

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

Improved Access. Improved Services. Better Health Outcomes.



Participants at the multisectoral AMR workshop, March 24–25, 2021.
Photo credit: MTaPS Nigeria

Strengthening Multisectoral Coordination for Combating Antimicrobial Resistance in Nigeria

Technical Brief | May 2023 | Nigeria

Improving governance structures and institutional capacity for multisectoral coordination

Background

As the use of antibacterial and other antimicrobial medicines has expanded, an increasing number of pathogens have stopped responding to these medicines. This is known as antimicrobial resistance (AMR). The World Health Organization (WHO) estimates that AMR is associated with nearly 5 million deaths per year globally.¹

In Nigeria, misuse and overuse of antibiotics is an ongoing problem, contributing to the increased emergence and spread of AMR. Effectively addressing AMR requires monitoring and containment efforts

across the human health, food, agriculture, and environmental sectors.

The US Agency for International Development (USAID) works to address the threat of AMR through the Global Health Security Agenda (GHSA), an international effort which brings together more than 70 countries and nongovernmental partners to collectively achieve the vision of a world safe and secure from global health threats posed by infectious diseases. The USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018–2025) is a key implementer in USAID’s support for the GHSA vision. In Nigeria,

¹ Antimicrobial Resistance Collaborators. (2022). Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis. *The Lancet*; 399(10325): P629-655. DOI: [https://doi.org/10.1016/S0140-6736\(21\)02724-0](https://doi.org/10.1016/S0140-6736(21)02724-0)

MTaPS is supporting AMR containment to slow the emergence of resistant bacteria and prevent the spread of resistant infections through three key intervention areas: multisectoral coordination (MSC), strengthening infection prevention and control (IPC) practices, and optimizing use of antimicrobials.

Problem Statement

An assessment conducted in Nigeria in 2017 using the World Health Organization (WHO) Joint External Evaluation (JEE) tool (version 1) rated Nigeria as having “limited capacity” (level 2 of 5) for all AMR indicators. A situational analysis of AMR the same year highlighted the following gaps: the nonexistence of a national IPC coordinating body, poor budgetary support for IPC activities in health facilities, and the lack of antimicrobial stewardship (AMS) in both the private and public sectors.^{2,3}

Since 2017, Nigeria has made progress in implementing recommended activities and addressing challenges in AMR containment. The country developed a National Action Plan on AMR (NAP-AMR) 2017–2022 to guide implementation of AMR containment activities and, in 2019, established an MSC AMR Committee, also known as the National AMR Technical Working Group (TWG), to plan, implement, and monitor AMR interventions in the country. However, the committee’s work was hampered by COVID-19 pandemic restrictions, which made it difficult for it to meet regularly.

The AMR TWG is hosted by the Nigerian Centre for Disease Control (NCDC). In line with the One Health approach, which calls for multisectoral collaboration on AMR across the human health, animal health and environment sectors, the AMR TWG includes representatives of these three sectors, as well as relevant associations, academic institutions, and nongovernmental organizations. The AMR TWG’s secretariat leads implementation of AMR containment activities. When the MTAps program began its work in Nigeria in 2021, NAP-AMR implementation was under way.

Although each of the relevant ministries had identified a lead for AMR, a marked lack of collaboration between the animal health sector, human health sector, and the environmental sector hindered their progress. No systems existed for communication and collaboration between the sectors. The AMR TWG secretariat and overall governance structure for NAP-AMR implementation remained relatively weak and lacked clear terms of reference (TOR).

Technical Approach

MTaPS’ activities to strengthen MSC for the implementation of Nigeria’s NAP-AMR have been guided by the WHO JEE 2.0 tool (2018) and the WHO Benchmarks for International Health Regulations (IHR) Capacities (2019).⁴ These tools are designed to help countries identify and implement recommended actions and measure progress in key GHS technical areas, including MSC on AMR. The JEE and WHO benchmarks categorize the country’s capacities into 5 capacity levels, ranging from 1 (no capacity) to 5 (sustainable capacity).⁵

Aligned with the WHO benchmarks, MTAps supports countries in building their capacity for MSC by strengthening governance of MSC-AMR bodies, facilitating NAP implementation by MSC-AMR bodies, and improving institutionalization and sustainability of MSC actions.

