

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

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



Training of members of the Kangaba Reference Health Center drug and therapeutics committee. Photo credit: Sanoussi Kone, GHSC-PSM



## Establishing Drug and Therapeutics Committees to Combat Antimicrobial Resistance in Mali

Technical Highlight | October 2023 | Mali

This document explores lessons learned from efforts to address antimicrobial resistance by strengthening human resource capacity through in-service training.

### Background

The irrational use of antibiotics, known to fuel antimicrobial resistance (AMR), is a major concern for global health security. According to the World Health Organization (WHO), over 50% of all medicines are sold, prescribed, or dispensed incorrectly.<sup>1</sup> Irrational medicine use in the health care system results in both waste of precious medications and increased risk of community health hazards due to AMR.

Mali has been fighting against AMR for many years. In 2018, the country developed and approved a multisectoral national action plan to combat AMR through activities such as providing guidance to hospital practitioners and supervising medicine prescribing practices. Establishing drug and therapeutics committees (DTCs) in facilities is an effective way to combat AMR. DTCs are formal bodies within health facilities that are responsible for implementing and monitoring medicine supply and use strategies, including AMR containment activities.

<sup>1</sup> <https://www.who.int/activities/promoting-rational-use-of-medicines#:~:text=WHO%20estimates%20that%20more%20than,resources%20and%20widespread%20health%20hazards>

DTCs were first implemented in Mali in 2008, but this effort both lacked sufficient stakeholder involvement and the involved stakeholders were not sufficiently trained and did not receive clear instructions on their role. For these reasons, the US Agency for International Development (USAID)—through its Medicines, Technologies, and Pharmaceutical Services (MTaPS) program—supported the Directorate for Pharmacy and Medicines (DPM), the National Agency for Hospital Assessment, and the National Multisectoral Coordination Group for AMR to pilot implementation of DTCs in five sites in 2020: Point G Hospital, Mère-Enfant Hospital, Sikasso Hospital, Ségou Hospital, and Koutiala *Centre de Santé de Référence*.

MTaPS' approach included terms of reference (TOR) development for the DTCs, training module implementation for their members, and facilitator support. Facilitator support was focused on improving knowledge on the WHO-recommended Access, Watch, and Reserve (AWaRe) classification of antibiotics and the functioning of DTCs. The AWaRe classification serves as a simple but effective tool to monitor antibiotic consumption and use, defining targets and monitoring the effects of antimicrobial stewardship policies and programs that aim to optimize antibiotic use and to curb AMR.<sup>2</sup>

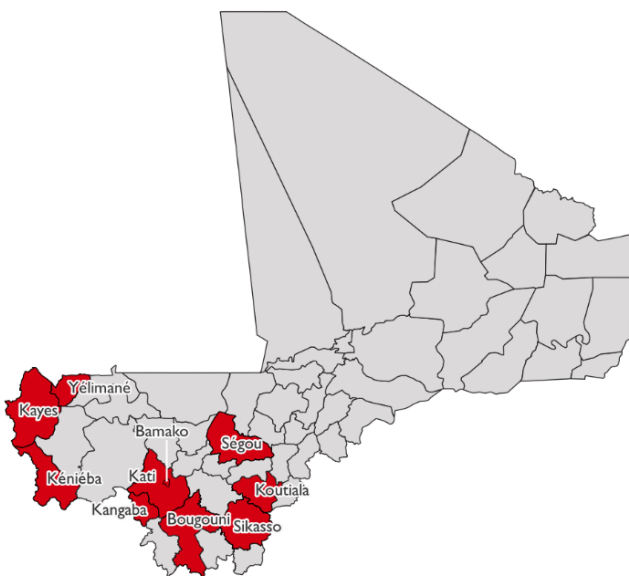


Figure 1. MTAps' work included facilities from 10 administrative regions in Mali, shown on the map in red.

MTaPS' strategy guided the revision of the National Pharmaceutical Policy and ensured adoption of activities to combat AMR in all sites. Following these initiatives, the DPM, the National Agency for Hospital Assessment, and the National Multisectoral Coordination Group for AMR, with MTAps' support, put in place mechanisms to scale up the DTC approach from 5 health facilities to 11 other health facilities (map below provides location of supported health facilities).

## Technical Approach

MTaPS provided support to develop TOR for establishment of DTCs. The DPM sent orientation letters to health facilities regarding the goal, design, and organization of DTCs. Following this important step, training materials were disseminated and a master trainers pool was created with the goal of implementing training and monitoring activities. MTAps used the experience of the first 5 DTCs for training staff in 11 additional health facilities. Additionally, MTAps collaborated with hospital stakeholders to develop and help implement action plans for the DTCs in these new facilities.

Simply training staff was not enough to ensure success of the DTCs, as issues like high turnover and low human resources continue to impact the effectiveness of the health system in Mali. To address these issues, it was necessary to provide supportive supervisory visits to the health facilities to strengthen the capacity of the DTCs, to discuss action plans with DTC members, to evaluate the indicators of antibiotic prescription, and to address any ad hoc issues. Despite challenges related to the high turnover and few human resources available, MTAps' support ensured that 82 DTC members out of 189 trainees (43%, a total of 36 females and 153 males in trainee group) stayed active in the DTCs of the 16 supervised health facilities.

