

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

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Cover photo: Dr. Omona Vinence, a pediatrician at St. Mary's hospital Lacor discusses treatment guidelines with the host health workers. Photo credit: Hassan Kasujja, MTaPS Uganda.



Facilitating Peer-to-Peer Learning: Practical Exchange of Knowledge, Skills, and Best Practices toward Antimicrobial Resistance Containment in Uganda

Technical Highlight | January 2023 | UGANDA

Background

Infection prevention and control (IPC) and antimicrobial stewardship (AMS) are evidence-based practices that improve patient care, reduce antimicrobial use and hospital operating costs, prevent the spread of infection among patients and health workers, and contain antimicrobial resistance (AMR). The US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program builds capacity and strengthens systems in the

fight against AMR, with focus on IPC, AMS, and multisectoral coordination (MSC) in Uganda. At the health facility level, MTaPS focuses on strengthening IPC and AMS systems and structures, and on defining roles and enhancing practices based on standard World Health Organization (WHO) recommendations. MTaPS leverages data to inform interventions, which focus on hand hygiene, tracking health care-associated infections (HAI), and optimizing antibiotic use in upper respiratory tract infections (URTI), urinary tract infections (UTI), and surgical antibiotic prophylaxis (SAP).

Problem Statement

Baseline assessments conducted between March and May 2021 in 13 health facilities with 130 health care workers (HCW) indicated significant gaps in IPC implementation and in health workers' knowledge. The assessment showed an average knowledge score of 44.2% for hand hygiene and HAIs. Only 68% of HCWs had received formal training on hand hygiene in the past 3 years. The average score for the IPC core components on the WHO Infection Prevention and Control Assessment Framework (IPCAF) tool was 476/800, an intermediate level, and some facilities scored as low as 229.5. The average score for the hand hygiene multimodal strategies on the WHO Hand Hygiene Self-Assessment Framework (HHSAF) tool was 234.4/500, which is considered a basic level; some facilities scored as low as 165. In addition, there was limited IPC program implementation in health facilities and HCWs did not understand the relevance and application of IPC interventions in their respective settings.

Technical Approach

To address these gaps and build capacity for AMR containment, MTaPS provided technical and logistical support for a peer-to-peer learning activity, using a benchmarking process. Benchmarking is a continuous process of measuring best practices against a high standard and learning from that standard for quality improvement. MTaPS selected St. Mary's Hospital Lacor, a hospital in Gulu District, in Northern Uganda based on its advanced capability in AMS and IPC as evidenced by the following:

- 78% of antibiotics used in the hospital were from the Access category of WHO-recommended Access, Watch, and Reserve (AWaRe) classification.¹
- The hospital SAP program is well implemented, with a single in-situ antibiotic prescription supported by a robust post-surgical IPC and wound care program.
- Lower use of antibiotics per patient for UTIs and URTIs (with a mean of 1.1 antibiotic administered per patient with UTI and a mean of 0.1 antibiotic given per URTI patient)
- Higher compliance for hand hygiene
- Advanced capacity on the IPCAF (680) and HHSAF (395) tools

Working with the respective hospital administrations and the Department of Clinical Services from the Ministry of Health, MTaPS supported an onsite peer-to-peer learning activity for all MTaPS-supported health facilities in March 2022. After approval from St. Mary's hospital administration, 33 HCWs (16 of them female) from both the medicines and therapeutics committee (MTC) and IPC committee from 6 facilities were supported to travel to St. Mary's Hospital to participate in a practical peer-to-peer learning exercise. The peer-to-peer learning focused on:

1. How to implement a SAP program
2. Post-surgical IPC and wound care
3. Use of antibiotics in surgery
4. Antibiotic use in the outpatient department
5. Management of a hand hygiene program
6. Hospital environmental management, with a focus on waste
7. Programmatic implementation of IPC and AMS programs in a hospital

On arrival at St. Mary's Hospital the guest health workers discussed the objectives and expectations of the trip together with the host committee members (both from IPC and MTC), and with the MTaPS team. The approach centered on involving the guest health workers in the day-to-day activities of the facility under the guidance of unit charges and members of the MTC and IPC committee. Guest participants were placed at different units in smaller groups and rotated from one unit to the other, including the operating theater, surgical ward, maternity ward, medical ward, the pharmacies, waste treatment and management unit.

At the end of the group rotations, the guest and host health workers held an evaluation meeting, sharing feedback on the practices and skills they had developed and/or refined as part of the peer-to-peer learning. The discussions focused mainly on the application and applicability of IPC and AMS practices, how the host HCWs arrived at the point where they are now, and the administrative aspects of instituting robust IPC

¹ The AWaRe Classification of antibiotics is a tool developed in 2017 by the WHO Expert Committee on Selection and Use of Essential Medicines to support antibiotic stewardship efforts at local, national and global levels. Antibiotics are classified into three groups, Access, Watch and Reserve, which take into account the impact of different antibiotics and antibiotic classes on antimicrobial resistance, in order to ensure appropriate use.