Stakeholder Engagement

To strengthen MSC, MTAps collaborated with the WHO; the US Centers for Disease Control and Prevention; the Food and Agriculture Organization (FAO); the Federal Ministry of Health Directorate of Hospital Services and Directorate of Public Health; the Federal Ministry of Agriculture and Rural Development; the National Agency for Food and Drug Administration and Control; the Federal Ministry of Environment; the NCDC; the National AMR TWG; the National AMR Secretariat; the National AMR Control Coordinating Body; and the Enugu and Kebbi

² AMS aims to ensure appropriate use of antibiotics, avert inappropriate prescribing and dispensing practices, and deter self-medication.

³ Abiodun Egwuenu et al. Antimicrobial Use and Resistance in Nigeria: Situation Analysis and Recommendations, 2017. Available from: https://www.researchgate.net/publication/323908212_Antimicrobial_use_and_resistance_in_Nigeria_situation_analysis_and_recommendations_2017.

⁴ International Health Regulations (IHR) (2005), an instrument of international law that is legally binding in 196 countries, establishes rights and obligations for countries related to reporting, surveillance, and response to public health events, with the aim of protecting public health globally. IHR covers 19 technical areas, including AMR.

⁵ The benchmark activities and levels for MSC, IPC, and AMS are detailed at <https://ihrbenchmark.who.int/document/3-antimicrobial-resistance>. See Benchmarks 3.1, 3.3, and 3.4.

state Ministry of Health (MOH), Ministry of Agriculture, and Ministry of Environment.

Intervention

In February 2021, the AMR TWG formally recognized MTaPS as a partner supporting Nigeria in the implementation of interventions to contain AMR. In this role, MTaPS implements activities to strengthen governance structures and institutional capacity for MSC on AMR.

Reviewing the NAP-AMR

MTaPS supported the national AMR secretariat in carrying out a review of Nigeria's 2017–2022 NAP-AMR implementation. Stakeholders from all relevant sectors took part in the review, which resulted in a comprehensive report to the national AMR coordinating committee. The report findings, including implementation gaps and recommendations identified during the review are guiding the development of an updated NAP-AMR for Nigeria. MTaPS is providing technical support to the multisectoral committee in developing this new costed NAP-AMR 2023–2028 and its monitoring framework, which is expected to be completed in early 2024.

Advocating for Improved MSC

MTaPS also carried out advocacy visits to MOH leadership in the two MTaPS-supported states (Enugu and Kebbi) to encourage them to lead MSC efforts to bring together all relevant AMR stakeholders, including the animal health, environment, and food sectors. Advocacy visits enabled improvement of stakeholders' understanding of their roles in preventing and containing AMR and helped them to feel their voices are being heard. Following the advocacy to the state AMR stakeholders, AMR MSC has been set up and is operational in one of the MTaPS-supported states, while the second supported state has put the necessary mechanism in place to set up its multisectoral AMR coordinating structure.

Revitalizing the TWG subcommittees for strengthened MSC

MTaPS focuses its capacity development activities on building and strengthening the AMR TWG's subcommittees for AMS and IPC. TWGs depend on regular engagement of members to crystallize planned actions and drive their agendas forward. However, since the TWG was established in 2017, the TWG

subcommittees in AMS and IPC were largely inactive and had held only one meeting—virtually.

As a first step in bolstering subcommittee capacity, MTaPS, in partnership with the NCDC, held a retreat for members of the AMS subcommittee and one for members of the IPC subcommittee. Participants in the retreat included 25 members from each subcommittee, representing the human, animal, and environmental sectors, as well as the private sector and civil society.

The retreats helped subcommittee members to better understand their roles and responsibilities, explore the challenges affecting the groups' functionality, and plan for better multisectoral engagement going forward. During the workshops, each subcommittee developed a TOR and a work plan based on priority activities from the NAP-AMR. Since the retreats, with MTaPS support, subcommittees have held their own regular meetings ahead of the routine quarterly TWG meetings to keep abreast of developments at the AMR TWG secretariat, track progress of activities/implementation, and discuss relevant issues to shape the technical direction of the TWG.

