MTaPS staff provide training on improving antimicrobial stewardship at Kiwoko Hospital.
Photo credit: John Paul Waswa, MTaPS Uganda

Progressing Towards a Higher Joint External Evaluation Capacity Level for Uganda

Technical Brief | October 2021 | UGANDA

Improving WHO Benchmarks for IHR Capacities

Background

As an early member of the Global Health Security Agenda (GHSA) and signatory to the International Health Regulations (IHR), Uganda has shown commitment to supporting the fight against the emergence and spread of antimicrobial resistance (AMR). However, it still contends with resistant microbes, e.g., over 30% of surgical-site infections are from resistant microbes and 58% of isolates from nosocomial infections in intensive care units are multi-drug resistant.[1] The US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program's goal in Uganda is to slow the emergence and spread of AMR by building the capacity of country stakeholders through a system-strengthening approach. MTaPS' efforts towards the containment of AMR are guided by evidence-based international tools, including the World Health Organization (WHO) Joint External Evaluation (JEE) Tool (version 2.0, 2018) and the 2019 Benchmarks for International Health Regulations (IHR) Capacities to build Uganda's national capacity for multisectoral coordination (MSC), infection prevention and control (IPC), and antimicrobial stewardship (AMS).

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[1] Seni et al.: Antimicrobial resistance in hospitalized surgical patients: a silently emerging public health concern in Uganda. BMC Research Notes 2013 6:298. https://bmcresnotes.biomedcentral.com/track/pdf/10.1186/1756-0500-6-298.pdf

Key actions by MTaPS include implementing Uganda's National Action Plan (NAP) on AMR and making progress toward a higher JEE score by completing the recommended actions in the IHR.

Problem Statement/Challenge

JEE 2 is a WHO tool designed to help countries assess their health security preparedness.[2] Uganda conducted its first JEE assessment in 2017 in collaboration with WHO, scoring capacity 3 for both IPC and AMS.[3] Despite its efforts, Uganda has not yet fully met the required core capacities under the IHR to prevent, detect, and respond to public health emergencies.

Technical Approach

MTaPS' GHSA approach addresses AMR challenges as a multifaceted and systemic issue. Addressing AMR requires strong health and pharmaceutical systems-strengthening strategies and actions to achieve higher JEE capacity levels and sustainability. Higher JEE scores in IHR for Uganda require action in various AMR intervention areas, including MSC, IPC, and AMS.

Intervention

To support improved capacities in MSC, IPC, and AMS, MTaPS focused on strengthening leadership for AMR at the national level through the national AMR sub-committee (NAMRsC) of the One Health Platform and its IPC and AMS technical working committees (TWCs); at the health-facility level through the AMS and IPC committees; and at the district level through district IPC teams. MTaPS also worked with NAMRsC on a gap analysis to help address bottlenecks to NAP implementation. Capacity building included the use of evidence-based tools for assessment and monitoring of progress in the three areas.

Dr. Henry Kajumbula, Chair of the NAMRsC, launching the Uganda National Students' AMR Charter, July 9, 2022. Photo credit: MTaPS Uganda
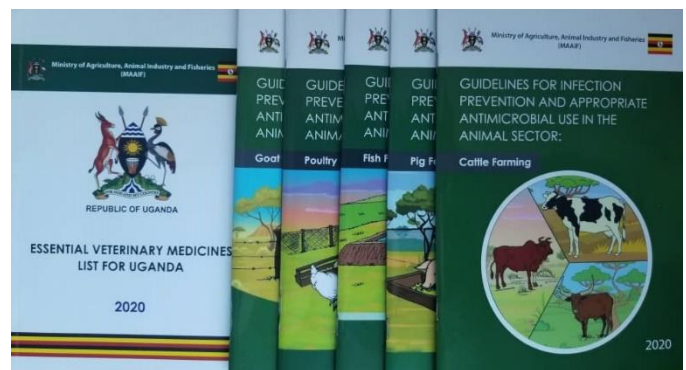
Key documents developed for the animal sector with MTaPS support. Photo credit: MTaPS Uganda

