activities include:

- Reviewing the ongoing training efforts, curricula, and approaches and providing technical assistance to the AMR Secretariat and sub-group 3 on hygiene, IPC, and biosecurity
- Assisting the national AMR-TWG's sub-group 3 to strengthen the existing pool of IPC trainers/facilitators
- Developing tools and approaches to conduct general sensitization of all health care workers in the three targeted facilities on the risks of AMR in general and health care-associated infections in particular

***Activity 2.5.1: Strengthening IPC core components and the functionality of IPC committees in select hospitals (NAP Activity 3.1.2)***

The CDC noted in its early findings on IPC in Nigeria that hospital IPC committees exist but are not functional. Work plan activities include:

- Collaborating with the AMR Secretariat and the national and state supervisory authorities of health facilities to select three health facilities that will be targeted for intervention
    - MTaPS will use the results of these assessments to support the designated health facilities to develop a plan to strengthen the selected core components of IPC in the facility
    - MTaPS will support the management of each facility to conduct a rapid situational analysis of the existence and functionality of an IPC committee
    - MTaPS will support the management of the three health facilities and supervisory authorities through a process to identify facility IPC priorities and develop a plan of action, including establishing and/or strengthening oversight capacity of IPC committees to improve IPC compliance at the identified sites
- Working with the national AMR-TWG, the State Ministry of Health, the State Health Management Board, and the State TWG on IPC to conduct supervision and monitoring of compliance to national guidelines in the three facilities

**RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED**

***Activity 3.1.1: Strengthen AMS in human and animal health sectors (NAP Objective 4.3)***

A rational drug use survey conducted in 12 developing countries reported that Nigeria had the highest number of medicines prescribed, a low percentage of generic drugs prescribed, and the third-highest prescription of antibiotics. Strong governance and oversight structures are a bedrock of antimicrobial stewardship (AMS). Work plan activities include:

- Assessing stewardship policies and activities with the national AMR Secretariat
- Developing data collection tools with the national AMR Secretariat
- Using the results of the rapid assessment, in conjunction with any available data on the consumption and use of antimicrobials in the human and animal sectors, to draft a national AMS plan that covers both the human and animal health sectors
- Supporting the AMR Secretariat to organize a workshop that includes experts to review this information, adapt the WHO categorization to the national context, and come up with a national essential antibiotics list classified using the AWaRe classification
- Exploring opportunities in AMR MSC to encourage and promote national stakeholders to take initiatives toward carrying out a similar type of classification of antimicrobials in the animal health sector to help generate multisectoral AMS efforts

***Activity 3.5.1: Support implementation of AMS programs in the three targeted intervention facilities***

Competencies in antimicrobial prescription and monitoring are critical in the program, and support is needed to initiate a facility-level systematic approach to addressing AMS competency challenges. Work plan activities include:

- Developing a strategy to establish/revitalize and build/strengthen the capacities of Drug and Therapeutics Committee (DTC) members with the AMR Secretariat, the FMOH, and the Departments of Health and Facility Management in the selected state and facilities
- Supporting DTCs in the three selected health facilities to design and implement a continuous quality improvement approach with incremental self-improvement plans and targets. Approaches will include coaching, mentoring, and peer-learning activities.

| **ACTIVITIES FOR NEXT QUARTER** | |
|---|---|
| ACTIVITY AND DESCRIPTION | DATE |
| Present our workplan to local stakeholders, including the FMOH and national AMR-TWG. | TBD |

# THE PHILIPPINES

For progress on MTaPS/Philippines COVID-19 activities, click here.

The MTaPS/Philippines program aims to establish and institutionalize an integrated health supply and pharmaceutical management system in the Philippines 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. To reach this goal, MTaPS/Philippines provides state-of-the-art technical assistance and capacity building to the Department of Health (DOH) to:

- Institutionalize an integrated and effective procurement and supply chain management (PSCM) system for TB, family planning (FP), and other health program commodities
- Establish a fully functional pharmacovigilance (PV) system and improve pharmaceutical services to ensure patient safety and rational use of health commodities

MTaPS uses a systems strengthening approach that aligns with USAID's vision of pharmaceutical systems strengthening. This approach is supported by innovative and sustainable strategies in line with the journey to self-reliance principle and ensures private-sector engagement and gender equity.

### OBJECTIVE 1: PHARMACEUTICAL-SECTOR GOVERNANCE STRENGTHENED

MTaPS has facilitated a discussion and agreement with the National Tuberculosis Program (NTP) to bring the NTP's Drugs and Supplies Management (DSM) unit under the leadership of the DOH Procurement and Supply Chain Management Team (PSCMT). This move is part of an initiative to establish the PSCMT's centrally integrated stewardship role. This transition will help reduce the current fragmentation of PCSM functions and ensure that the PSCMT is playing a technical leadership role in managing and overseeing all aspects of the PSCM cycle, including product selection, quantification, procurement, storage, distribution, and monitoring. MTaPS will continue working with the NTP and PSCMT to redefine the DSM unit's roles and responsibilities under PSCMT supervision and initiate the policy changes needed to implement the transition.

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

Following the completion of the functional analysis of the workforce needs for PSCM and PV, MTaPS facilitated a virtual forum in November with 138 participants representing DOH offices (PSCMT, Health Human Resource Development Bureau, Procurement Service, Supply Chain Management Service [SCMS], Health Facility Development Bureau, Health Policy Development and Planning Bureau, Food and Drug Administration, Pharmaceutical Division, and Health Technology) to present the workforce analysis findings and discuss the proposed structures and staffing needs for reorganizing PSCM and PV functions to support the country's commitment to achieving universal health coverage. The DOH agreed to consider implementing the PSCM and PV workforce development plan by creating necessary positions, hiring staff to fill the positions, and building workforce capacity. MTaPS will support the DOH by creating professional development e-Learning modules and uploading them to the DOH e-Learning Academy. During this quarter, MTaPS started developing and customizing e-Learning modules on pharmaceutical systems strengthening and warehouse operations management. Moving forward, MTaPS will advocate with the DOH to incorporate the PSCM and PV workforce development plan into the Health Human Resources Master Plan and support the PSCMT to implement the plan to get an adequate and professional workforce to ensure uninterrupted access to and safe use of health commodities.

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

**eLMIS:** MTaPS supported the DOH in officially establishing an electronic logistic management information system (eLMIS) Technical Working Group (TWG) comprising members from different units of the DOH (PSCMT, SCMS, Procurement Service, and Knowledge Management and Information Technology Service [KMITS]). The TWG has been meeting every week to discuss, coordinate, and resolve issues related to the selection and implementation of an eLMIS. Six TWG meetings were conducted with support from MTaPS during the reporting period, and MTaPS had four additional discussions with the SCMS, KMITS, health programs, and regional representatives to identify the eLMIS requirements, validate the PCSM process flows, and gather input for developing an eLMIS implementation road map. MTaPS supported the PSCMT to develop an eLMIS implementation readiness assessment tool to conduct a survey of the facilities intending to implement the eLMIS. Moving forward, MTaPS will support the TWG to finalize the eLMIS design, selection, and implementation roadmap and recommend to the DOH Executive Committee eLMIS technology(ies) for the DOH to adopt. Once implemented, the eLMIS will electronically connect and equip all service delivery points, stock keeping points, data centers, and decision making posts for more timely, accurate, and complete visibility of commodity flow and logistics information flow to support an effective PSCM system of health commodities and ensure uninterrupted access to essential health services throughout the country.

**Rational allocation tool:** To help the DOH use existing supply chain management data to allocate commodities, MTaPS continued to support the National FP Program to carry out rational distribution. MTaPS trained regional FP coordinators, shared an Excel-based allocation calculation tool, and provided reference guides for implementing the principle of rational allocation and rational distribution of FP commodities to service delivery points to avoid stock-outs and overstock. The National FP Program will start using the calculation tool in early 2021 to address the current faulty distribution practice.

**PViMS:** MTaPS worked with active drug safety monitoring (aDSM) stakeholders, such as the DOH Pharmaceutical Division, KMITS, the NTP, the Food and Drug Administration, and other implementing partners to enhance PViMS software to address the need for an aDSM framework and harmonize PViMS processes with the integrated TB information system that will streamline health facilities' TB-related PV reporting. MTaPS also guided aDSM stakeholders on the data and process requirements needed to fully use PViMS' analysis and signal detection functionality. In the next quarter, MTaPS will support the DOH Pharmaceutical Division and other stakeholders to revise PViMS training materials to reflect the enhancements and plan for the nationwide PViMS rollout to monitor patient safety related to TB medicines.

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

To address procurement bottlenecks related to an annual appropriation-based, rigid procurement system, MTaPS has been supporting the DOH to start using framework agreements as a more flexible procurement method. MTaPS virtually oriented DOH program managers from the Disease Prevention and Control Bureau, including the NTP and the National FP Program, on how to use framework agreements to procure selected health commodities, multiyear contractual authority, and pooled procurement. MTaPS supported the NTP in preparing the justification and other documentation needed to use framework agreements to procure GeneXpert cartridges and adult TB drugs. The DOH NTP is undertaking procurement using a single-year framework agreement as an initial step toward using this modality in 2021, with a plan to continue using multiyear framework agreements (two to three years) starting in 2022.

At the regional and local government levels, MTaPS supported the NTP in orienting all 17 DOH regional offices (Centers for Development [CHDs]) and some local government units on the use of framework agreements through a pooled procurement mechanism. This initiative responded to the NTP's call to action for regional and local government unit levels to complement the NTP's budget for procuring TB drugs. MTaPS and another USAID implementing partner, TB Platforms, supported the NTP in this call to action, and MTaPS partnered with another government entity called Philippine Pharma Procurement, Inc., to act as a procurement agent for the DOH CHDs and local government units to carry out pooled procurement in 2021.

The framework agreement and pooled procurement mechanism will offer the DOH more flexible and economic options to procure health commodities in a more efficient, timely, and needs-based manner to improve the health system's performance.

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

To support the scale up of TB preventive treatment (TPT) and the introduction of a new TPT regimen, MTaPS worked with the NTP and other implementing partners to conduct a national quantification exercise of TPT-related commodities. MTaPS continued to support the DOH SCMS to perform an inventory analysis of health commodities being managed at the central and regional levels. The DOH SCMS aims to strengthen its role in this process by hiring additional staff to collect inventory and procurement data to generate inventory reports that it will use to inform DOH health programs if the allocations they have provided are sufficient considering current stock and upcoming procurement.

Building on its COVID-19 response work, MTaPS shared the findings and recommendations from its COVID-19 facilities assessments for infection prevention and control (IPC), health care waste management (HCWM), and supply chain management practices with 95 stakeholders. In addition, MTaPS conducted a planning session with the DOH Health Facility Development Bureau and Pharmaceutical Division to finalize a health facility assessment checklist covering IPC, HCWM, and antimicrobial stewardship and develop a training-of-trainers program to train a pool of staff from the DOH and CHDs to monitor health facilities. This training of trainers and subsequent facility visits by trained staff will supplement the existing e-Learning modules on IPC and HCWM that MTaPS developed and uploaded in the DOH e-Learning Academy. MTaPS will also support the DOH to finalize and upload another course on antimicrobial stewardship that the Pharmaceutical Division is creating with support from the World Health Organization.

**CONFERENCE PARTICIPATION THIS QUARTER**

| CONFERENCE | PRESENTATION/PANEL TITLE | DATE |
|---|---|---|
| Global Health Supply Chain Submit (GHSCS) 2020<br>(Virtual) | Philippines: Reconfiguration of the supply chain to balance equity and emergency response during the COVID-19 pandemic | November 17, 2020 |

| ACTIVITIES FOR NEXT QUARTER | |
|---|---|
| ACTIVITY AND DESCRIPTION | DATE |
| Activity 1.1.1: Strengthen the stewardship role of PSCM team to set up centrally integrated PSCM functions with decentralized implementation (Facilitate dialogues among PSCMT, Disease Prevention and Control Bureau, and NTP on integrated PSCM roles) | March 2021 |
| Activity 1.2.1: Support DOH to implement a PSCM and PV workforce development plan for institutional capacity building (Share e-Learning courses on pharmaceutical systems strengthening with DOH for review and clearance) | February 2021 |
| Activity 1.2.2: Capacitate a pool of local technical assistance providers to support institutional capacity building of local government units (LGUs) for PSCM and PV functions (Conduct gap analysis workshops with LGUs) | January–February 2021 |
| Activity 1.3.1: Support DOH to develop a roadmap, acquire necessary technology, and implement the roadmap for an end-to-end eLMIS (Present eLMIS assessment report to DOH) | March 2021 |
| Activity 1.4.1: Support DOH and LGUs to conduct procurements through framework agreements (FAs) and pooled procurement mechanisms for FP and TB commodities (Provide continued support for FA, pooled procurement, and multiyear contracting authority to DOH) | March 2021 |
| Activity 1.5.1: Support DOH to analyze PSCM system design options for implementation (Commence the PSCM system architecture design activity) | February 2021 |
| Activity 2.4.1: Support DOH in rolling out the PV Information Monitoring System (PViMS) for active PV (Prepare the training materials and develop a PViMS roll out plan) | March 2021 |
| Activity 3.2 Gender equality and women's empowerment: Analyze gender disaggregated aDSM data for TB medicines from gender perspective (Develop the research design) | March 2021 |

# RWANDA

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

### *Activity 1.1.1: Strengthen the capacity of Rwanda FDA in regulating pharmaceuticals used in HIV/AIDS, MNCH, and FP/RH programs*

To improve pharmaceutical-sector governance through strengthening capacity at the Rwanda FDA, during this quarter MTaPS continued to provide support to the Rwanda FDA to develop its four-year strategic plan (2021–2024). The draft strategic plan was reviewed and organized under three strategic priority areas and ten strategic objectives, with identified key performance indicators aligned to the objectives. It is expected that the final strategic plan will be submitted for consideration for approval to the Rwanda FDA board at the end of January 2021. After approval by the board, the Rwanda FDA will start to operationalize the plan for implementation.

Considering that the Rwanda FDA is a recently established institution with a wide mandate, various regulations, guidelines, and SOPs in the areas of medicines registration, regulatory inspection of premises, and PV are being developed to guide both the institution and its clients on regulatory requirements and approval processes. In this regard, MTaPS supported the Rwanda FDA in drafting the guidelines on quality audit of the medical device manufacture process. The draft guidelines are to be handed over to the Rwanda FDA for validation.

As part of continuation of PY2 activities, MTaPS continued to work with and support the Rwanda FDA to develop documentation and guidance on the requirements and implementation of the QMS. Four documents relating to the risk management framework, eight process flow documents, two SOPs for medicine registration and approval of promotional materials, and the quality manual were among the documents reviewed and validated by the Rwanda FDA in a workshop October 26–30, 2020. The Rwanda FDA quality manual will be tabled for approval by the Rwanda FDA Board of Directors at the end of January 2021.

