

USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program

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Improved Services.
Better Health Outcomes.



Facility infection prevention and control (IPC) assessment, August 2019.
Photo credit: Alphonse Acho, MTaPS Cameroon

MTaPS COUNTRY SUMMARY REPORT CAMEROON (2018–2025)

About USAID MTaPS

The US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program (2018–2025) enables low- and middle-income countries to strengthen their pharmaceutical systems, which are essential to establishing higher-performing health systems and achieving better health outcomes. The program is implemented by a consortium of global and local partners, led by Management Sciences for Health (MSH), a global health nonprofit.

Learn more at
<https://www.mtapsprogram.org/>

INTRODUCTION

The US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program enables low and middle-income countries to strengthen their pharmaceutical systems, which are critical for ensuring access to and appropriate use of safe, effective, quality-assured, affordable medicines, vaccines, health technologies and products, and related pharmaceutical services to improve health. MTaPS' objectives are to: (1) strengthen pharmaceutical sector governance; (2) increase institutional and human resource capacity for pharmaceutical management and services, including regulation of medical products; (3) increase availability and use of pharmaceutical information for decision making and advance the global learning agenda; (4) optimize pharmaceutical sector financing, including resource allocation and use; and (5) improve pharmaceutical services, including product availability and patient-centered care, to achieve desired health outcomes.

MTaPS employs a pharmaceutical systems strengthening (PSS) approach to identify and implement strategies and actions that achieve coordinated and sustainable improvements of a pharmaceutical system to make it more responsive and resilient for achieving better health outcomes. The MTaPS approach emphasizes locally led development, country ownership, and self-reliance to support countries on the pathway to sustainability.

At the country level, the MTaPS approach is adapted to the specific context, national health system strengthening strategies, and USAID's vision and support. In Cameroon, from 2018 to 2025, MTaPS provides technical assistance to the Ministry of Public Health (MOPH) to strengthen pharmaceutical systems and services in three areas—multisectoral coordination (MSC) on antimicrobial resistance (AMR), infection prevention and control (IPC), and antimicrobial stewardship (AMS)—which fall under the broad Global Health Security Agenda (GHSa) and comply with the World Health Organization (WHO) International Health Regulations (IHR, 2005); COVID-19 response including vaccination; and malaria control in alignment with the US President's Malaria Initiative (PMI).



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CHALLENGES

- Insufficient capacity in IPC and AMS for health security
- Lack of AMR policies and regulations; NAP-AMR (2018–2020) not implemented
- Misuse and overuse of antimicrobials
- Poor compliance with IPC practices in both the human and animal sectors
- Absence of an HCAI surveillance and control program
- Lack of capacity to urgently implement appropriate IPC measures during the COVID-19 pandemic
- Low capacity of MOPH to finance COVID-19 vaccination activities
- Poor quality of antimalarials on the market due to the low maturity level of DPML



PARTNERS

- Ministry of Agriculture and Rural Development
- Ministry of Environment, Protection of Nature and Sustainable Development
- Ministry of Livestock, Fisheries and Animal Husbandry
- Ministry of Public Health (MOPH)
 - Directorate of Pharmacy, Medicines and Laboratories (DPML), Directorate of Disease Control, Epidemics and Pandemics, Directorate of Health Promotion, National Public Health Observatory, National Public Health Laboratory, Expanded Program on Immunization
- University of Buea
- Association of Microbiologists in Cameroon
- Cameroon Society of Infectiology
- Cameroon Society of Microbiology
- Cameroon Society of Pediatrics
- National Order of Pharmacists of Cameroon
- National Order of Medical Doctors of Cameroon
- National Order of Dentists of Cameroon
- National Order of Medical and Health Professions
- National Procurement Centre for Essential Drugs and Medical Devices (CENAME)
- African One Health University Network
- Breakthrough Action
- Food and Agricultural Organization
- Infectious Disease Detection and Surveillance
- World Health Organization (WHO)

COUNTRY CONTEXT

Despite Cameroon's firm commitment to meeting GHSA standards and complying with the WHO's IHR (2005), the Joint External Evaluation (JEE v.1) conducted in 2017 by WHO rated Cameroon as having "no capacity" (score 1) in IPC and AMS. The evaluation highlighted a lack of coordination among responsible government sectors, and insufficient policies and regulations to effectively address the drivers of AMR. A One Health National Action Plan against AMR (NAP-AMR) 2018–2020 was developed in response but was neither formalized nor implemented due to limited support and resource allocation. The IPC program faced serious weaknesses, including the absence of a national IPC plan and coordination structures, poor compliance with IPC standards, and inadequate health care waste management. Frequent health staff turnover, misuse of antimicrobials in the human and animal sectors, and poor control of health care-associated infections (HCAI) were pressing issues.