“For Nigeria to get it right with the fight against antimicrobial resistance, the critical issues of access and responsible use for antimicrobials must be addressed. This retreat has spawned brilliant ideas that I believe will move us forward in this fight.”

Dr. Oluwadamilola Abiodun-Adewusi, National Agency for Food and Drug Administration and Control, Lagos (Statement made during the March 2021 AMS subcommittee workshop)



Members of AMR TWG AMS team in Nasarawa. Photo credit: MTaPS Nigeria

Results and Achievements

Since the inception of MTaPS' program in Nigeria in 2021, MTaPS has supported the engagement of critical stakeholders in MSC on AMR and has contributed to the review of MSC activities and progress through regular meetings of the AMR TWG subcommittees. MTaPS' review of the current NAP-AMR (2017–2022) and its recommendations are a first step in supporting Nigeria in developing the next multisectoral NAP-AMR (2023–2028).

The governance structure of the AMR TWG and its subcommittees, strengthened with MTaPS support, is a critical driver of MSC in Nigeria. The structure has fostered an improved working relationship between the human and animal health sectors. The animal sector focal person and other members of the animal sector team now actively participate and have stepped up to lead the MSC and AMR coordinating committee meetings, and they have participated in joint development of governance tools, such as the One Health National AMS Plan and the national IPC strategic plan.

The ongoing development of the Nigeria NAP-AMR 2023–2028 reflects the new dynamics of MSC among the animal health, human health, environment, and food and plant sectors. MTaPS' support to the AMR TWG has helped in fostering positive collaboration among these key AMR stakeholders in Nigeria, with the

potential to improve the collective ownership of the 2023–2028 NAP-AMR, which will contribute to improved MSC in NAP-AMR implementation.

Lessons Learned

MTaPS identified several enablers that facilitated MSC for AMR containment in Nigeria, as follows:

Advocacy increases stakeholder buy-in. Advocacy was key in driving MSC across all levels—federal, state, and local. Advocacy visits to stakeholders increase understanding of both parties, which contributes to improved program design and stakeholders feeling heard. This helps stakeholders feel like equal partners in containing AMR and makes them more likely to contribute. Advocacy is also crucial for gaining government approvals and funding support. To increase awareness and understanding of the multisectoral AMR agenda, MTaPS and the AMR TWG secretariat have made joint advocacy visits to introduce AMR work to the state MOH leadership and to Chief Medical Directors of selected health care facilities.

Proactive approaches help engage sectors beyond human health in AMR. The human health sector generally drives AMR response, with other sectors sometimes reluctant to play an active role in activity implementation if they did not have a say in activity design. MTaPS supported the incorporation of the animal health sector by following up with the

Ministry of Agriculture and emphasizing the importance of its role working in concert with the human health and environment sectors to jointly lead the effort to address AMR challenges. Furthermore, MTaPS ensured that the animal and environment sector representatives jointly drove AMR meetings as equal partners of the multisectoral committee. MTaPS' sustained advocacy effort culminated in the joint development of the first national AMS plan by the tripartite sectors (human, animal, and environment), with all key stakeholders accepting ownership of this important national document.

Systematizing mechanisms for MSC enables key actors to drive AMR actions. This can be achieved by ensuring that TWG subgroups convene regularly by establishing regular meetings for multisectoral partners to collaborate, clearly defining stakeholder roles and responsibilities of attendees, and utilizing these platforms to identify actionable items to improve MSC.

Buy-in for MSC AMR can be strengthened by aligning approaches. For example, when donors align their interventions with the NAP-AMR (which reflects country AMR priorities), it is easier for national, state, and local bodies to get on board with country AMR priorities. MTaPS ensured that the priorities of sectoral partners were given due consideration in the design and development of national documents. This approach gave the sense of co-creation and not mere implementation of strategies handed down by others.

Leadership skills are necessary for MSC AMR bodies to fulfill their roles. MTaPS' capacity-building support to MSC AMR bodies on leadership, as well as on governance and oversight, helped these bodies step up and better coordinate their members. At the state level, MTaPS supported the AMR TWG secretariat to provide training on leadership skills in different focal areas of AMR. At the national level, the WHO collaborated with the quadripartite team leading the NAP development, which included MTaPS, to provide leadership training to key stakeholders in AMR in Nigeria.