In addition, MTaPS facilitated a capacity building and awareness session on the purpose, implementation, and requirements of a QMS for 28 operational staff (8 female and 20 male) December 8–11, 2020, following the one previously held for 12 Rwanda FDA senior management team members in September 2020. The main goal was to create awareness for Rwanda FDA personnel on the need to implement a QMS based on ISO 9001:2015 requirements, which have a critical role in strengthening governance as well as oversight and eventually contribute to increasing the Global Benchmarking Tool maturity level of the Rwanda FDA. The capacity building session report is undergoing internal technical review.

### *Activity 1.1.2: Streamline registration of essential medicines and medical devices, including those used in MNCH and FP programs*

Following the capacity building training workshop for 55 medicines assessors for Rwanda FDA staff that was held during quarter 4 of PY2, and based on public institution challenges around staff retention and on the understanding that refresher courses and additional training are always needed for a recently established institution such as the Rwanda FDA, MTaPS is supporting the Rwanda FDA to develop an online e-Learning course for medicines dossier evaluation and registration to build the capacity of current and future assessors. Course outlines for four modules have been developed, and an e-Learning consultant is being engaged to develop the e-Learning course. It is expected that the course content materials will be developed, approved, and available online for utilization between April and June 2020.

### OBJECTIVE 2: PROMOTE AVAILABILITY AND USE OF PHARMACEUTICAL INFORMATION FOR ART-RELATED DECISION MAKING

#### *Activity 2.1.1: Strengthen site-level tools for tracking and reporting patients receiving three- and six-month MMD of ARVs*

In quarter 4 of PY2, MTaPS worked with the RBC/HIV Division to conduct a survey in the form of an exit interview in the 10 MTaPS-supported health facilities that covered prescribers, dispensers, and clients attending the HIV clinic, as well as the director of HIV care and treatment at the RBC. The purpose of the assessment was to identify existing gaps in the transitioning of clients from the tenofovir + lamivudine + efavirenz (TLE) regimen to the DTG-based regimens (tenofovir + lamivudine + dolutegravir [TLD]) as the first-line treatment and to provide information that will guide MTaPS' support to improve implementation of TLD transitioning, multi-month dispensing (MMD), and reporting of adverse drug reactions (ADRs) for people living with HIV. A secondary focus was to understand the preferences of clients for MMD of three or six months. Some of the findings are that the antiretroviral therapy (ART) data collection and reporting system does not capture the pack sizes dispensed to clients and that ADRs reported by clients are neither recorded nor reported to the Rwanda FDA. During this quarter, the report and recommendations were finalized, including that there should be quick rollout of 6MMD and provision of the 180-pack size along with the 90 and 30 pack sizes to all ART sites to meet client preferences and that the 10 facilities in the transition should be supported as needed including in sending of ADR reports on antiretrovirals (ARVs) to the Rwanda FDA. Once the key identified gaps are addressed, it is expected that the quality-of-service delivery in relation to the use of TLD will improve.

Based on the assessment findings, in PY3 MTaPS will continue to support the MOH, Rwanda FDA, and RBC in the management of the TLD transition and other pharmaceuticals in Rwanda by providing supportive supervision and mentorship to the 10 MTaPS-supported facilities to improve ADR reporting as it relates to transitioning patients to TLD and use of other ARV regimens.

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

#### *Activity 3.1.1: Standards for pharmaceutical services aligned to Rwanda health care quality and accreditation system developed*

In the area of strengthening capacity to manage the pharmaceutical sector, in PY2, MTaPS supported the MOH to develop Rwanda pharmaceutical service accreditation standards and a performance tool kit as part of the comprehensive quality assurance framework for rating, monitoring, and evaluating the performance of the sector and for improving the quality of pharmaceutical services offered to patients in Rwanda. The final edited copy of the standards and its assessment toolkit was received and shared with the Mission. The next step is for MTaPS to provide the necessary technical support to the MOH and its stakeholders to disseminate and implement the standards.

#### *Activity 3.1.2: Improve quality and use of medicines for pre-eclampsia, eclampsia, and postpartum hemorrhage*

In strengthening management of health commodities at health facilities, MTaPS is working with the RBC in developing an implementation manual for cold storage of oxytocin at the district and health facility levels, including SOPs for receiving, storing, ordering, and recording oxytocin. The manual is currently available in draft form after being adapted from existing MSH materials developed for use in other countries.

The manual and SOPs provide guidance on appropriate storage, receiving, ordering, and recording to health care workers at the health facility level and district pharmacies, with the aim of improving practices to keep oxytocin cold until the point of use, which will maintain its potency and quality. The

documents are under review for appropriateness in relation to the local Rwandan context. After review, the documents will be shared with key stakeholders in the MOH for review and validation.

***Activity 3.1.3: Improve access to and administration of oxygen to hypoxic newborns and children with pneumonia***

MTaPS is working with the MOH to improve access to and administration of oxygen in health facilities, beginning with identification of existing gaps.

The MOH conducted a nationwide inventory assessment with support from the Clinton Health Access Initiative and is finalizing the report based on feedback from key partners, including MTaPS. To complement that inventory assessment, MTaPS conducted a rapid desk review of the availability and use of oxygen, equipment, and medical devices and completed its documentation in this quarter.

MTaPS has been discussing with the MOH Clinical Services Department and the RBC how best to support them to develop a comprehensive oxygen roadmap. There was consensus that an oxygen coordination mechanism is needed, and the updating of the oxygen roadmap will be the first task of this oxygen working group. MTaPS will support the MOH and the clinical services director to play the convening role for that working group and to establish a rolling agenda, terms of reference, and action plan. The working group will provide a forum for coordinating activities related to oxygen within the MOH and with donors and implementing partners and ensure that all actions are in accordance with the MOH's vision. MTaPS is developing draft terms of reference for the group for the MOH to review and adopt.

Based on the assessment findings and the actions to be defined in the roadmap, MTaPS will support the MOH and other stakeholders in the development of an oxygen policy framework, guidelines, and SOPs on the use and management of oxygen in the coming year.

***Activity 3.1.4: Support management of medicines at community level***

MTaPS is working with the MOH and the RBC/Maternal, Child, and Community Health (MCCH) Division to review and address gaps in the management of health commodities by community health workers (CHWs). MTaPS has reviewed the tools and guidelines utilized by CHWs undertaking community-based health care provision, and the set seems complete. MTaPS has collected some information from a sample of districts and seen that the tools and guidance are not applied systematically by all CHWs. A meeting was proposed for this quarter with the MCCH team of the MOH but was postponed to next quarter for a variety of reasons. In this meeting, MTaPS will discuss the gaps in application of supply chain management best practices, tools, and guidance with the MCCH and propose targeted interventions to improve the refresher training and performance of CHWs.

***Activity 3.2.1: Support establishment of a system for active surveillance of the new DTG-based regimen and strengthen the existing spontaneous reporting system***

MTaPS has been providing technical assistance to the RBC and Rwanda FDA in building capacity to conduct a study on active safety surveillance of medicines, especially for HIV/AIDS, focusing on DTG-based regimens in particular. For this activity, a research protocol was developed. The protocol has been technically approved by experts and is being finalized with the RBC before submission to the Rwanda National Ethics Committee (RNEC) for consideration and approval. In addition to the protocol, two SOPs have been drafted on client enrollment and electronic data entry. It is expected that field activities on recruitment of subjects and data collection will start after approval by the RNEC, hopefully in March 2021.

In addition, MTaPS supported development of a multiyear national PV costed plan. The plan was reviewed by the Rwanda FDA and other stakeholders and is currently undergoing editorial review prior to submission to the Rwanda FDA for validation and approval.

MTaPS is continuing to provide technical support to the Rwanda FDA and its stakeholders in strengthening PV. Building on the initial capacity building training activity in medicines safety monitoring, which was conducted in January 2020 for 45 health care providers, MTaPS is providing technical assistance for the development of a PV e-Learning course. It is expected that with the online PV e-Learning course, health care providers, marketing authorization holders, and Rwanda FDA staff will be able to learn and acquire knowledge on medicines safety monitoring. Eleven mini-modules have been developed and are being transformed into online e-Learning course materials. It is expected that between April and June 2021 the first group of students will have been registered through the National Pharmacy Council to kick start the online program.

MTaPS has worked with the Rwanda FDA to install the Pharmacovigilance Information Monitoring System (PViMS), a web-based tool that supports the collection and management of medical products safety data. PViMS is installed on the Rwanda FDA's own servers. The system has been customized to meet local requirements from the Rwanda FDA, and an updated version will be installed in the next quarter. To guide the users of PViMS, MTaPS provided support in finalizing the PViMS user manual. The user manual is available for use by Rwanda FDA and other stakeholders interested in the use of the system. It will help users who wish to navigate through the system and make it easy to report medicines safety issues and conduct data analysis to help in decision making.

**ACTIVITIES FOR NEXT QUARTER**

| ACTIVITY AND DESCRIPTION | DATE (2021) |
|---|---|
| Activity 1.1.1: Strengthen capacity of the Rwanda FDA in regulating pharmaceuticals used in HIV/AIDS, MNCH, and FP/RH programs | |
| • Finalize development of Rwanda FDA four-year strategic plan (2021–2024) covering a broader scope | January–March |
| • Support Rwanda FDA to conduct external QMS audit toward ISO 9001:2015 certification, including additional implementation of corrective and preventive actions arising from the assessment | January–March |
| • Support the classification of antibiotics following WHO 2018 AWaRe (access, watch, reserve) classification approach and establish a national list of essential antibiotics that will be inserted into National Essential Medicines List during revision/support availing a consultant | January–June |
| Activity 3.1.1: Strengthen delivery of high-quality patient-centered pharmaceutical care through the development of pharmacy service standards aligned to Rwanda health care quality and accreditation system | |
| • Support the dissemination and implementation of the approved pharmacy service accreditation standards and operationalize the pharmaceutical standards implementation plan using dissemination workshops and trainings | January–March |
| • Support development of information, education, and communication materials for public awareness on medicines safety such as flyers, stickers, and posters | January–March |
| Activity 3.1.2: Improve quality and use of medicines for reproductive, maternal, neonatal, and child health | |
| • Finalize the draft manual on management of oxytocin and validate it with MOH stakeholders. Plan for dissemination to the health facilities and orientation on the manual and procedures for staff. | January–March |
| • Undertake a situational analysis on dispensing and prescribing patterns of FP products at the facility level through Drug and Therapeutics Committees and other actors/means | January–March |

| ACTIVITIES FOR NEXT QUARTER | |
|---|---|
| ACTIVITY AND DESCRIPTION | DATE (2021) |
| Activity 3.1.3: Improve access to and administration of oxygen to hypoxic newborns and children with pneumonia | |
| • Establish the oxygen working group and hold its first meeting to update the oxygen roadmap or strategic plan | January–March |
| • Work with the MOH to review and update existing tools, procedures, and guidelines on the administration and use of oxygen and its distribution | January–March |
| Activity 3.1.4 Support management of medicines at community level | |
| • Identify gaps in management of medicines by CHWs and agree on interventions | January–March |
| • Develop refresher training material and orient district teams | January–March |
| Activity 3.2.1: Support establishment of a system for active surveillance of the new DTG-based regimen and strengthen the existing spontaneous reporting system | |
| • Obtain Institutional Review Board approval to implement the protocol for active surveillance and reporting of adverse events related to patients' use of DTG-based regimens | January–March |
| • Complete the transformation of the PV content into the e-Learning format and launch the platform to allow participants to commence the course | January–March |

# SENEGAL

For progress on MTaPS/Senegal's COVID-19 activities, click here.

### RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

***Activity 1.1.1: Strengthen the functionality of the antimicrobial resistance (AMR) technical working group (TWG) by supporting effective coordination through regular meetings.***

MTaPS provided technical and financial support to the One Health (OH) Permanent Secretariat and the AMR TWG to organize a two-day workshop October 21–22 to finalize and validate the antimicrobial stewardship (AMS) national action plan and the 2021 AMR annual action plan. The plenary sessions held over the two days allowed for detailed presentations and thorough discussions of each document. As a result, the AMR TWG agreed to validate both documents subject to taking into account recommendations made by participants. On November 17, 2020, after confirming that all critical recommendations had been taken into account, the OH Permanent Secretariat shared the finalized and validated national AMS action plan with the AMR TWG. The OH Permanent Secretariat will convene another meeting during FY21Q2 to further prioritize activities of the technically validated 2021 AMR annual action plan.

### RESULT AREA 2: INFECTION PREVENTION AND CONTROL

***Activity 2: Strengthen the capacity of health facilities for implementing infection prevention and control (IPC) programs***

MTaPS provided technical and financial support for a workshop to update the IPC guidelines of the Hôpital Général Idrissa Pouye (HOGIP) level 3 hospital in Dakar, based on WHO's IPC guidelines and recommendations. The Directorate of Hospital Quality, Security, and Hygiene (DQSHH) is planning to use the IPC guidelines from the three MTaPS-supported pilot hospitals (HOGIP, private level 2 Hospital Saint Jean de Dieu in Thiès, and level 1 Hospital Abdoul Aziz Sy in Tivaouane) as a reference to help update the national-level IPC guidelines. Once the national-level IPC guidelines are finalized and validated, the DQSHH will disseminate them nationwide, along with the lessons learned from the pilot hospitals. MTaPS provided technical and financial support to the DQSHH to convene a joint lessons learned meeting with the three pilot hospitals to review accomplishments, experiences, challenges, lessons learned, and the way forward for scale up. MTaPS' support for the design and implementation of the plan of action contributed to the three pilot hospitals' significant improvements to their respective IPC capacity levels: the Tivaouane level 1 hospital improved its capacity level from inadequate (100/800) to intermediate (500/800), the level 2 hospital (FBO/private) in Thiès improved its capacity level from intermediate (500/800) to advanced (688/800), and the level 3 hospital in Dakar improved its capacity level from basic (315/800) to intermediate (435/800). The meeting identified 22 best practices for the eight WHO IPC capacity components that contributed to the hospitals' Infection Control Committees' (ICCs) achievements. MTaPS will support the DQSHH to use these best practices to revitalize the ICCs of five additional hospitals. The meeting recommended that the DQSHH help address the lack of budget allocation by the hospitals for ICC activities to sustain the gains and capacity improvements the supported hospitals are achieving. The DQSHH committed to advocating for and requesting the needed support from the Ministry of Health (MOH) to ensure that the lessons learned and recommendations are implemented to increase the number of functioning hospital ICCs, which is currently as low as 10 ICCs nationwide, and further strengthening the overall national IPC program.

**RESULT AREA 3: USE OF ANTIMICROBIAL MEDICINES OPTIMIZED**

***Activity 3.1.1: Support the government through the Directorate of Pharmacy and Medicines (MOH) to develop and validate the national AMS plan, including completing the ongoing revision process of the policy and STGs on antibiotic therapy***

On October 21, under the aegis of the OH Permanent Secretariat, MTaPS supported the organization of a workshop to finalize and validate the national AMS plan. During the workshop, IP3 Conseil presented the first draft of the national AMS plan. At the end of the workshop, the OH Permanent Secretariat advised IP3 Conseil to address all comments and recommendations made by participants in the final version of the plan. On November 2, 2020, IP3 Conseil shared the finalized, validated national AMS plan.