Sr. Ogwen Jane (left), the theater in-charge, discusses surgical patient preparation and administration of surgical antibiotic prophylaxis with guest health workers. Photo credit: Kwikiriza Grace, MTaPS Uganda.

systems. There was also a critique of the practices found in the wards, and guests shared what was working in their facilities. During these meetings, the health workers commended MTaPS for organizing the visit through which they gained knowledge and skills; they subsequently pledged to disseminate this learning to peers in their respective facilities.

Results and Achievements

After each group rotation, the host and guest participants held a question-and-answer session and engaged in discussions to clarify any unresolved issues during the rotation. During these interactions, participants shared a range of ideas and lessons learned. Many participants expressed their appreciation for the activity and acknowledged the practical aspect of learning away from the ordinary classroom-based continuing medical education (CME).

“I commend the practice that I have found here. Most of my objectives... have been met... We shall ensure that our committees [are] empowered administratively so that they can perform as they should. We shall continue networking and having discussions on a couple of issues to learn from Lacor with the other facility members we have met during this visit. We need to understand their barriers [in order] to learn... on how to overcome [them]...”

—Dr. James Nyonyintono, a surgeon at Kiwoko Hospital, one of the visiting facilities which is a center of excellence (COE) on IPC

Dr. Nyonyintono added, “One important lesson. . . is people should know that they do not have it all and that they should be moving out to learn from others. From this we have developed a network with Lacor that we think will be fruitful.”

The host participants acknowledged the mutual benefit of this initiative as they also learned from the guests:

“This has been a learning process for me, [and] we have received quite a lot of feedback that we shall embark on...”

—Sister Josephine Oyella, pharmacist and secretary to the MTC, St. Mary’s Hospital Lacor

“From the interactions we had from the benchmarking teams, we noticed gaps that we thought we didn’t have, probably [because] we are still very poor with compliance monitoring. We have been told of things that have been happening and we did not know these things were happening. This has been an eye opener to many of the host health workers and they should be open to change.”

—Dr. Alfred Okello, IPC focal person at St. Mary’s Hospital Lacor

Following the onsite visits, MTaPS visited the facilities as part of routine mentorship to assess the progress of implementation on the continuous quality improvement plan implementation. During these visits, there were notable improvements in all facilities, and HCWs have applied the learnings from the onsite visits. Many HCWs reported that the onsite visit empowered them to better manage HAIs and to implement IPC practices and programs and other technical areas:

“Because of the benchmark visit that MTaPS supported. . . I am now more confident in handling maternal sepsis at my ward.”

—Sr. Alupo Florence, in-charge, maternity ward, Kumi Hospital

Notably, one facility developed a costed budget for the IPC work plan, totaling UGX 43,980,000 or USD 11,886, to support not only programmatic implementation but also advocacy for the needed materials and services, both from within the facility and from implementing partners.

Lessons Learned

The peer-to-peer learning created a community of HCWs in constant communication to share skills, knowledge, and experiences with each other. Through social media platforms and emails, the HCWs have continued to share materials among themselves to improve the quality of health care within facilities in a sustainable manner. MTaPS’ experience has generated the following key lessons:

- A model facility or institution from which other facilities can learn from is critical for the implementation of a successful capacity-building program.
- A stepwise approach will enable effective cross-learning. Implementing partners can initially prioritize developing one or two model facilities, followed by exchange programs with other health facilities to support effective cross-learning and exchange.

Pathway to Sustainability

As part of next steps, MTaPS will support the visiting health facilities to cascade the knowledge they gained to their hospital management teams, and share lessons learned with other IPC and AMS teams and hospital-based CME. To ensure program sustainability, the MTaPS Program facilitated a visit by the USAID Mission staff to one of the well-performing hospitals to become a COE for IPC. Plans are also under way to support visits by the Ministry of Health and the members of the National AMR subcommittee to develop additional COEs.

These centers will also be used as learning sites for the US President’s Plan for Emergency AIDS Relief (PEPFAR) regional implementing partners as part of MTaPS-supported above-site capacity building for AMR containment. Through these approaches, MTaPS will aim to ensure sustainability of the national AMR program through knowledge sharing and building capacity towards the Joint External Evaluation-2 benchmark action 3.3: “Mandate and support IPC improvement at all healthcare facilities, recommending the use of the IPCAF and the [water and sanitation for health facility improvement] tool and antibiotic stewardship programs.”

Conclusions

Peer-to-peer learning is an effective way to transfer knowledge and skills and should be used routinely as part of capacity-building programs. Program implementors can establish or identify model facilities from which HCWs and other project beneficiaries can routinely visit to support the practical aspects of learning. Not only does this create sustainable knowledge transfer, but it creates a community that can continue to share experiences, learning, and skills.

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Authors

This publication was written by Hassan Kasujja, Reuben Kiggundu, and Niranjana Konduri.

For more information, please contact memory@msh.org

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.



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