Supervision of five facilities in 2021 showed that 49% of the antimicrobials prescribed were from the Access category. According to data from the subsequent supervision of the 16 MTAps-supported facilities (April 2022), the level of prescribed antibiotics from the Access category was, on average, 56% (figure 2). This is close to WHO's recommendation of at least 60% of antibiotics consumption at the national level coming

<sup>2</sup> <https://www.who.int/publications/i/item/2021-aware-classification>

from the Access category. The Access category of drugs offers the best therapeutic value while minimizing the potential for resistance.

MTaPS also supported dissemination of reference documents that will contribute to optimizing the use of antimicrobials. Examples of these reference documents are the 2021 manual on procedures to register medicines in the human health sector and the repertoire of human and animal health medicines with market authorization in Mali.

To ensure sustainability and functionality of the above actions and the established DTCs, MTAps is working with the DPM to organize regular supervision for the implementation of action plans, indicator assessment, and reporting of results to the central level.

## Lessons Learned

- I. Policymakers should **formalize the use of funds** from the sale of medicines and laboratory cost recovery to hire additional staff and support DTC and AMR containment action plan implementation. Limited funding for implementation of DTC action plan activities has led to insufficient capacity for

2. Continuously **supervise and support facilities** to build DTC capacity and address issues. DTC members may have low motivation and availability to participate in the implementation of AMR containment activities. Heavy workload, involvement in the implementation of other health programs, local and central level supervision activities, and requests to participate in other meetings at the regional and national levels are contributing factors. Low availability of DPM staff and members of the pool of trainers for the planning and implementation of the activities led to frequent postponing of critical training activities and field visits.
3. For expansion of DTC implementation and follow-up, utilize the **online training platform** and **consider selected members of DTCs as trainers**. High turnover of personnel at the health facility level was a notable barrier to the implementation of DTCs. Staff transfers resulted in a need to redesign DTC structures and caused difficulty in obtaining facility buy-in for the establishment of new DTCs.

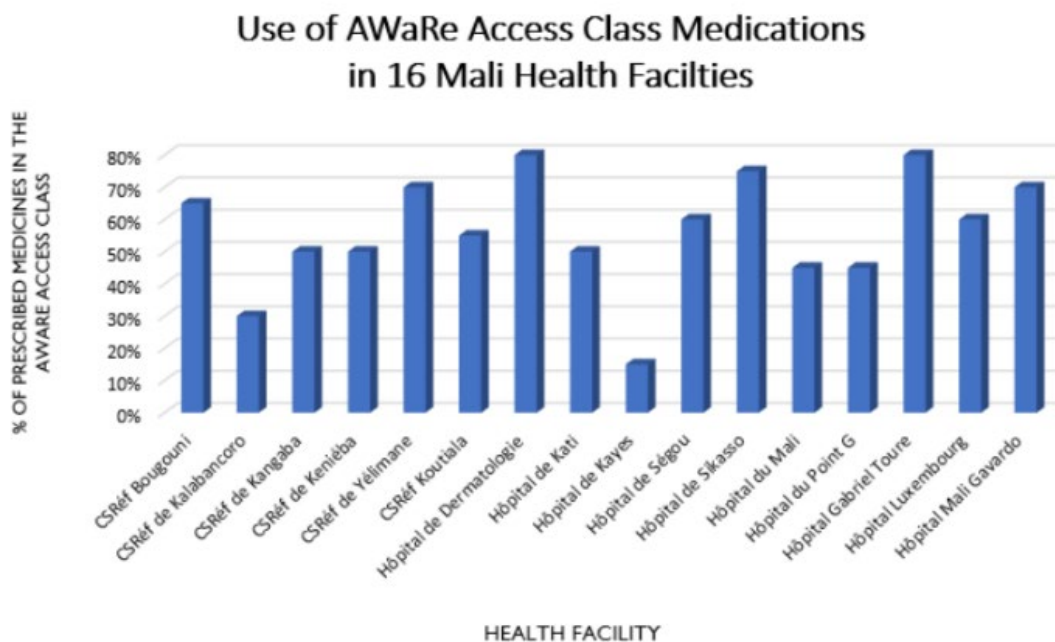


Figure 2. Percent of prescribed medications in the AWaRe Access class in 16 MTAps-supported health facilities. Percent of Access class medications ranges from 15% in Hôpital de Kayes to 80% in Hôpital de Dermatologie and Hôpital de Gabriel Toure (April 2022).

## Conclusion

MTaPS' implementation support experiences in Mali highlight how insufficient financial and human resource capacities remain a barrier to executing key AMR containment actions. Formal designation of a stable funding stream for AMR activities will facilitate program continuation by reducing reliance on external donors. This recommendation is critical to addressing long-term sustainability of DTC financing and DTC action plan implementation. These project experiences and lessons learned from implementation provide valuable insight for future project teams and stakeholders to make critical decisions toward increasing the rational use of antimicrobial medicines.

## Reference

- [Promoting Rational Use of Medicines](#) – WHO

In addition to any reference listed in preparing this technical document, the MTAaPS team drew on internal project documents, including work plans, activity reports, terms of reference, and meeting minutes.



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## About USAID MTAaPS:

The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018–2025) 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.