The MTaPS Senegal team continued working with the National Committee for Antibiotic Treatment (NCAT) and advocating for the organization of a validation workshop on the policy and standard treatment guidelines (STGs), which take into consideration the Access, Watch, Reserve (AWaRe) categorization. In preparation for the validation workshop, MTaPS provided support to the NCAT to organize two technical meetings to assess the remaining pre-validation work. The NCAT worked on the STGs for antibiotic treatment of community infections in adults and children and the antibiotic policy. The NCAT shared the STGs on antibiotic prophylaxis and antibiotic treatment for health care-acquired infections with committee members for final comments. In light of the new COVID-19 wave, the head of the NCAT recently decided to organize a virtual validation workshop of all finalized antibiotic therapy STGs and policy by January 31, 2021.

***3.2.1 Support the MOH to monitor and document the implementation process of the IPC and AMS e-learning modules***

MTaPS and Empower organized and conducted a third highly interactive virtual session to equip the MOH e-learning teams with the necessary e-learning facilitation skills. The objectives completed during this third virtual session included orienting participants on:

- E-learning concepts and approaches (asynchronous, synchronous, and blended learning)
- Facilitation techniques for online courses
- Key features and functions of the Moodle platform

MTaPS is working with the DQSHH and the MOH IT/technology unit to roll out the IPC e-learning training sessions during FY21Q2. MTaPS will support the organization of an initial orientation of the targeted hospitals' ICCs on the use of the e-learning platform and courses. MTaPS is working with the DQSHH and the MOH IT/technology unit to draft the terms of reference for the launch of the platform.

**ACTIVITIES FOR NEXT QUARTER**

| ACTIVITY AND DESCRIPTION | DATE |
|---|---|
| Under the aegis of the OH Permanent Secretariat, support the AMR TWG to organize multisectoral coordination meetings on the implementation of the annual AMR plan of action. | January–March 2021 |
| Support the DQSHH to update the national IPC guidelines that consider the finalized IPC guidelines from the three pilot hospitals and to start disseminating these updated guidelines in an additional five hospitals. | January–March 2021 |
| Support the National Committee of Antibiotic Therapy to organize a validation workshop of the policy and guidelines for antibiotic therapy use in Senegal and to start disseminating them nationwide. | January–March 2021 |
| Support the DQSHH to organize an initial orientation of the targeted hospitals' ICCs on the use of the e-learning platform and to start rolling out IPC e-learning courses for the eight targeted hospitals. | January–March 2021 |

# TANZANIA

For progress on MTaPS/Tanzania's COVID-19 activities, click here.

### RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

#### *Activity 1.1.1: Review plans and progress through regular meetings of the MCC*

MTaPS supported the Awareness Technical Working Group (TWG) of the Multisectoral Coordination Committee (MCC) on antimicrobial resistance (AMR) containment for discussions about Antimicrobial Awareness Week commemorations.

MTaPS also supported the MCC meeting at the beginning of Antimicrobial Awareness Week commemorations (November 18, 2020). On the same day, the MCC issued a press release in which the chair of the MCC emphasized that antimicrobials should never be sold without a prescription, and they should never be taken without consulting a health care provider.

Regular quarterly meetings of the MCC are key to the operationalization of Tanzania's National Action Plan on AMR, which aims to ensure that the MCC will have viable reporting accountability mechanisms and will contribute to Tanzania progressing to the next Joint External Evaluation (JEE) capacity level by implementing the recommended actions in benchmark 3.1 for multisectoral coordination on AMR in the World Health Organization's (WHO) 2019 International Health Regulations capacities benchmarking tool.

### RESULT AREA 2: INFECTION PREVENTION AND CONTROL

#### *Activity 2.3.1: Develop a system for monitoring and evaluation of IPC program in health facilities*

MTaPS held a one-day consultative stakeholder meeting to discuss and agree on the infection prevention and control (IPC) indicators that are to be added to the district health information system to capture IPC interventions at the health facility level. There were 18 representatives from different organizations, including WHO, Medipeace, and FHI360, and the IPC TWG. The Ministry of Health, Community Development, Gender, Elderly, and Children (MOHCDGEC) monitoring and evaluation unit and DHIS2 team from the University of Dar es Salaam were involved to ensure that the indicators are sound and align with the MOHCDGEC health management information system.

This intervention will support Tanzania in the pathway toward progress from JEE capacity level 4 to 5 in the mainland by implementing the following level 4 recommended action: Mandate and support IPC improvement at all health care facilities.

#### *Activity 2.5.1: Continue to promote a self-improvement culture through local teams that use continuous quality improvement (CQI) methodologies for IPC*

MTaPS supported the MOHCDGEC to conduct a two-day training for 17 health care workers from 10 supported health facilities on the standard-based monitoring and recognition (SBMR) model of improvement for IPC. The aim of the training was to equip participants with knowledge about the SBMR approach to improvement when implementing IPC activities, including how to use standards to do self-assessment in IPC interventions and self-improvement. MTaPS had earlier supported the MOHCDGEC in the development of IPC standards for hospitals, health centers, and dispensaries. Facilities are expected to use these standards, assess themselves on a quarterly basis, and report the results to the MOHCDGEC.

MTaPS conducted a national IPC assessment using the WHO National Infection Prevention and Control Assessment tool 2 (IPCAT2). This was a one-day meeting with IPC stakeholders in the country,

including FHI 360, Medipeace, WHO, and IPC TWG members. The IPCAT2 assesses the national IPC program in six core components. The country scored more than 60% in four of the six components (figure 11).


Figure 11: The National IPC Assessment Results for Tanzania, December 2020

The team also used the WHO Benchmarks for International Health Regulations capacities tool to assess the IPC component under the AMR technical capacities. The team agreed that the national IPC program is at **level 4 (demonstrated capacity),** as most of the activities that are mentioned in this level have already been done or are in progress (table 5).

Table 5: WHO Benchmarks for International Health Regulations Capacities for IPC Level 4 Progress for Tanzania

| SN | LEVEL 4 ACTIVITIES | STATUS |
|---|---|---|
| 1 | Use the IPCAT2 to identify precise areas still requiring action and update the plan of action | Yes |
| 2 | Mandate and support IPC improvement at all health care facilities, recommending the use of the infection prevention and control assessment framework (IPCAF); the water, sanitation, and hygiene fit tool; and antibiotic stewardship (AMS) programs | Yes, there is more emphasis in facilities to meet national standards that reflect the WHO tools. Standards for all levels of facilities have been developed and are in use. |
| 3 | Update and implement action plans, informed by assessment results and following the five-step cycle described in the practical manuals, that progressively cover all recommended IPC priority core components at the national and facility levels | Yes – in progress |
| 4 | Include specific interventions for AMR prevention tailored to the local epidemiological situation in these plans | Yes – in progress |
| 5 | Share the plans with national, subnational, and local IPC committees and incorporate guidance from them | Yes – in progress |

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

***Activity 3.5.1: Support active implementation of AMS practices in the six supported facilities and help initiate similar activities in four new facilities***

MTaPS supported the review and approval of the Medicines and Therapeutics Committee (MTC) guidelines on the formation and implementation of MTC activities at the national and health facility levels.

MTaPS also supported the national MTC to approve the access, watch, and reserve (AWaRe) list of antibiotics to promote rational use of antimicrobials.

This activity will help the MOHCDGEC monitor AMS practices that promote appropriate antimicrobial use in health facilities, thus contributing to progress toward JEE capacity level 3.

**ACTIVITIES FOR NEXT QUARTER**

| ACTIVITY AND DESCRIPTION | DATE |
|---|---|
| Activity 2.3.1: Develop a system for monitoring and evaluation of IPC program in health facilities | January–March 2021 |
| Activity 2.5.1: Continue to promote a self-improvement culture through local teams that use continuous quality improvement (CQI) methodologies for IPC | February 2021 |
| Activity 3.5.1: Support active implementation of AMS practices in the six supported facilities and help initiate similar activities in four new facilities | February 2021 |

# UGANDA

For progress on MTaPS/Uganda's COVID-19 activities, click here.

### RESULT AREA 1: EFFECTIVE MULTISECTORAL COORDINATION ON AMR

#### *Activity 1.2.1: Strengthen national and sub-national human resource capacity through support to the IPC and AMS TWGs of the National AMR Sub-Committee (NAMRsC)*

MTaPS is finalizing the sub-contract with Makerere University for the implementation of the activity to provide logistical support to Makerere University and the Antimicrobial Stewardship (AMS) Technical Working Group (TWG) to write a quarterly AMS newsletter highlighting AMS activity implemented at the national and sub-national levels and share the newsletter on the documentation platform. Engagements with the AMS TWGs will commence once the sub-contract is finalized.

MTaPS intends to advance gender equity considerations in leadership and participation of antimicrobial resistance (AMR) national action plan governance and to inspire students to get involved in Global Health Security Agenda (GHSA) activities. In-depth interviews with two key female members of the NAMRsC have been planned. These members have been identified and have an extensive profile, experience, and portfolio in AMR containment activities in Uganda and East Africa. The transcribed interview will be disseminated with the aim of highlighting, discussing, and sharing visibility of women leaders and role models in their work with the NAMRsC and its TWGs and the fight against AMR at large.

### RESULT AREA 2: INFECTION PREVENTION AND CONTROL

#### *Activity 2.1.2: Strengthen human resource capacity of health facilities and professional bodies*

At the national level, MTaPS plans to work with professional councils and associations to create AMR awareness among members through targeted AMR (infection prevention and control [IPC] and AMS) continuous medical education (CME) sessions linked to continuous professional development credits. Planned inception activities for working with professional bodies and councils are being implemented. During this quarter, MTaPS identified the Uganda Medical and Dental Practitioners Council, the Pharmaceutical Society of Uganda, the Allied Health Professionals Council, and Uganda Nurses and Midwives Council and has reached out to the Pharmaceutical Society of Uganda. After an initial inception meeting, further meetings have been arranged as the professional bodies/councils begin to draft their work plans and identify time for working together. The activities will involve CME and lectures aimed at increasing AMR awareness among health workers in Uganda with resultant improvements in prescription practices, medicine use, IPC practices, patient safety, and quality of health care.

At the sub-national level, MTaPS plans to conduct AMR awareness activities in university medical schools. Five medical schools in Gulu, Mbarara, Busitema, Makerere, and Kampala International (Bushenyi) universities were identified for activity implementation. The MTaPS team visited these institutions, identified student leaders, and introduced them to the activity. CME and lectures will be planned once MTaPS secures approvals for logistical support. The CME and lectures will target medical students (medicine, pharmacy, and nursing) and will include topics that introduce AMR, drivers of AMR, and containment methods. The planned AMR awareness activities will cover the four geographical of Uganda: Gulu University (northern region), Busitema University (eastern region), Makerere University (central region), and Kampala International University and Mbarara University of Science and Technology (western region).

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

#### *Activity 3.2.1: Strengthen the Centers of Excellence for AMS*

MTaPS plans to strengthen AMS at national and sub-national (centers of excellence [CoEs]) levels.

At the national level, MTaPS provided support to World Antimicrobial Awareness Week (WAAW) activities. During World Antimicrobial Awareness Week 2020 (November 18–24), MTaPS, in collaboration with Makerere University School of Health Sciences, organized and participated in a week-long lecture series and seminars to increase awareness of AMR and highlight some of the interventions being implemented for human and animal health in Uganda. The lecture series reached a diverse audience over the five days, convening representatives from the Ministries of Health and Agriculture, academia, health workers and district veterinary officers, and members of the public.

With an average of 30 new participants each day, the lecture series was able to reach approximately 150 people over the five days, with day one of presentations on MTaPS and the GHSA reaching 80 participants. As a result of the lecture series, more people know about AMR, including interventions in Uganda and current progress on the National Action Plan for Uganda, which will enable future and continued dialogue about AMR.

At the sub-national level, MTaPS plans to provide support for the CoEs to set up AMS teams and conduct supportive supervision and mentorship visits for lower-level health facilities. This year, MTaPS/Uganda gained an additional 10 health facility sites of implementation, all of which are private-not-for-profit facilities, that will be supported by directly providing technical assistance to become CoEs for IPC and AMS. During this quarter, the team conducted baseline Antimicrobial Use/Consumption (AMU/C) surveys to inform interventions for improving the use of antibiotics in health facilities. The World Health Organization (WHO) global point prevalence survey (PPS) methodology was used, as was the modified WHO methodology for measuring defined daily dose for antibiotics consumed over a calendar year. Data were collected from five health facilities, and results will be shared during the health facility trainings scheduled for FY3 Q2.

| ACTIVITIES FOR NEXT QUARTER | |
|---|---|
| ACTIVITY AND DESCRIPTION | DATES |
| Assemble the editorial team, collect data, write, and disseminate a quarterly AMS newsletter | March 2021 |
| Upload all results of the AMS survey to the platform and encourage the supported health facilities to use the platform to access the results | March 2021 |
| Conduct interviews and transcribe a story about at least one female AMS champion in Uganda | March 2021 |
| Organize AMR awareness activities with professional bodies, councils, and medical schools; implement the activities; and write a technical brief | March 2021 |
| Conduct off-site AMS/IPC trainings for supported health facilities | March 2021 |
| Provide the CoEs with feedback on findings of the global PPS conducted during the previous and current quarters | March 2021 |
| Conduct an assessment/review of the current national policies and regulations for AMS | March 2021 |
| Provide direct technical assistance to the National Drug Authority to measure and report on antimicrobial consumption at the national level | March 2021 |

# MONITORING, EVALUATION, AND LEARNING

## MONITORING AND EVALUATION

### *Baseline Report*

MTaPS completed revisions of the baseline report after addressing the final round of comments from the contracting officer representative's (COR) team, including a global baseline report and 16 individual country baseline reports. The reports present key findings from the baseline assessment conducted in 16 countries (Bangladesh, Burkina Faso, Cameroon, Côte d'Ivoire, Democratic Republic of Congo [DRC], Ethiopia, Jordan, Kenya, Mali, Mozambique, Nepal, the Philippines, Rwanda, Senegal, Tanzania, and Uganda) receiving MTaPS technical assistance. The dissemination of global and country reports is underway.

### *Global MEL Plan and MTaPS Indicators Review*

During Q4 of project year 2 and Q1 of project year 3, MTaPS finalized its revision of the global monitoring, evaluation, and learning (MEL) plan. The revision included changing the naming system for indicators, updating the MTaPS MEL plan goal statement, and redefining and excluding specific indicators.