Pathway to Sustainability

As a result of support from MTaPS and other partners, the AMR TWG secretariat and subcommittees have operational governance structures, and the IPC and AMR subcommittees have work plans in place and are implementing them. MSC, though not perfect, is a reality, with the animal and human health sectors both playing an active role in containing AMR.

The governance structures and regular communications channels institutionalized with MTaPS' support serve as enablers for MSC sustainability. Although MTaPS provided the initial jumpstart support to the AMR TWG and its subcommittees at these in-person retreats, it has since transitioned its support for quarterly AMR TWG subcommittee meetings to the National AMR Secretariat to promote sustainability. To achieve long-term sustainability, increased domestic support, including funding, will be needed to sustain the AMR agenda. Nigeria can take steps in this direction by mainstreaming AMR work in broader agendas which already have support in the country, including universal health coverage.

Conclusions

AMR stakeholders cannot work effectively in silos. With MTaPS support, Nigeria has strengthened the capacity of MSC governance bodies at the national level and fostered coordination between sectors for effective action on AMR. Over the remainder of the project, MTaPS will support ongoing capacity building of the AMR TWG subcommittees, promote further collaboration with animal health institutions, and advocate for government funding to make regular meetings of the AMR governing bodies sustainable. Moreover, MTaPS will work to establish AMR TWGs at the state level to mobilize state-level stakeholders in MSC. With ongoing effort, the country's MSC AMR bodies can foster equal engagement of the animal health and environment sectors and continue to expand the MSC AMR governance structure to the state level. Moving forward, to further multisectoral ownership, Nigeria may want to make the AMR TWG secretariat rotational across the ministries of health, agriculture, and environment, rather than keeping it permanently based in the MOH.

References

Abiodun Egwuenu et al. Antimicrobial use and resistance in Nigeria: situation analysis and recommendations, 2017.

Available from:

https://www.researchgate.net/publication/323908212_Antimicrobial_use_and_resistance_in_Nigeria_situation_analysis_and_recommendations_2017

Federal Ministry of Health, Federal Ministry of Agriculture and Rural Development. Federal Ministry of Environment. National Action Plan for Antimicrobial Resistance 2017–2022. Available from:

https://ncdc.gov.ng/themes/common/docs/protocols/77_1511368219.pdf

Federal Ministry of Health, Federal Ministry of Agriculture and Rural Development. Federal Ministry of Environment. One Health Strategic Plan 2019–2023. Available from:

https://ncdc.gov.ng/themes/common/docs/protocols/93_1566785462.pdf.

Federal Ministry of Agriculture and Rural Development, Federal Ministry of Environment and Federal Ministry of Health. Antimicrobial Use and Resistance in Nigeria: Situational Analysis and Recommendation. Available from:

https://ncdc.gov.ng/themes/common/docs/protocols/56_1510840387.pdf

MTaPS. A Technical Guide to Strengthening the Multisectoral Coordination Body to Address Antimicrobial Resistance in MTA PS Program Countries. Available from:

<https://www.mtapsprogram.org/wp-content/uploads/2021/03/USAID-MTA PS-Check-list-on-Implementing-Multisectoral-Coordination-on-AMR.pdf>

MTaPS. May 10, 2021. Rejuvenation of Antimicrobial Resistance Activities in Nigeria. Available from:

<https://www.mtapsprogram.org/news-blog/rejuvenation-of-antimicrobial-resistance-activities-in-nigeria/>

Acknowledgement

Thank you to the staff from MTA PS Nigeria for their support in the development of this technical brief.

Authors

This publication was written by Kabir Abdullahi; Babatunde Akinola; Emeka Okechukwu, Senior Integrated Health Program Specialist, Health Population & Nutrition (HPN) Office; and Homsuk Swomen, Senior Global Health Security Management Specialist, USAID.

For more information, please contact memory@msh.org

About USAID MTA PS:

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.



USAID
FROM THE AMERICAN PEOPLE

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.