In MSC, MTaPS helped bridge gaps between the human health and agriculture sectors by developing key documents to guide policy, e.g., an Essential Veterinary Medicines List; messages on AMR in the agricultural sector; and guidelines on infection control and antimicrobial use in the agricultural sector. Also, government ownership of MSC was strengthened to promote strong governance for the national program on AMR and transparent and accountable approaches (e.g., the NAMRsC) for continued government support for AMR-related actions.

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[2] The JEE covers 19 technical areas and is a "voluntary, collaborative, multisectoral process to assess country capacities to prevent, detect and rapidly respond to public health risks whether occurring naturally or due to deliberate or accidental events," according to the WHO. The purpose of the assessment is to "evaluate country-specific status, progress in achieving the core capacity requirements…, and recommend priority actions to be taken across the 19 technical areas being evaluated. The JEE process helps countries identify the most critical gaps within their human and animal health systems, to prioritize opportunities for enhanced preparedness and response, and to engage with current and prospective partners and donors to effectively target resources."

[3] Joint External Evaluation of IHR core capacities of the Republic of Uganda Mission report: June 26-30, 2017.
https://apps.who.int/iris/handle/10665/259164

In IPC and AMS, continuous quality improvement plans were implemented at centers of excellence and then cascaded to lower-level health facilities to implement locally prioritized activities and advance the AMR containment learning agenda. Also, MTaPS created a learning ecosystem in which targeted interventions at health facilities were implemented to promote mutual knowledge sharing. The Ministry of Health and other USAID implementing partners (IPs) were supported to use the centers of excellence as learning hubs for IPC and AMS.

Stakeholder Engagement

MTaPS works with the Government of Uganda (GoU); national AMR governance institutions; select health facilities; educational institutions and professional organizations; and USAID IPs to promote synergies.

Results and Achievements

MTaPS supported 6 out of 17 WHO benchmark actions for MSC from March 2019 to September 2022, with two actions planned in 2023 (table 1). This will help Uganda reach capacity level 4 on MSC, based on the WHO benchmarks tool (2018).

Table 1: WHO benchmark actions on MSC supported by MTaPS

MSC/AMR (P.3.1) – WHO Benchmark Actions	Mar 2019-Sep 2022	Oct 2022-June 2023
Limited capacity (2)		
1 Establish a national multisectoral AMR coordinating committee	X	
2 Undertake a situation analysis to identify major risks for AMR*		
3 Identify AMR programs/activities that need to be developed or scaled up	X	
4 Identify a health ministry lead for AMR, develop TOR, and coordinate activity of the ministries	X	
Developed capacity (3)		
5 Develop a plan to address AMR in line with the Global Action Plan*		
6 Submit a plan for approval through governance bodies*		
7 Develop TOR for a multisectoral governance mechanism	X	
8 Organize effective coordination through regular meetings	X	
Demonstrated capacity (4)		
9 Identify priority actions, develop an implementation plan, and begin implementation*		
10 Develop and implement an AMR NAP monitoring framework*		

MSC/AMR (P.3.1) – WHO Benchmark Actions	Mar 2019-Sep 2022	Oct 2022-June 2023
11 Review plans and progress through regular meetings of the AMR governance committee	X	
12 Identify and map sustained funding for planned activities in the AMR NAP		X
Sustainable capacity (5)		
13 Dedicate sustained funding for planned activities in the AMR NAP		
14 Ensure that key activities are incorporated into plans and budgets of programs and agencies		
15 Ensure regular monitoring of progress with data submitted to regional and global levels		X
16 Define clearly specified actions within planning and governance mechanisms for all key sectors involved		
17 Identify potential barriers and/or challenges to implementing the NAP and approaches to overcome these barriers		

* Actions supported by partners

MTaPS supported 16 out of 21 WHO benchmark actions for IPC from March 2019 to September 2022, with one action planned in 2023 (table 2). Uganda is expected to achieve capacity level 4 on IPC.