### *Support for Country MEL Plans and Work Plans*

In previous quarters, the MTaPS MEL headquarters (HQ) team developed a template for country MEL plans. The template with stock language has been instrumental in standardizing MEL plans across MTaPS countries and guiding country teams in developing comprehensive country MEL plans. Throughout Q1 of project year 3, MTaPS HQ and regional MEL teams continued to support country teams to develop, review, and finalize MEL plans using the standard template. MTaPS supported Bangladesh, Ethiopia, Kenya, Mozambique, Nepal, Tanzania, and Uganda country teams to finalize their MEL plans. Continued guidance is being provided to Burkina Faso, Cameroon, Mali, and Senegal to draft their plans. Other country MEL plans are also being revised or updated based on HQ MEL team feedback.

### *Data Management and System Review*

During the end of Q4 and throughout Q1 of project year 3, MTaPS reviewed the MTaPS Data Management and Analytics Platform (MDMAP) to address MDMAP gaps. MTaPS conducted data quality and reporting dialogue with country teams, including discussions with technical teams assessing MDMAP. MTaPS also conducted an internal after-action review to evaluate previous data management and system activities and identify successes, challenges, and gaps. An MDMAP document was developed, providing country teams answers to non-system level concerns and challenges that emerged from the dialogue with country teams relating to SurveyCTO and data quality and reporting. MTaPS created an MDMAP tracker to layout short- and long-term plans to tackle identified pre-existing and frequent challenges. MTaPS is developing a customized data entry and reporting sheet to be used by country teams in the short term to optimize data collection and management.

## KNOWLEDGE MANAGEMENT

### *Peer-Reviewed Publications Guidance*

To facilitate the process for developing and publishing articles in peer-reviewed publications, the MTaPS created a guidance document to support all MTaPS staff seeking to publish articles. The peer-reviewed publications guidance provides a summary of the writing process, including creating a concept note, developing an outline, and writing and submitting a manuscript to the applicable peer-reviewed journal. The guideline goes in-depth, helping the user to assess and identify the type of article to write and

highlighting key components to consider for choosing a journal and submitting an article along with several helpful peer-reviewed publication resources. During Q1, MTaPS MEL further reviewed and incorporated feedback from SMT into the guidance document. After the guidance was finalized and received final approval, it was translated into French. The peer-reviewed publications guide has been rolled out to all MTaPS staff to use.

***Standard Requirements for MTaPS Deliverables***

The Standard Requirements for Deliverables is a key MTaPS document that provides information on minimum standards requirements for all MTaPS products submitted to USAID or shared externally. These products include SOPs, technical highlights and briefs, case studies, training materials, and websites. The standard requirements document also guides MTaPS staff through the standard process for developing products. In Q1 of project year 3, the MTaPS HQ team continued to draft the standard requirements document. SMT feedback was incorporated into the document and it was finalized. The MTaPS HQ team rolled out the standard requirements to all MTaPS staff in Q1.

***Collaborating, Learning, and Adaptation (CLA) Summary Guide***

The CLA guide focuses on a set of practices, specifically, the systematic integration of the USAID CLA framework into MTaPS country programs. The guide is divided into sections that describe and summarize each CLA component, provides examples of what each element means in practice for MTaPS, and tools and resources related to all CLA areas. The goal of applying CLA practices is to continue strengthening and creating an effective learning program. In Q1, the MTaPS HQ team translated the guide into French and developed a presentation that provides country teams with an overview of the USAID CLA framework, why CLA matters, and specific actions MTaPS staff can pursue to integrate CLA into country program activities. The CLA guide is under review by the SMT; after approval by the SMT, the MTaPS HQ team will disseminate the guide to all MTaPS staff in Q2 and orient country teams on how to use it.

***Pause and Reflect***

An essential part of using the USAID CLA framework is integrating processes, such as pause and reflect, to enable continuous reflection, learning, and adapting during program activities. All MTaPS staff devoting time to pause and reflect on program activities is critical to learning and improving performance. The MTaPS knowledge management (KM) and learning team developed presentation and reference materials for all MTaPS teams to facilitate pause and reflect sessions. These sessions help identify what's working well, what needs adapting, and how change can impact the environment or context in which we operate. During Q1, all country teams, except Mali, were oriented on pause and reflect. The sessions focus on the why, what, how, and when to pause and reflect. Pause and reflect resources, along with adaptive management tools, have been added to the CLA guide.

***Support for Country MEL Plans and Work Plans***

The HQ MEL team developed a section in the MEL plan to systematically and comprehensively document KM and learning activities in country MEL plans during project year 2. The template is divided into two components: the MTaPS learning plan and the KM plan. The first component is focused on strategically guiding and operationalizing learning. The second component outlines various ways country teams can document knowledge and lessons learned by assessing, capturing, synthesizing, and sharing program experiences. During the last quarter, the MTaPS MEL team provided continuous technical support to country teams to develop and finalize country-specific year 3 MEL plans and overall country work plans using the standard MEL template.

### *Orienting Country Teams on Work Plan KM Activities*

In Q4 of project year 2, a survey was conducted to evaluate country teams' knowledge and application of KM guidance documents and processes, respectively. The survey results were used to identify areas where country teams needed to be reoriented on KM processes and materials. During Q1 of project year 3, country teams were oriented on how to implement work plan KM activities, specifically on how to conduct action reviews, plan and hold pause and reflect meetings, capture and apply lessons learned, and use technical documentation.

### *Knowledge Exchange*

"National Health Insurance Fund's Engagement of Retail Drug Outlets: A Tanzania Case": On November 20, 2020, a presentation was made on MTaPS' experience in learning about the contributing factors and barriers to expanding coverage of medicines in Tanzania's National Health Insurance Fund.

"Effective Governance Structures to Combat Antimicrobial Resistance (AMR) in Côte d'Ivoire": On December 8, 2020, a presentation was made on the MTaPS/Côte d'Ivoire experience on effective governance structures to mobilize and support multisectoral coordination from the national to the health facility-level for infection prevention control (IPC) and antimicrobial stewardship (AMS).

### *Global Learning Activities*

In Q1, MTaPS advanced the global learning agenda by:

- Presenting at the virtual Global Health Supply Chain Summit on November 17-19, 2020, on "The MTaPS Experience: Reconfiguration of the supply chain to balance equity and emergency response in the Philippines during the COVID-19 pandemic."
- Presenting on "Effective Multisectoral Coordination on Antimicrobial Resistance (AMR): A Landscape of Experiences and Lessons from 11 Countries" during the 2020 Global Health Security Agenda Ministerial Meeting titled "Moving Toward Best Practices in Multisectoral Coordination: Integrating Environment and Health to Strengthen Capacities to Prevent, Detect and Respond" on November 4, 2020.
- Developing a "Microlearning Course on Maternal, Newborn, and Child Health and Pharmaceutical Systems Strengthening" to raise awareness and promote understanding of why strengthening the pharmaceutical system is important for improving MNCH outcomes in low- and middle-income countries (LMICs). The course is geared toward MNCH program managers from MOHs, implementing partners supporting MNCH programs, non-state actors, including civil society, and donors, particularly USAID staff involved in MNCH programming.
- Launching "A Roadmap for Systematic Priority Setting and Health Technology Assessment (HTA)," which serves as a practical guide for policy action in LMICs to successfully implement HTA and pave the road to sustainable universal health care and self-reliance. Developed by MSH and the MTaPS Program, with contributions from global experts, this roadmap will help countries institutionalize their mechanisms, processes, and institutions to use evidence and data to better inform their resource allocation decisions.
- Launching the "Pharmaceutical System Strengthening (PSS) 101 e-Learning Course" on LeaderNet. Strengthening the entire pharmaceutical system means taking a holistic approach to addressing its gaps. It means going beyond how medical products are selected, procured, and distributed to include bolstering the knowledge of the people who provide them. MTaPS supports USAID's vision to help countries deliver affordable, quality-assured medicines and related products and services and, to that end, presents a series of e-learning courses. The PSS 101 e-learning course modules focus on the governance and regulatory policies that support this goal.
- Developing for and disseminating during World Antimicrobial Awareness Week (WAAW) 2020, a technical brief on "Advancing the Global Health Security Agenda" by controlling the global threat of AMR, which relies on robust pharmaceutical systems worldwide that promote access to and

appropriate use of medical products, including antimicrobial medicines, which is the core mission of MTaPS.

- Publishing a peer-reviewed article on "National Consumption of Antimicrobials in Tanzania: 2017-2019" in Pharmaceutical Medicine and Outcomes Research, a section of the journal *Frontiers in Pharmacology*, October 30, 2020. The objective of this MTaPS-led study was to measure antimicrobial consumption in Tanzania, given the paucity of antimicrobial consumption data in the sub-Saharan Africa region and the increasing use of antimicrobials by the private sector that requires careful monitoring in accordance with national policies.
- Publishing a peer-reviewed article on "Antimicrobial Use Across Six Referral Hospitals in Tanzania: A Point Prevalence Survey" in BMJ Open, December 15, 2020. The objective of this MTaPS-led study was to delineate the prevalence and factors associated with antimicrobial use across six referral hospitals in Tanzania using WHO point prevalence survey methodology to inform hospital-specific AMS programs.

Please refer to the Cross Bureau section for more information on global learning activities.

***Lessons Learned from Technical Implementation***

This quarter, MTaPS documented lessons learned from 11 countries, summarized below.

In **Tanzania,** we learned that there should be stronger consideration on how the country can create explicit pharmaceutical benefit packages for drugs, especially if the country has more advanced coverage arrangements, such as a national health insurance scheme. Our work established new evidence about the importance of national health insurance coverage of products from retail drug outlets, which is crucial for informing the development of pharmaceutical benefits for insurance schemes. We learned about contributing factors, barriers, and facilitators for expanding coverage of medicines in Tanzania's National Health Insurance Fund to incorporate retail drug outlets into national prepayment schemes. In Q1, MTaPS published a peer-reviewed article on this study (see KM section of this report for more information).

In **Bangladesh,** health facilities were struggling to provide adequate health care to both COVID-19 and non-COVID patients because of limited human resources and logistical support, making it difficult for staff to conduct regular monitoring and supervision because of a heavy workload. IPC was not a standard practice, creating a high-risk of COVID-19 infection for health care providers and support staff in health facilities. Active and continuous technical support by MTaPS through sharing of IPC assessment findings; close collaboration with the Communicable Disease Control (CDC) of the DGHS; revitalization of IPC committees; MTaPS-led staff capacity-building activities and supervision on IPC in health facilities; development of TOR for the IPC committee and IPC team that have been formed; development of an IPC action plan with clearly defined activities; and the appointment of a focal person assigned to oversee IPC procedures facilitated regular monitoring and supervision will help improve IPC standards at health facilities.

In **Mozambique,** we learned that sometimes the NDRA (National Directorate of Pharmacy [DNF]/ Autoridade Nacional Reguladora de Medicamentos de Moçambique [ANARME]) considered MTaPS as a financial support partner, rather than an implementing partner providing technical assistance and capacity-building support. There were several requests to MTaPS from departments of the NDRA requesting financial support for supply of equipment or payment of workshop costs. Some activities proposed to be undertaken by MTaPS related to technical assistance were accepted by the departments of the NDRA but not prioritized because of two challenges faced by NDRA departments: lack of financial resources and delay in receiving funds from the approved government budget for activities. MTaPS needed to regularly communicate with the NDRA to show the value of MTaPS as a technical assistance partner in achieving the country's objectives. Strong negotiation skills and considerable follow-up efforts were needed on the part of the MTaPS country team to align priorities with NDRA

departments and complete planned activities. MTaPS is engaging with DNF to create a TWG to promote coordination and collaboration in regulatory systems strengthening between the NDRA, donors, MTaPS, and other implementing partners to maximize opportunities for knowledge sharing and exchange of updated regulatory trends, providing space for NDRA to understand and know how to use the value and power of MTaPS' knowledge and experience in technical assistance so that NDRA benefits.

In **Senegal**, holding a joint lessons-learned exercise with the infection control committees (ICCs) of the three pilot hospitals offered important insights for improving IPC practices and revitalizing the ICCs. MTaPS supported the MOH in convening a joint lessons-learned meeting. In preparation of the meeting, MTaPS customized its lessons learned practical application approach (LLPA) to focus on the eight components of the WHO IPCAF tool before sharing it with all three ICCs and the MOH. Each ICC filled out the LLPA matrix. The joint lessons-learned meeting between the three ICCs generated ideas and practical solutions, produced a set of agreed best practices to be rolled out nationwide to revitalize non-functioning ICCs, and provided recommendations to the central-level MOH for further strengthening the national IPC program. The recommended actions include using the results from the meeting i.e., agreed best practices and recommendations to provide ICCs with doable actions and solutions to improve their performance.

**ACTIVITIES FOR NEXT QUARTER**

| ACTIVITY AND DESCRIPTION | DATE (2021) |
|---|---|
| Conduct a data quality audit of COVID-19 data | February-March |
| Finalize Excel-based temporary data reporting system | February |
| Explore options for a permanent data management system | February-March |
| MTaPS PSS in action: Knowledge exchange (monthly) | January-March |
| MTaPS global learning series for USAID (quarterly) | March |
| MTaPS mid-program review meeting | March |

# ANNEX 1: MTAPS SUCCESS STORIES

# SUCCESS STORY

**Inappropriate management and use of medicines and pharmaceutical products are challenges that health facilities in Mali face regularly. To help solve this issue, MTaPS is supporting the implementation of therapeutics committees, a proven way to reduce inappropriate practices and promote sound management of medicines.**

## THE FIRST THERAPEUTICS COMMITTEES IMPLEMENTED IN MALI

*Training of members of the therapeutics committee of Ségou. Photo credit: Dr. Ousmane Traoré, Senior Technical Advisor/MTaPS*

Inappropriate management and use of medicines and pharmaceutical products are challenges that health facilities in Mali face regularly. Misuse and weak health systems can compromise the safety of medicines, promote wasting resources, and lead to the rise of antimicrobial resistance (AMR). WHO's Joint External Evaluation (JEE) of the International Health Regulations, conducted in June 2017, revealed Mali's limited capacity for antimicrobial stewardship (AMS), with a score of 1 out of 5.

As indicated by Dr. Sirantou Tata Dena, doctor and focal point for AMR at the *Centre de Santé de Référence* in Koutiala, "I was a focal point for AMS in my previous unit and I had a lot of difficulties to make my colleagues understand the importance of AMR."

Therapeutics committees are a proven way to reduce inappropriate practices and to promote sound management of medicines among health care professionals. A therapeutics committee provides a forum for improving health care delivery by reviewing good prescribing and dispensing practices and implementing improvement strategies for medicine use in health facilities. The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) program is supporting Mali's Ministry of Health in implementing the country's first-ever therapeutics committees. These committees have been implemented in five hospitals as sentinel sites to provide an assessment before extending them to other health

***About MTaPS***

*The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018-2023) enables low- and middle-income countries to strengthen their pharmaceutical systems, which is pivotal to better health outcomes and higher-performing health systems. The program is implemented by a consortium of global and local partners, led by Management Sciences for Health (MSH), a global health nonprofit.*

www.mtapsprogram.org

Contact: Dr. Safoura Berthé, MTaPS Mali Country Project Director, sberthe@mtapsprogram.org

facilities During the trainings provided at the end of October 2020, facilitators focused on the AWaRe (access, watch, reserve) classification and functioning of the committees. The *Direction de la Pharmacie et du Médicaments* and MTaPS provided technical support for the start of these activities: MTaPS has supported the country since June 2020 to develop terms of reference for committees and training modules for its members. During this first phase, 56 practitioners, including 12 women, were trained.

The implementation of the committees will help Mali improve its score during the next JEE. Next steps before a full extension include support for better functioning of the committees that will be achieved through supervisory activities and additional trainings, including the use of an e-learning platform. Next steps also include extending the implementation of committees to 11 other health facilities in Mali.

Dr. Tata Dena indicated that "the training was very interesting and was a change from trainings received before. The method of the assessment of core indicators helps identify the full scope of activities to be addressed by the group managing antimicrobials [a unit within the therapeutics committees] by noting weaknesses, such as a lack of respect of protocols and prescribing practices."

**MTaPS has supported the country since June 2020 to develop terms of reference for committees and training modules for its members. During this first phase, 56 practitioners, including 12 women, were trained.**

**"The training was very interesting and was a change from trainings received before. The method of the assessment of core indicators helps identify the full scope of activities to be addressed by the group managing antimicrobials [a unit within the therapeutics committees] by noting weaknesses, such as a lack of respect of protocols and prescribing practices."**

**— Dr. Sirantou Tata Dena, doctor and focal point for AMR at the *Centre de Santé de Référence* in Koutiala**

USAID FROM THE AMERICAN PEOPLE

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

## SUCCESS STORY

## STRENGTHENING HOSPITAL INFECTION CONTROL PROGRAMS IN SENEGAL

**Up to 90% of infection control committees at hospitals in Senegal were found to be functioning inefficiently. An improvement plan demonstrated successful revitalization and opened doors to stronger infection control across the country's hospitals.**

*The director of the DQSHH of the MOH visiting the Tivaouane hospital and talking to ICC members. Photo credit: Dr. Mame Mbaye, MTaPS*

In Senegal, the first national survey of health care-associated infections, conducted in 2007 by the Directorate General for Health of the Ministry of Health (MOH), showed that the volume of antimicrobial prescriptions, combined with low levels of hygiene observed during care at facilities, is the main cause of the emergence of antimicrobial resistance (AMR).

Infection control committees (ICCs) play a critical role in overseeing and implementing infection prevention and control (IPC)-related activities in hospitals, which is pivotal to containing AMR. The MOH implemented ICCs in all health care facilities in Senegal in 2004, under the direction of its National Program to Combat Nosocomial Infections (PRONALIN). However, in April 2017, PRONALIN determined during supervision visits that up to 90% of the ICCs are not functioning efficiently.

To reverse this trend, the Directorate for Quality, Security, and Hospital Hygiene (DQSHH) tasked the USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program to revitalize pilot hospitals' ICCs

***About MTaPS***

*The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018-2023) enables low- and middle-income countries to strengthen their pharmaceutical systems, which is pivotal to better health outcomes and higher-performing health systems. The program is implemented by a consortium of global and local partners, led by Management Sciences for Health (MSH), a global health nonprofit.*

www.mtapsprogram.org

Contact: Dr. Ousmane Faye, MTaPS Senegal Country Project Director, ofaye@mtapsprogram.org

by helping them implement effective action plans. In Senegal, MTaPS is addressing the challenges of AMR by strengthening health systems and practices for IPC and optimal use of antimicrobial medicines.

## REVITALIZING TIVAOUANE'S ICC

MTaPS started working with the DQSHH in August 2019 to conduct a baseline situation analysis of the hospital of Tivaouane, a city 100 km east of Dakar. The assessment, using the World Health Organization's IPC Assessment Framework (IPCAF) for health facilities, showed a score of 13% (100 out of 800), demonstrating poor IPC capacity at the facility. Several challenges were observed, including a lack of equipment for collecting and packaging biomedical waste, limited IPC capacity of health care workers, and no capacity for surveillance and detection of health care-associated infections.

Following this exercise, Tivaouane hospital's ICC developed an improvement plan and committed to fully implementing it with support from the DQSHH and MTaPS.

The ICC started reforming its functioning by putting in place regular meetings between the committee and the hospital's leadership and by submitting quarterly reports to the MOH. MTaPS conducted tailored IPC trainings; including a training of trainers; a training for medical doctors, nurses, and midwives; and a training for the hospital's support staff. The trainings focused on IPC components such as hand hygiene and waste management and used a continuous improvement approach to self-monitor activity implementation. MTaPS also monitored progress remotely and through field visits to track both achievements and challenges.

After six months, the hospital's ICC conducted a self-assessment using the IPCAF and obtained an improved score of 38% (300 out of 800), raising the hospital's IPC capacity from inadequate to basic. After a year, the ICC overcame additional challenges, including successfully implementing proper biomedical waste management. These efforts further helped the hospital drive up its IPC capacity to an intermediate level with a score of 68% (500 out of 800).

**Tivaouane hospital's Infection Prevention and Control Assessment Framework score increased from 13% to 68%, demonstrating an improvement in patient safety.**

## TOWARD SAFE HEALTH CARE AND REDUCED AMR SPREAD AT HOSPITALS

With assistance from the DQSHH and MTaPS, the Tivaouane hospital's ICC demonstrated a continued improvement trend of its IPC capacity level, achieving a 55% increase from its initial baseline score. These interventions will help the hospitals successfully contain the spread of AMR and provide quality health care to patients in a safe environment. Following this first success, MTaPS is working with the DQSHH to document lessons learned and facilitate knowledge sharing so that these results and experiences can inform and scale up the program of revitalizing ICCs.

**"After a year of implementing the IPC action plan […] in Tivaouane, we have noticed a remarkable improvement in the management of biomedical waste, thanks to the support of MTaPS and the DQSHH in the training of hospital staff, especially the training that was carried out in the national language to enable frontline workers to master the biomedical waste component."**

**— Dr. Ablaye Sakho, President of the medical commission of the Tivaouane hospital**

USAID
FROM THE AMERICAN PEOPLE

# SUCCESS STORY

**The treatment outcomes for maternal, newborn, and child diseases in the DRC are endangered by a weak capacity of health workers in properly administering medicines. Equipping health workers with treatment protocols and job aids is helping health facilities avoid treatment errors and deaths.**

***About USAID MTaPS***

*The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018-2023) enables low- and middle-income countries to strengthen their pharmaceutical systems, which is pivotal to better health outcomes and higher-performing health systems. The program is implemented by a consortium of global and local partners, led by Management Sciences for Health (MSH), a global health nonprofit.*

www.mtapsprogram.org

Contact: Dr. Robert Tuala Tuala, MTaPS Democratic Republic of Congo Country Project Director, rtuala@mtapsprogram.org

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

# EQUIPPING HEALTH WORKERS WITH TREATMENT PROTOCOLS AND JOB AIDS TO REDUCE MATERNAL AND CHILD MORTALITY IN DRC

*Reception of MNCH protocols and job aids in Ituri. Photo credit: Dr. Jérémie Fikiri/USAID MTaPS*

A significant proportion of maternal and child deaths can be avoided if women and children have access to quality, adequate health services, and if the necessary quality medical products, supplies, and skilled health providers are available. In the Democratic Republic of the Congo (DRC), which has one of the highest maternal, newborn, and child mortality rates globally, the national under-five mortality rate is 84.8/1,000 live births (UNICEF, 2019) and the maternal mortality rate is 473/100,000 live births (UNICEF, 2017). The situation is exacerbated by war and lingering conflict in East DRC, where maternal mortality is estimated to be double the average for sub-Saharan Africa. The lack of guidelines at local levels and weak implementation of treatment protocols negatively affect access to and appropriate use of essential maternal, neonatal, and child health (MNCH) commodities.

Most maternal and child deaths are caused by preventable diseases, including post-partum hemorrhage and eclampsia in women, and newborn sepsis, pneumonia, malaria, diarrhea, measles, and other acute infections in under-fives, worsened by malnutrition. The findings of an MTaPS consultation with health care providers in Ituri and Nord Kivu indicated that poor management of health conditions in women and children was due

to health workers' capacity gaps and the lack of protocols and job aids to guide patient management.

MTaPS supports review of policies and systems in the DRC to create favorable conditions for increased access to and appropriate use of MNCH medical products and services. To bridge the identified gaps, the program, in collaboration with the MNCH Directorate (D10) at the central level and reproductive health programs at the provincial level, disseminated 16 MNCH protocols and job aids in 170 health facilities in Nord Kivu and Ituri. The treatment protocols and job aids included guidelines for oxytocin, magnesium sulphate, and other essential medicines. The materials were also distributed for community MNCH interventions through orientation sessions.

**MTaPS, in collaboration with the MNCH Directorate at the central level and reproductive health programs at the provincial level, equipped health workers at 170 health facilities in Nord Kivu and Ituri with job aids and treatment guidelines for essential MNCH medicines.**

MNCH treatment guidelines and job aids help reduce errors and enhance the quality of patient care in North Kivu and Ituri, which is saving mothers' and children's lives and reducing the national maternal and child mortality rates in DRC.

These efforts in the DRC are advancing MTaPS' programmatic goal to help low- and middle-income countries strengthen their pharmaceutical systems, which is critical to sustainably improve health system performance. The work is also moving the needle on USAID's goal of preventing child and maternal deaths.

**"We are very happy about MTaPS' support. We had lost many patients in the past due to a lack of knowledge and protocols/job aids to assist and guide the management of patients, especially the administration of medicines such as magnesium sulfate. For example, two pre-eclamptic women died due to the fact that health providers didn't know how to use magnesium sulfate whereas this product was available. But today, with the support from MTaPS, we can no longer make such mistakes and errors as we have all the needed guiding protocols and job aids."**

**— Dr. Patrick Basara, Head of Rwampara Health Zone in Ituri**

# SUCCESS STORY

**Inadequate infection prevention and control practices (IPC) pose a significant challenge to health facilities in Ethiopia. A package of interventions introduced by USAID MTaPS at facilities raised the IPC capacity levels and demonstrated a clear path to strengthening IPC programs across Ethiopia's hospitals.**

## MTAPS INTERVENTIONS RAISE INFECTION AND PREVENTION CONTROL LEVELS IN ETHIOPIAN HOSPITALS


*An IPC training in session, held before the COVID-19 pandemic*

Poor infection prevention and control (IPC) practices are a major challenge in Ethiopian hospitals – they compromise quality of patient care and promote antimicrobial resistance. Factors contributing to this include the lack of an IPC program with clear objectives, up-to-date IPC guidance, and a strategy that addresses behavior change to bring a sustainable cultural change on the front of IPC.

The USAID MTaPS program worked with the Federal Ministry of Health to improve IPC practices in Ethiopia's hospitals. From October to December 2019, MTaPS supported 21 hospitals to conduct baseline assessments using the Infection Prevention and Control Assessment Framework (IPCAF), a tool that supports implementation of World Health Organization (WHO) guidelines on core components of IPC programs at the healthcare facility level. The assessments showed that 9 of 21 hospitals (43%) scored at basic level, while 11 of 21 (52%) were graded as intermediate and 1 (5%) was graded as inadequate.

Following the assessment, MTaPS provided IPC training to the hospitals, assisted 15 of them in developing an IPC facility improvement action plan, and supported implementation of their action plans.

***About USAID MTaPS***

*The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018-2023) enables low- and middle-income countries to strengthen their pharmaceutical systems, which is pivotal to better health outcomes and higher-performing health systems. The program is implemented by a consortium of global and local partners, led by Management Sciences for Health (MSH), a global health nonprofit.*

www.mtapsprogram.org

Contact: Dinah Tjipura, Portfolio Manager
dtjipura@mtapsprogram.org

In August 2020, MTaPS selected four hospitals from the initial group of 21 to conduct self-assessments using the IPCAF tool to evaluate their implementation of IPC action plans. The findings shed light on the improvements made at the hospitals through MTaPS' interventions when compared with the baseline data from 2019 (see Table 1).

Table 1. Results of IPC implementation assessment before and after MTaPS' support

| Name of hospital | Before | | After | |
|---|---|---|---|---|
| | IPCAF score at baseline assessment (out of 800)* | Classification of IPC practice | IPCAF score after technical support from MTaPS (out of 800)* | Classification of IPC practice |
| AaBET hospital | 183.5 | Inadequate | 382.5 | Basic |
| Hawassa University hospital | 452.5 | Intermediate | 565 | Intermediate |
| Felege Hiwot Hospital | 385 | Basic | 527.5 | Intermediate |
| Debre-Berhan specialized hospital | 410 | Intermediate | 500 | Intermediate |

** Score 0-200: Inadequate; 201-400: Basic; 401-600: Intermediate; 601-800: Advanced (**WHO's** Infection Prevention and Control Assessment Framework (IPCAF), https://www.who.int/infection-prevention/tools/core-components/en/)*

All four hospitals showed improvement in their IPCAF score. One hospital progressed from inadequate to the higher end of the score for basic level, while the second progressed from basic IPC level to intermediate. The other two hospitals maintained their IPC level but improved their IPC score by 20–25%.

The increase in scores reflected major improvements at the hospitals, including:

- Introduction of IPC programs with clearly defined objectives and action plans
- Establishment of multidisciplinary IPC committees

**Post-intervention assessment of MTaPS-supported hospitals indicated that all improved their IPCAF scores. Scores progressed from inadequate to the higher basic level, basic IPC level to intermediate, while some improved by 20–25%.**

- Designation of dedicated and full-time IPC focal persons to lead IPC activities
- Use of updated IPC guidelines on hand hygiene, standard precautions, transmission-based precautions, disinfection and sterilization, and prevention of surgical site infection

Ethiopia's Joint External Evaluation (JEE) of core capacities, conducted in 2016, indicated limited capacity for IPC (score of 2). The progress shown by the four hospitals will contribute to raising the country's JEE score on IPC to developed capacity (score 3).

The demonstrated efficacy of MTaPS' methods to improve IPC at health care facilities provides a clear path to stronger IPC practices in Ethiopia's hospitals, which contributes to both achieving better health outcomes for patients, as well as fighting the growing incidence of antimicrobial resistance.

USAID
FROM THE AMERICAN PEOPLE

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

## STRENGTHENING JORDAN'S RESPONSE TO COVID-19

*Increasing the preparedness of the health care system to manage and treat COVID-19 patients*

## SUCCESS STORY

**In September 2020, Jordan started facing a surge in the number of COVID-19 cases, and an alarming rise in the number of deaths. To support the response against the pandemic, a series of training workshops were performed to improve the knowledge of staff members**


*Ms. Samira Badr (right), nursing manager at Abdel-Hadi Hospital, and Mahmoud Ibrahim, IPC unit head. Photo credit: Dr. Ruba Haddadin/USAID MTaPS*

When the COVID-19 pandemic spread around the world in early 2020, Jordan took rapid and strong measures to successfully contain the number of cases in the country.