Table 2. WHO benchmark actions on IPC supported by MTaPS

IPC (P.3.3) – WHO Benchmark Actions	Mar 2019-Sep 2022	Oct 2022-Sep 2023
Limited capacity (2)		
1 Review WHO recommendations on IPC core components	X	
2 Use IPC assessment tools (IPCAT2, IPCAF) and identify precise areas/core components requiring action	X	
3 Develop and implement an action plan, informed by assessment	X	
4 Establish a national IPC committee/TOR and local IPC committees	X	
5 Develop a national IPC policy and plan for animal health	X	
Developed capacity (3)		
6 Develop national IPC guidelines for human and animal health sectors	X	
7 Identify and allocate adequate resources to support selected health facilities/farms to implement IPC action plans/guidelines	X	
8 Use IPCAF/IPCAT2 to identify additional activities	X	
9 Implement the action plan, informed by assessment results	X	
10 Train adequate healthcare workers (HCWs) on issued guidelines	X	

IPC (P.3.3) – WHO Benchmark Actions	Mar 2019-Sep 2022	Oct 2022-Sep 2023
11 Monitor IPC and water, sanitation, and hygiene (WASH) implementation in selected health care facilities by using IPCAF, HHSAF, HH compliance observation tools, WASH FIT tool	X	
Demonstrated capacity (4)		
12 Use IPCAT2 to identify precise areas still requiring action and update the plan of action	X	
13 Mandate and support IPC improvement at all health care facilities, recommending the use of IPCAF and WASH FIT tool and AMS*	X	
14 Update and implement action plans, informed by assessment results and following the five-step cycle	X	
15 Include specific interventions for AMR prevention tailored to the local epidemiological situation in these plans*		
16 Share plans with national, sub-national, and local IPC committees and incorporate guidance from them	X	
Sustainable capacity (5)		
17 Provide effective support to healthcare facility IPC programs nationwide		
18 Ensure that healthcare facilities undertake annual IPCAF and WASH FIT assessments as part of their review cycle to address long-term sustainability	X	
19 Establish a national system for continuous monitoring of progress in fulfilling the IPC core components (i.e., repeat assessments at least annually) and keep track of changes and scores and develop a long-term improvement plan*		
20 Analyze and regularly report national IPC and WASH data and support discussions on actions to incorporate lessons learned in the long-term improvement plan		X
21 Document the incidence of patient and HCW infections, including M. tuberculosis, and the effectiveness of measures to reduce their occurrence		

* Actions supported by partners

MTaPS supported 9 out of 24 WHO benchmark actions for AMS from March 2019 to September 2022, with one action planned in 2023 (table 3). Uganda will be at capacity level 2 for AMS as the National AMS Plan, Essential Medicines List (EML), and Clinical Guidelines have not been updated.

Table 3. WHO benchmark actions on AMS supported by MTaPS

AMS (P.3.4) – WHO Benchmark Actions	Mar 2019-Sept 2022	Oct 2022-Sep 2023
Limited capacity (2)		
1 Assess stewardship policies, industry regulatory framework, and supply chain management of antimicrobials by using multisectoral approach	X	
2 Review the EML and clinical guidelines that promote appropriate use		
3 Assess existing monitoring of AMU and consumption	X	
4 Develop a draft national AMS plan/strategy and national legislation that regulates use, availability, and quality of antimicrobials		
Developed capacity (3)		
5 Develop/update and disseminate national stewardship and clinical treatment guidelines that include access, watch, and reserve (AWaRe) classification		
6 Implement stewardship practices at designated healthcare facilities	X	
7 Establish standard operator procedures, protocols, and databases for monitoring AMU in humans and animals	X	
8 Implement AMS programs, including monitoring AMU, education/communication, and other interventions to improve antibiotic use at designated facilities	X	
9 Develop or review national regulatory framework for appropriate use of antimicrobials in humans		
10 Approve and enact legislation and regulations on import, marketing authorization, production, and use of antimicrobials		
Demonstrated capacity (4)		
11 Develop and disseminate information, education, and communication materials on drug resistance and drug use across human and animal sectors	X	
12 Monitor and evaluate stewardship programs conducted, including the analysis of AMU data	X	
13 Develop a national regulatory framework for appropriate use of affordable, quality-assured antimicrobials in humans and animals		
14 Expand AMS activities to all healthcare facilities		
15 Recommend and implement phasing out antimicrobials used for animal growth promotion		
16 Map existing legislation and begin review process for coherence	X	
17 Develop and implement legislation on prescription-only sales of key antibiotics		