However, Jordan started facing a surge in the number of cases beginning in mid-September, with the cumulative number of confirmed cases rising from 2,097 on September 1 to 174,335 on November 20, and an alarming rise in the number of deaths. How could health workers be protected against the escalating infection risks from this surge in cases?

"With the exception of the 2012 MERS outbreak, Jordan has a stable environment when it comes to infectious diseases. This doesn't mean that the public lacks appropriate knowledge in fighting these diseases, especially regarding hand washing or maintaining safe distances. However, the country hasn't faced many respiratory infection outbreaks. As a result, some of the biggest gaps relate to the use of personal protective equipment [PPE].

***About USAID MTaPS***

*The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018-2023) enables low- and middle-income countries to strengthen their pharmaceutical systems, which is pivotal to better health outcomes and higher-performing health systems. The program is implemented by a consortium of global and local partners, led by Management Sciences for Health (MSH), a global health nonprofit.*

www.mtapsprogram.org

Contact: Dr. Gustavo Bastos, MTaPS Portfolio Manager, gbastos@mtapsprogram.org

We want to ensure that health care workers have the knowledge to use PPE in an optimal way," says Dr. Ruba Haddadin, the country project lead for the USAID Medicines, Technologies, and Pharmaceutical Services program in Jordan.

The country's main challenge was the limited number of health care workers trained to deal with highly infectious patients.

To respond to the pandemic, USAID supported Jordan's Ministry of Health by conducting a series of COVID-19 training workshops on infection prevention and control (IPC) in hospitals around the country. Training focused on raising the preparedness of hospitals to manage and treat COVID-19 patients and improving their IPC practices to reduce transmission of the virus to health care workers, patients, and visitors. The increased hospital capacity will help reduce the burden of COVID-19 and protect health care workers so the population can continue to receive high-quality health care services despite the pandemic.

The training included guidance on the optimal use of PPE according to international recommendations, including a demonstration of how to correctly put on and remove PPE.

Following the training, participants were assessed on the training material, in particular identifying appropriate PPE for certain scenarios based on a risk assessment. To assess health care workers' competencies, two tests were performed by staff, one before the training and one after to measure the knowledge improvement. On average, the assessments showed a 114% improvement rate compared to the pre-training assessment.

To date, the USAID team has trained 1,317 health care workers (56 % female) in 36 hospitals countrywide (12 Ministry of Health and university hospitals, 18 private hospitals, and 6 Royal Medical Service hospitals).

Hospital staff felt empowered by the training provided by USAID. At Al-Israa' Hospital, Ms. Zainab Ghafari, head of the infection prevention unit, shares, "All the attendees confirmed that it added a lot to their knowledge. The information provided was very clear and will help the staff deal with all the expected scenarios. We requested the USAID team to conduct another workshop at our hospital according to our need and staff requests."

**By February 2021, 1,317 health care workers had been trained in 36 hospitals countrywide. On average, competency assessments showed a 114% improvement rate compared to the pre-training assessment.**

**"We are very grateful to USAID MTaPS for organizing this training workshop. It gave the staff the knowledge, skills and most importantly, confidence to treat COVID-19 patients, especially when new cases came to the ER."**

**— Ms. Samira Badr, nursing manager at Abdel-Hadi Hospital**

# ANNEX 2: MTAPS INDICATOR TRACKING TABLE

**Annex Table 1: MTaPS Performance Indicator Tracking Table**

This table includes only the MTaPS quarterly indicators, not the semi-annual or annual indicators.

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| **Objective 2: Institutional and Human Resource Capacity for Pharmaceutical Management and Services Increased, Including Regulation of Medical Products** | | | | | | | |
| **Sub-Objective 2.2: Capacity of Government to Manage Pharmaceutical Systems Strengthened** | | | | | | | |
| MT 2.2.2 | # of persons trained in pharmaceutical management with MTaPS support | Quarterly | 0 | 1,116 | 2,107 | 1,027 | |
| | *Asia Bureau* | | 0 | 0 | 45 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Bangladesh* | | 0 | 961 | 800 | *Female* | 218 |
| | | | | | | *Male* | 645 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 863 |
| | *Mozambique* | | 0 | 40 | 52 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Nepal* | | 0 | 0 | 10 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Philippines* | | 0 | 0 | 0 | *Female* | 86 |
| | | | | | | *Male* | 50 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 136 |
| | *Rwanda* | | 0 | 0 | 1200 | *Female* | 8 |
| | | | | | | *Male* | 20 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 28 |

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| MT 2.2.4 | # of people successfully completing MTaPS-developed e-learning courses | Quarterly | 0 | 65 | 231 | 55 | |
| | *Asia Bureau* | | 0 | 0 | 30 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 55 |
| | | | | | | *Total* | 55 |
| | *Bangladesh* | | 0 | 0 | 30 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Cross Bureau* | | 0 | 0 | 60 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Mozambique* | | 0 | 65 | 53 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Rwanda* | | 0 | 0 | 58 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| **Objective 3: Availability and Use of Pharmaceutical Information for Decision Making Increased and Global Learning Agenda Advanced** | | | | | | | |
| **Sub-Objective 3.2: Information on Pharmaceutical Systems Available and Used** | | | | | | | |
| MT 3.2.1 | # and % of MTaPS-supported health facilities that complete and submit an LMIS report on time for the most recent reporting period | Quarterly | 74.3% (84/115) | 92% (4293/4680) | 95% | 83% (4334/5213) | |
| | *Bangladesh* | | 74.3% (84/115) | 92% (4293/4680) | 95% | *DGFP (Sub-District Level)* | 100% (488/488) |
| | | | | | | *DGFP (Central/ Regional Level)* | 100% (22/22) |
| | | | | | | *District Hospital* | 82% (18/22) |
| | | | | | | *Civil Surgeon Office* | 61% (14/23) |

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| | | | | | | *Upazila Health Complex* | 75% (117/156) |
| | | | | | | *Union Sub Center* | 76% (283/371) |
| | | | | | | *Community Clinic* | 82% (3392/4131) |
| | | | | | | *Total* | 83% (4334/5213) |
| **Sub-Objective 3.3: Pharmaceutical Systems Strengthening Research and Global Learning Agenda Advanced** | | | | | | | |
| MT 3.3.3 | # of activities to engage with stakeholders to advance the PSS global learning agenda | Quarterly | 0 | 11 | 11 | 2 | |
| | *Cross Bureau* | | 0 | 11 | 10 | 2 | |
| | *CSL* | | 0 | 0 | 1 | 0 | |
| **Objective 5: Pharmaceutical Services, Including Product Availability and Patient-Centered Care, to Achieve Health Outcomes Improved** | | | | | | | |
| **Sub-Objective 5.3: Patient Safety and Therapeutic Effectiveness Ensured** | | | | | | | |
| MT 5.3.1 | % of MTaPS-supported health facilities that have implemented medicines safety activities | Quarterly | 31% (31/100) | 3% (3/110) | 91% (106/116) | 20% (13/66) | |
| | *Bangladesh* | | 31% (31/100) | 3% (3/100) | 90% (90/100) | *Pharmaceuticals* | 26% (13/50) |
| | | | | | | *Total* | 26% (13/50) |
| | *Jordan* | | 0% (0/0) | 0% (0/0) | 100% (6/6) | *Hospitals* | 0% (0/6) |
| | | | | | | *Total* | 0% (0/6) |
| | *Rwanda* | | 0% (0/10) | 0% (0/10) | 100% (10/10) | *Health Center* | 0% (0/9) |
| | | | | | | *Hospital* | 0% (0/1) |
| | | | | | | *Total* | 0% (0/10) |
| **MTaPS Global Health Security Agenda (GHSA) Indicators** | | | | | | | |
| **Result Area 1: Effective multisectoral coordination on AMR** | | | | | | | |
| MSC 1 | # of AMR-related in-country meetings or activities conducted with multisectoral participation | Quarterly | 0 | 122 | 87 | 36 | |
| | *Bangladesh* | | 0 | 3 | 2 | 0 | |
| | *Burkina Faso* | | 0 | 2 | 2 | 2 | |
| | *Cameroon* | | 0 | 5 | 14 | 1 | |
| | *Côte d'Ivoire* | | 0 | 35 | 18 | 11 | |

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| | *DRC* | | 0 | 6 | 6 | 4 | |
| | *Jordan* | | 0 | 0 | 4 | 1 | |
| | *Kenya* | | 0 | 38 | 14 | 14 | |
| | *Mali* | | 0 | 16 | 15 | 0 | |
| | *Senegal* | | 0 | 4 | 4 | 1 | |
| | *Tanzania* | | 0 | 4 | 4 | 1 | |
| | *Uganda* | | 0 | 9 | 4 | 1 | |
| MSC 5 | # of persons trained in AMR-related topics in leadership/management related to multisectoral engagement in AMR with MTaPS support | Quarterly | 0 | 164 | 532 | 204 | |
| | *Bangladesh* | | 0 | 0 | 0 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Burkina Faso* | | 0 | 0 | 0 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Cameroon* | | 0 | 0 | 20 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Côte d'Ivoire* | | 0 | 134 | 160 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *DRC* | | 0 | 0 | 150 | *Female* | 98 |
| | | | | | | *Male* | 106 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 204 |
| | *Kenya* | | 0 | 0 | 0 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| | | | | | | *Total* | 0 |
| | *Mali* | | 0 | 30 | 2 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Senegal* | | 0 | 0 | 0 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Tanzania* | | 0 | 0 | 200 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Uganda* | | 0 | 0 | 0 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| **Result Area 2: Infection Prevention and Control Improved and Functional** | | | | | | | |
| IP 2 | # of persons trained in IPC with MTaPS support | Quarterly | 0 | 1,199 | 2,806 | 4,566 | |
| | *Bangladesh* | | 0 | 0 | 600 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Burkina Faso* | | 0 | 0 | 0 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Cameroon* | | 0 | 86 | 66 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| | *Côte d'Ivoire* | | 0 | 0 | 120 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *DRC* | | 0 | 0 | 90 | *Female* | 50 |
| | | | | | | *Male* | 44 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 94 |
| | *Kenya* | | 0 | 642 | 1,500 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 4,455 |
| | | | | | | *Total* | 4,455 |
| | *Mali* | | 0 | 0 | 0 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Senegal* | | 0 | 0 | 20 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Tanzania* | | 0 | 471 | 200 | *Female* | 8 |
| | | | | | | *Male* | 9 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 17 |
| | *Uganda* | | 0 | 0 | 210 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| IP 3 | # and % of MTaPS-supported facilities that are using standardized tool(s) for monitoring IPC and informing programmatic improvement | Quarterly | 56% (5/9) | 100% (9/9) | 100% (87/87) | 66% (57/87) | |
| | *Bangladesh* | | 0% (0/0) | 0% (0/0) | 100% (2/2) | *Hospitals* | 0% (0/2) |
| | | | | | | *Total* | 0% (0/2) |
| | *Burkina Faso* | | 0% (0/0) | 0% (0/0) | 0% (0/0) | *Total* | 0% (0/0) |

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| | *Cameroon* | | 0% (0/0) | 0% (0/0) | 100% (6/6) | *Hospitals* | 100% (6/6) |
| | | | | | | *Total* | 100% (6/6) |
| | *Côte d'Ivoire* | | 0% (0/0) | 0% (0/0) | 100% (12/12) | *Hospital* | 20% (2/10) |
| | | | | | | *Animal health Centers* | 100% (2/2) |
| | | | | | | *Total* | 33% (4/12) |
| | *DRC* | | 0% (0/0) | 0% (0/0) | 100% (5/5) | *Hospitals* | 60% (3/5) |
| | | | | | | *Total* | 60% (3/5) |
| | *Jordan* | | 0% (0/0) | 0% (0/0) | 100% (6/6) | *Hospitals* | 0% (0/6) |
| | | | | | | *Total* | 0% (0/6) |
| | *Kenya* | | 0% (0/0) | 0% (0/0) | 100% (20/20) | *Hospitals* | 79% (15/19) |
| | | | | | | *Health Centers* | 100% (1/1) |
| | | | | | | *Total* | 80% (16/20) |
| | *Mali* | | 0% (0/0) | 0% (0/0) | 100% (16/16) | *Hospital* | 67% (6/9) |
| | | | | | | *Health Centers* | 86% (6/7) |
| | | | | | | *Total* | 75% (12/16) |
| | *Senegal* | | 100% (3/3) | 100% (3/3) | 100% (3/3) | *Hospitals* | 100% (3/3) |
| | | | | | | *Total* | 100% (3/3) |
| | *Tanzania* | | 33% (2/6) | 100% (6/6) | 100% (10/10) | *Hospitals* | 60% (6/10) |
| | | | | | | *Total* | 60% (6/10) |
| | *Uganda* | | 0% (0/0) | 0% (0/0) | 7/7 (100%) | *Hospitals* | 100% (7/7) |
| | | | | | | *Total* | 100% (7/7) |
| IP 5 | # and % of MTaPS-supported facilities implementing continuous quality improvement (CQI) to improve IPC | Quarterly | 43% (20/47) | 83% (39/47) | 100% (81/81) | 48% (39/81) | |
| | *Bangladesh* | | 0% (0/0) | 0% (0/0) | 100% (2/2) | *Hospitals* | 0% (0/2) |
| | | | | | | *Total* | 0% (0/2) |
| | *Burkina Faso* | | 0% (0/0) | 0% (0/0) | 0% (0/0) | *Total* | 0% (0/0) |
| | *Cameroon* | | 0% (0/6) | 100% (6/6) | 100% (6/6) | *Hospitals* | 0% (0/6) |
| | | | | | | *Total* | 0% (0/6) |
| | *Côte d'Ivoire* | | 50% (2/4) | 100% (4/4) | 100% (12/12) | *Hospitals* | 20% (2/10) |
| | | | | | | *Animal Health Centers* | 100% (2/2) |

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| | | | | | | *Total* | 33% (4/12) |
| | *DRC* | | 0% (0/0) | 0% (0/0) | 100% (5/5) | *Hospitals* | 60% (3/5) |
| | | | | | | *Total* | 60% (3/5) |
| | *Kenya* | | 100% (16/16) | 100% (16/16) | 100% (20/20) | *Hospitals* | 79% (15/19) |
| | | | | | | *Health Centers* | 100% (1/1) |
| | | | | | | *Total* | 80% (16/20) |
| | *Mali* | | 0% (0/5) | 0% (0/5) | 100% (16/16) | *Hospital* | 0% (0/9) |
| | | | | | | *Health Centers* | 0% (0/7) |
| | | | | | | *Total* | 0% (0/16) |
| | *Senegal* | | 0% (0/3) | 0%(0/3) | 100% (3/3) | *Hospitals* | 100% (3/3) |
| | | | | | | *Total* | 100% (3/3) |
| | *Tanzania* | | 33% (2/6) | 100% (6/6) | 100% (10/10) | *Hospitals* | 60% (6/10) |
| | | | | | | *Total* | 60% (6/10) |
| | *Uganda* | | 0% (0/7) | 100% (7/7) | 7/7 (100%) | *Hospitals* | 100% (7/7) |
| | | | | | | *Total* | 100% (7/7) |
| IP 6 | # and % of MTaPS-supported facilities with functional IPC committees | Quarterly | 37% (15/41) | 87% (41/47) | 100% (81/81) | 72% (58/81) | |
| | *Bangladesh* | | 0% (0/0) | 0% (0/0) | 100% (2/2) | *Hospitals* | 50% (1/2) |
| | | | | | | *Total* | 50% (1/2) |
| | *Burkina Faso* | | 0% (0/0) | 0% (0/0) | 0% (0/0) | *Total* | 0% (0/0) |
| | *Cameroon* | | 0% (0/0) | 83% (5/6) | 100% (6/6) | *Hospitals* | 100% (6/6) |
| | | | | | | *Total* | 100% (6/6) |
| | *Côte d'Ivoire* | | 100% (4/4) | 100% (4/4) | 100% (12/12) | *Hospitals* | 20% (2/10) |
| | | | | | | *Animal Health Centers* | 100% (2/2) |
| | | | | | | *Total* | 33% (4/12) |
| | *DRC* | | 0% (0/0) | 0% (0/0) | 100% (5/5) | *Hospitals* | 60% (3/5) |
| | | | | | | *Total* | 60% (3/5) |
| | *Kenya* | | 0% (0/16) | 100% (16/16) | 100% (20/20) | *Hospitals* | 79% (15/19) |
| | | | | | | *Health Centers* | 100% (1/1) |
| | | | | | | *Total* | 80% (16/20) |
| | *Mali* | | 0% (0/5) | 0% (0/5) | 100% (16/16) | *Hospital* | 67% (6/9) |
| | | | | | | *Health Centers* | 68% (6/7) |
| | | | | | | *Total* | 75% (12/16) |

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| | *Senegal* | | 100% (3/3) | 100% (3/3) | 100% (3/3) | *Hospitals* | 100% (3/3) |
| | | | | | | *Total* | 100% (3/3) |
| | *Tanzania* | | 17% (1/6) | 100% (6/6) | 100% (10/10) | *Hospitals* | 60% (6/10) |
| | | | | | | *Total* | 60% (6/10) |
| | *Uganda* | | 100% (7/7) | 100% (7/7) | 7/7 (100%) | *Hospitals* | 100% (7/7) |
| | | | | | | *Total* | 100% (7/7) |
| **Result Area 3: Use of anti-microbial medicines is optimized** | | | | | | | |
| AS 2 | # and % of MTaPS supported facilities' MTC/AMS committees or other relevant groups that implemented AMS improvement plans and/or monitoring framework | Quarterly | 14% (4/29) | 81% (25/31) | 100% (92/92) | 33% (30/92) | |
| | *Bangladesh* | | 0% (0/0) | 0% (0/0) | 100% (2/2) | *Hospitals* | 0% (0/2) |
| | | | | | | *Total* | 0% (0/2) |
| | *Burkina Faso* | | 0% (0/0) | 0% (0/0) | 100% (12/12) | *Hospitals* | 0% (0/8) |
| | | | | | | *Health Centers* | 0% (0/4) |
| | | | | | | *Total* | 0% (0/12) |
| | *Cameroon* | | 0% (0/0) | 0% (0/0) | 100% (6/6) | *Hospitals* | 0% (0/6) |
| | | | | | | *Total* | 0% (0/6) |
| | *Côte d'Ivoire* | | 0% (0/0) | 0% (0/0) | 100% (12/12) | *Hospitals* | 17% (2/12) |
| | | | | | | *Total* | 17% (2/12) |
| | *DRC* | | 0% (0/0) | 0% (0/0) | 100% (5/5) | *Hospitals* | 60% (3/5) |
| | | | | | | *Total* | 60% (3/5) |
| | *Jordan* | | 0% (0/0) | 0% (0/2) | 100% (6/6) | *Hospitals* | 0% (0/6) |
| | | | | | | *Total* | 0% (0/6) |
| | *Kenya* | | 6% (1/16) | 100% (18/18) | 100% (24/24) | *Hospitals* | 81% (17/21) |
| | | | | | | *Health Centers* | 100% (1/1) |
| | | | | | | *Pharmacy* | 0% (0/2) |
| | | | | | | *Total* | 75% (18/24) |
| | *Mali* | | 0% (0/0) | 0% (0/0) | 100% (5/5) | *Hospital* | 0% (0/4) |
| | | | | | | *Health Centers* | 0% (0/1) |
| | | | | | | *Total* | 0% (0/5) |
| | *Senegal* | | 0% (0/0) | 0% (0/0) | 100% (3/3) | *Hospitals* | 0% (0/3) |
| | | | | | | *Total* | 0% (0/3) |
| | *Tanzania* | | 0% (0/6) | 0% (0/6) | | *Hospitals* | 0% (0/10) |

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| | | | | | 100% (10/10) | *Total* | 0% (0/10) |
| | *Uganda* | | 43% (3/7) | 100% (7/7) | 7/7 (100%) | *Hospitals* | 100% (7/7) |
| | | | | | | *Total* | 100% (7/7) |
| AS 3 | # of persons trained in AMS topics with MTaPS support | Quarterly | 0 | 436 | 2,304 | 1,302 | |
| | *Bangladesh* | | 0 | 0 | 0 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Burkina Faso* | | 0 | 0 | 100 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Cameroon* | | 0 | 0 | 144 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Côte d'Ivoire* | | 0 | 0 | 100 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *DRC* | | 0 | 0 | 150 | *Female* | 61 |
| | | | | | | *Male* | 60 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 121 |
| | *Jordan* | | 0 | 0 | 20 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Kenya* | | 0 | 165 | 1,500 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 1,125 |

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| | | | | | | *Total* | 1,125 |
| | *Mali* | | 0 | 0 | 0 | *Female* | 12 |
| | | | | | | *Male* | 44 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 56 |
| | *Senegal* | | 0 | 0 | 20 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Tanzania* | | 0 | 201 | 200 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| | *Uganda* | | 0 | 70 | 70 | *Female* | 0 |
| | | | | | | *Male* | 0 |
| | | | | | | *Unknown* | 0 |
| | | | | | | *Total* | 0 |
| AS 4 | # and % of MTaPS-supported facilities implementing continuous quality improvement (CQI) to improve AMS | Quarterly | 62% (24/39) | 75% (41/55) | 100% (86/86) | 35% (30/86) | |
| | *Bangladesh* | | 0% (0/0) | 0% (0/0) | 100% (2/2) | *Hospitals* | 0% (0/2) |
| | | | | | | *Total* | 0% (0/2) |
| | *Burkina Faso* | | 0% (0/0) | 100% (5/5) | 100% (12/12) | *Hospitals* | 0% (0/8) |
| | | | | | | *Health Centers* | 0% (0/4) |
| | | | | | | *Total* | 0% (0/12) |
| | *Cameroon* | | 0% (0/0) | 0% (0/6) | 100% (6/6) | *Hospitals* | 0% (0/6) |
| | | | | | | *Total* | 0% (0/6) |
| | *Côte d'Ivoire* | | 0% (0/0) | 100% (2/2) | 100% (12/12) | *Hospitals* | 17% (2/12) |
| | | | | | | *Total* | 17% (2/12) |
| | *DRC* | | 0% (0/0) | 100% (3/3) | 100% (5/5) | *Hospitals* | 60% (3/5) |
| | | | | | | *Total* | 60% (3/5) |
| | *Kenya* | | 100% (18/18) | 100% (18/18) | 100% (24/24) | *Hospitals* | 81% (17/21) |
| | | | | | | *Health Centers* | 100% (1/1) |
| | | | | | | *Pharmacy* | 0% (0/2) |
| | | | | | | *Total* | 75% (18/24) |

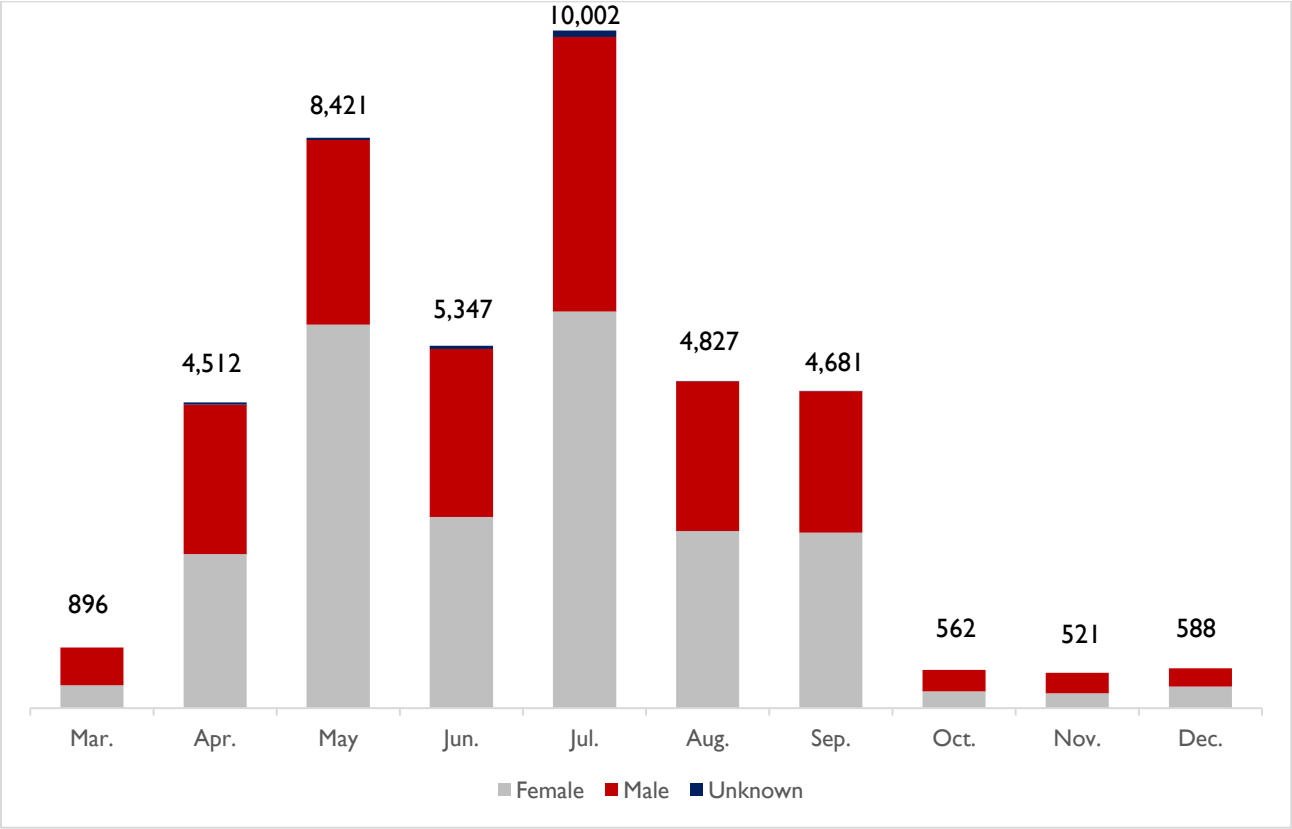
| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result | |
|---|---|---|---|---|---|---|---|
| | *Mali* | | 0% (0/5) | 0% (0/5) | 100% (5/5) | *Hospital* | 0% (0/4) |
| | | | | | | *Health Centers* | 0% (0/1) |
| | | | | | | *Total* | 0% (0/5) |
| | *Senegal* | | 0% (0/3) | 0% (0/3) | 100% (3/3) | *Hospitals* | 0% (0/3) |
| | | | | | | *Total* | 0% (0/3) |
| | *Tanzania* | | 0% (0/6) | 100% (6/6) | 100% (10/10) | *Hospitals* | 0% (0/10) |
| | | | | | | *Total* | 0% (0/10) |
| | *Uganda* | | 86% (6/7) | 100% (7/7) | 7/7 (100%) | *Hospitals* | 100% (7/7) |
| | | | | | | *Total* | 100% (7/7) |
| **Philippines Custom Indicators** | | | | | | | |
| PP 1 | % of service delivery points with stock out of FP, TB and HIV-AIDS tracer commodities | Quarterly | | | | | |
| | *First line TB meds (4 FDC)* | | 40.5% | 30% (472/1552) | 25% | 23% | |
| | *TB Pediatric Med (4FDC)* | | 90.6% | 97% (856/883) | 30% | 48% | |
| | *TB Preventive Treatment (for children)* | | 63.8% | 65% (645/987) | 30% | 81% | |
| | *TB Second Line Drug (Levofloxacin 500mg)* | | N/A | 53% (105/199) | 20% | 7% | |
| | *TB Second Line Drug (Moxifloxacin 400mg)* | | N/A | 5% (9/199) | 20% | 4% | |
| | *TB Second Line Drug (Linezolid 600mg)* | | N/A | 12% (24/199) | 20% | 5% | |
| | *TB Second Line Drug (Bedaquiline)* | | N/A | 13% (25/199) | 20% | 5% | |
| | *GeneXpert Cartridges* | | N/A | 3% (13/395) | 25% | 15% | |
| | *FP Injectable* | | 30.2% | 12% (218/1775) | 20% | 13% | |
| | *FP Implant* | | 52.7% | 55% (717/1316) | 30% | 45% | |
| | *FP Oral COC* | | 25.6% | 8% (143/1798) | 20% | 11% | |
| | *FP Oral POP* | | 69.3% | 31% (507/1630) | 30% | 27% | |
| | *IUD* | | 36.7% | 29% (454/1566) | 25% | 41% | |
| | *Male condom* | | 38.9% | 21% (358/1743) | 25% | 31% | |

| Code | Performance Indicator | Reporting Frequency | Baseline Value | PY2 Cumulative Result | PY3 Target | PY3Q1 Result |
|---|---|---|---|---|---|---|
| | *SDM beads* | | 75% | N/A | 30% | 0% |
| **Nepal Custom Indicators** | | | | | | |
| NP 8 | Number of monitoring visits in which GON participates | Quarterly | 0 | 0 | 2 | 1 |