AMS (P.3.4) – WHO Benchmark Actions	Mar 2019- Sept 2022	Oct 2022- Sep 2023
Sustainable capacity (5)		
18 Measure antibiotic use and assess appropriateness	X	X
19 Continue to monitor AMS activities and update the national stewardship plan on a timely basis and publicly report on the results		
20 Track antibiotic dispensing and set national targets for improvement		
21 Monitor antibiotic quality and address drivers of prescribing behaviors		
22 Implement a national regulatory framework for the appropriate use of affordable, quality-assured antimicrobials in humans and animals		
23 Monitor prescription-only sales of key antibiotics		
24 Complete the review of legislation and enact amendments to make legislation coherent		

Lessons Learned

- Buy-in from all stakeholders from the start (e.g., during planning) is key to successful program implementation because it promotes stakeholder commitment. Some MTaPS activities were delayed or cancelled because of a realignment of GoU priorities that was due partly to a lack of initial buy-in.
- Political commitment and leadership are pivotal in program implementation. Political leadership will also ensure continuity of implementation.
- Working with USAID IPs to help those partners utilize AMR tools in their respective programs can maximize resources and opportunities toward a common goal.

Pathway to Sustainability

MTaPS helps institutionalize activities at the ministry and health facility levels; supports synergies with other USAID IPs in GHSA through catalytic technical assistance; and builds GoU capacity to implement sustainable AMR programs. Also, human resources are being strengthened by working with medical schools, students, and professional associations, and by incorporating AMR in curricula.

Recommendations

- Include key JEE indicators in the annual national health sector performance review to increase how comprehensively these indicators are addressed as health programs are implemented. Currently, IPC and AMS are not in the performance review.
- Strengthen the multi-sectoral approach for JEE capacity building by coordinating IPs working in AMR to foster synergies and avoid redundancy. IPs could identify similar interests/implementation areas to harness their efforts for greater output.
- Increase knowledge of and capacity in JEE for in-country human resources, as it is not well understood by HCWs and policy makers.

Conclusions

MTaPS' systems-strengthening approach has contributed to capacity building within the Uganda AMR space, with various stakeholders at the national and facility levels able to use evidence-based tools to assess program status and develop improvement plans. Through this approach, MTaPS has supported Uganda's progress towards a higher JEE score, as demonstrated by the increasing number of WHO Benchmark actions for IHR capacities completed. As of September 2022:

- MTaPS has supported 75% of capacity level 2 WHO IHR benchmark actions, 50% of level 3 actions, 50% of level 4 actions, and 20% of level 5 actions for MSC.
- MTaPS has supported 100% of capacity level 2 WHO IHR benchmark actions, 100% of level 3 actions, 80% of level 4 actions, and 20% of level 5 actions for IPC.
- MTaPS has supported 50% of capacity level 2 WHO IHR benchmark actions, 50% of level 3 actions, 43% of level 4 actions, and 14% of level 5 actions for AMS.

Going forward, efforts to ensure the sustainability of investments and developed capacity need to be considered as part of national AMR programming.

References

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