# ANNEX 3: COVID-19 INDICATORS

| *Annex Table 2. CV 1: # MTaPS-supported health facilities whose staff received COVID-19-related IPC training* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **Mar.** | **Apr.** | **May** | **Jun.** | **Jul.** | **Aug.** | **Sep.** | **Oct.** | **Nov.** | **Dec.** | **Total** |
| **Country** | Bangladesh | 88 | 538 | 16 | 77 | 2 | 2 | 1 | 0 | 2 | 0 | 726 |
| | Burkina Faso | | | | 26 | 4 | 18 | 14 | 0 | 0 | | 62 |
| | Cameroon | | 10 | 0 | 3 | 4 | 9 | 4 | 0 | | | 30 |
| | Côte d'Ivoire | | 1 | 0 | 12 | 6 | 6 | 0 | 7 | 6 | | 38 |
| | Ethiopia | 0 | 2 | 79 | 41 | 31 | 243 | 139 | | | | 535 |
| | Jordan | | | | | | 3 | 13 | 8 | 5 | 7 | 36 |
| | Kenya | 112 | 201 | 24 | 39 | 28 | 2 | 0 | | | | 406 |
| | Mali | | | 19 | 41 | 0 | 0 | 0 | 0 | | | 60 |
| | Mozambique | | | | 18 | 55 | 19 | 34 | 2 | 0 | | 128 |
| | Philippines | | 24 | 33 | 42 | 23 | 14 | 8 | | | | 144 |
| | Senegal | | | 1 | 5 | 20 | 0 | 0 | 2 | | | 28 |
| | Tanzania | | | 35 | 0 | 0 | 4 | 10 | | | | 49 |
| | Uganda | | | | 125 | 582 | 151 | 0 | | | | 858 |
| | **Total** | **200** | **776** | **207** | **429** | **755** | **471** | **223** | **19** | **13** | **7** | **3,100** |
| **Technical area** | eSC | 0 | 538 | 23 | 24 | 15 | 12 | 16 | 2 | 0 | 3 | 633 |
| | HCWM | 112 | 207 | 187 | 320 | 745 | 463 | 211 | 18 | 5 | 7 | 2,275 |
| | IPC | 200 | 391 | 190 | 412 | 755 | 466 | 223 | 19 | 13 | 7 | 2,676 |
| **Facility type** | Hospital | 88 | 573 | 97 | 210 | 96 | 134 | 81 | 9 | 7 | 7 | 1,302 |
| | Health Center | 0 | 0 | 7 | 143 | 565 | 234 | 127 | 3 | 0 | 0 | 1,079 |
| | Clinic | 0 | 0 | 0 | 23 | 52 | 47 | 1 | 0 | 0 | 0 | 123 |
| | Other | 0 | 0 | 0 | 12 | 11 | 51 | 14 | 7 | 6 | 0 | 101 |
| | Unknown | 112 | 203 | 103 | 41 | 31 | 5 | 0 | 0 | 0 | 0 | 495 |
| **Facility ownership type** | Public | 0 | 22 | 73 | 303 | 547 | 411 | 207 | 14 | 10 | 1 | 1,588 |
| | Private not-for-profit | 0 | 0 | 1 | 18 | 93 | 12 | 3 | 1 | 0 | 0 | 128 |
| | Private for-profit | 0 | 13 | 14 | 55 | 78 | 48 | 12 | 4 | 3 | 1 | 228 |
| | Other | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | 6 |
| | Unknown | 200 | 741 | 119 | 53 | 37 | 0 | 0 | 0 | 0 | 0 | 1,150 |

| *Annex Table 3. CV 2: # of persons who received COVID-19-related training* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **Mar.** | **Apr.** | **May** | **Jun.** | **Jul.** | **Aug.** | **Sep.** | **Oct.** | **Nov.** | **Dec.** | **Total** |
| **Country** | Bangladesh | 560 | 1,530 | 376 | 1,114 | 88 | 88 | 75 | 0 | 274 | 227 | 4,332 |
| | Burkina Faso | | | | 26 | 100 | 300 | 462 | 0 | 0 | | 888 |
| | Cameroon | | 25 | 0 | 360 | 81 | 204 | 177 | 0 | | | 847 |
| | Côte d'Ivoire | | 30 | 0 | 507 | 60 | 151 | 171 | 235 | 100 | | 1,254 |
| | Ethiopia | 15 | 125 | 312 | 228 | 741 | 657 | 403 | | | | 2,481 |
| | Jordan | | | | | | 98 | 342 | 231 | 147 | 361 | 1,179 |
| | Kenya | 321 | 1,091 | 200 | 311 | 34 | 57 | 0 | | | | 2,014 |
| | Mali | | | 30 | 89 | 0 | 0 | 170 | 0 | | | 289 |
| | Mozambique | | | | 243 | 2,142 | 1,889 | 2,244 | 83 | | | 6,601 |
| | Philippines | | 1,711 | 6,948 | 2,091 | 2,326 | 405 | 597 | | | | 14,078 |
| | Senegal | | | 31 | 28 | 62 | 0 | 0 | 13 | | | 134 |
| | Tanzania | | | 524 | 0 | 0 | 248 | 40 | | | | 812 |
| | Uganda | | | | 350 | 4,368 | 730 | 0 | | | | 5,448 |
| | **Total** | **896** | **4,512** | **8,421** | **5,347** | **10,002** | **4,827** | **4,681** | **562** | **521** | **588** | **40,357** |
| **Sex** | Female | 338 | 2,275 | 5,663 | 2,821 | 5,855 | 2,615 | 2,592 | 247 | 217 | 319 | 22,942 |
| | Male | 558 | 2,205 | 2,722 | 2,482 | 4,050 | 2,209 | 2,085 | 315 | 304 | 269 | 17,199 |
| | Unknown | 0 | 32 | 36 | 44 | 97 | 3 | 4 | 0 | 0 | 0 | 216 |
| **Facility type** | Hospital | 0 | 1,766 | 7,423 | 2,688 | 3,963 | 2,943 | 2,885 | 402 | 421 | 572 | 23,063 |
| | Health Center | 0 | 0 | 91 | 467 | 4,494 | 1,324 | 1,513 | 53 | 0 | 0 | 7,942 |
| | Clinic | 0 | 0 | 0 | 44 | 225 | 217 | 3 | 0 | 0 | 0 | 489 |
| | Other | 0 | 0 | 19 | 299 | 47 | 284 | 280 | 107 | 100 | 16 | 1,152 |
| | Unknown | 896 | 2,746 | 888 | 1,849 | 1,273 | 59 | 0 | 0 | 0 | 0 | 7,711 |
| **Facility ownership type** | Public | 0 | 1,268 | 4,307 | 2,005 | 6,663 | 4,247 | 4,083 | 436 | 479 | 410 | 23,898 |
| | Private not-for-profit | 0 | 0 | 1 | 271 | 310 | 34 | 150 | 23 | 0 | 0 | 789 |
| | Private for-profit | 0 | 498 | 3,225 | 1,222 | 2,125 | 530 | 426 | 103 | 42 | 54 | 8,225 |
| | Other | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 124 | 146 |
| | Unknown | 896 | 2,746 | 888 | 1,849 | 904 | 16 | 0 | 0 | 0 | 0 | 7,299 |

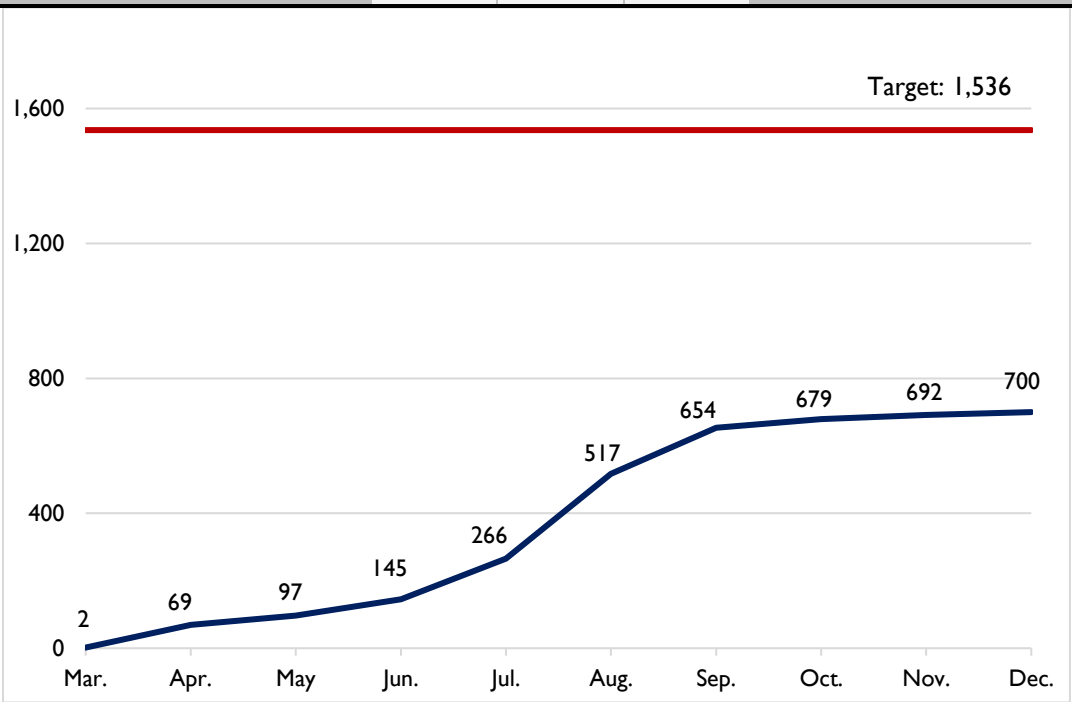



Annex Figure 1. CV 2: Total # of persons who received COVID-19-related training, by month and sex

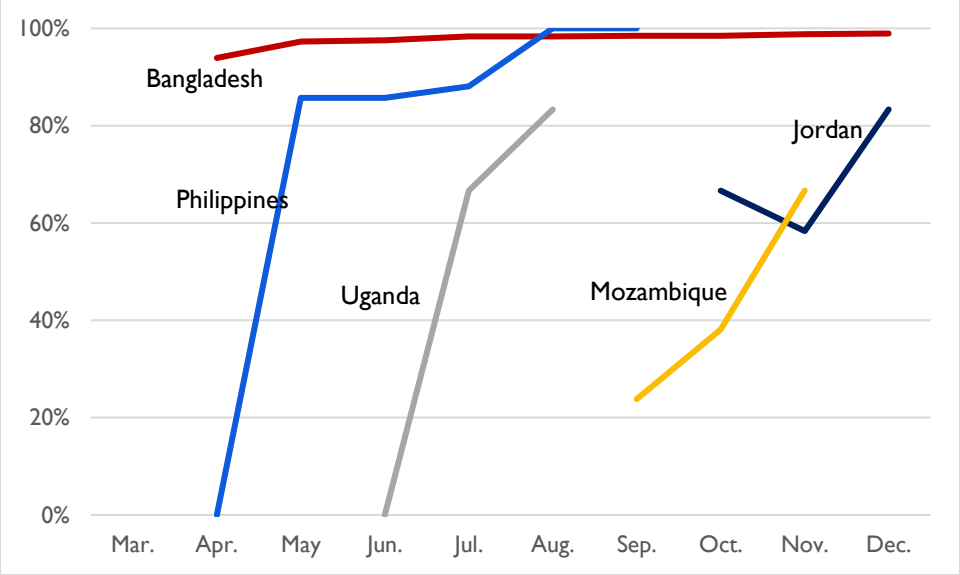
| *Annex Table 4. CV 3: # MTaPS-supported health facilities in compliance with COVID-19 IPC guidelines/SOPs* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **Mar.** | **Apr.** | **May** | **Jun.** | **Jul.** | **Aug.** | **Sep.** | **Oct.** | **Nov.** | **Dec.** | **Total** |
| **Country** | Bangladesh | | | | | | | | | | 2 | |
| | Burkina Faso | | | | | | | | 15 | | | |
| | Cameroon | | | | | 0 | 7 | 2 | 0 | 5 | | |
| | Côte d'Ivoire | | 0 | 13 | 2 | 7 | 0 | 5 | 2 | 7 | | |
| | Ethiopia | | 2 | 4 | 10 | 26 | 197 | 95 | 0 | | | |
| | Jordan | | | | | | 4 | 12 | 6 | 1 | 6 | |
| | Kenya | 2 | 65 | 11 | 36 | 0 | 21 | 0 | 0 | | | 2 |
| | Mali | | | | 0 | 2 | 10 | 0 | 0 | | | |
| | Mozambique | | | | | 2 | 5 | 9 | 2 | 0 | | |
| | Philippines | | 0 | 0 | 0 | 11 | 6 | 14 | | | | |
| | Senegal | | | | | | | | | | | |
| | Tanzania | | | 0 | 0 | 0 | 1 | 0 | | | | |
| | Uganda | | | | 0 | 73 | 0 | 0 | | | | |
| | **Total** | **2** | **67** | **28** | **48** | **121** | **251** | **137** | **25** | **13** | **8** | **2** |
| **Facility type** | Hospital | 0 | 0 | 0 | 0 | 3 | 10 | 2 | 3 | 7 | 0 | 0 |
| | Health Center | 0 | 0 | 0 | 0 | 56 | 124 | 67 | 15 | 0 | 0 | 0 |
| | Clinic | 0 | 0 | 0 | 0 | 11 | 16 | 1 | 0 | 0 | 0 | 0 |
| | Other | 0 | 0 | 0 | 0 | 3 | 10 | 2 | 3 | 7 | 0 | 0 |
| | Unknown | 2 | 67 | 15 | 46 | 26 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Facility ownership type** | Public | 0 | 0 | 13 | 14 | 47 | 231 | 121 | 20 | 12 | 2 | 0 |
| | Private not-for-profit | 0 | 0 | 0 | 10 | 17 | 0 | 0 | 1 | 1 | 0 | 0 |
| | Private for-profit | 0 | 0 | 0 | 14 | 31 | 20 | 15 | 4 | 0 | 1 | 0 |
| | Other | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 | 0 |
| | Unknown | 2 | 67 | 15 | 10 | 26 | 0 | 0 | 0 | 0 | 0 | 0 |

*Table 5. CV 4: # of MTaPS-supported facilities that routinely report stock data for IPC PPE or HCWM commodities by country*

| | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|
| | # (%) | # (%) | # (%) | # (%) | # (%) | # (%) | # (%) | # (%) | # (%) | # (%) |
| Bangladesh | | 617 (94%) | 639 (97%) | 641 (98%) | 646 (98%) | 646 (98%) | 647 (98%) | 647 (98%) | 649 (99%) | 650 (99%) |
| Jordan | | | | | | | | 8 (67%) | 7 (58%) | 10 (83%) |
| Mozambique | | | | | | | 5 (24%) | 8 (38%) | 14 (67%) | |
| Philippines | | 0 (%) | 36 (86%) | 36 (86%) | 37 (88%) | 42 (100%) | 42 (100%) | | | |
| Uganda | | | | 0 (%) | 4 (67%) | 5 (83%) | | | | |




Annex Figure 2. CV 3: # MTaPS-supported health facilities in compliance with COVID-19 IPC guidelines/SOPs, across all countries




Annex Figure 3. CV 4: % of MTaPS-supported facilities that routinely report stock data for IPC PPE or HCWM commodities, by country