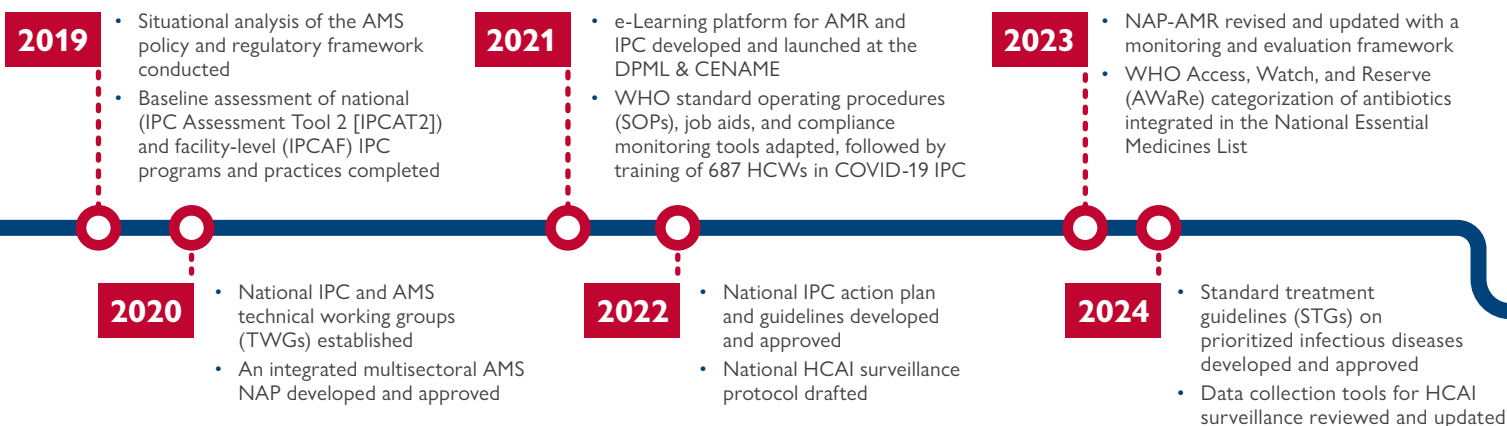
The COVID-19 pandemic exposed significant IPC challenges, leading to increased cases and deaths, exacerbated by the lack of IPC capacity and coordination in health facilities (HFs) to mount a local response. There was also a pressing need for health care worker (HCW) training on COVID-19 vaccine administration and waste management. For malaria control, the MOPH adopted artemisinin-based combination therapy as the first-line treatment due to resistance issues. However, the Directorate of Pharmacy, Medicines and Laboratories (DPML) operated at a minimal maturity level (ML 1), lacking the capacity to effectively control drug quality.

STRATEGIC APPROACH

MTaPS' approach focused on addressing government-defined priorities in global health security and the COVID-19 response in harmony with donor strategies, such as USAID's strategy for strengthening pharmaceutical systems and the U.S. COVID-19 Global Response and Recovery Framework.¹ In Cameroon, MTaPS collaborated with national partners to support AMR containment; mitigate COVID-19 transmission by improving IPC practices; and accelerate widespread delivery of safe and effective COVID-19 vaccinations. Under PMI, MTaPS collaborated with national partners to strengthen the regulation of medical products and enhance capacity for product registration, including antimalarial products, using the WHO Global Benchmarking Tool (GBT) to guide and assess progress toward establishing a stable, well-functioning regulatory system and eventually attaining WHO ML 3.²

The approach emphasizes alignment with national policies and plans (e.g., the NAP-AMR); leveraging local data-driven insights from sources like the JEE and IPC Assessment Framework (IPCAF); alignment with global evidence-based guidelines, e.g., WHO's manuals, frameworks, and tools; synergistic collaboration and coordination among government ministries, agencies, multinationals, and experts from both the public and private sectors; leveraging the existing health systems and infrastructure; and developing electronic systems such as the Open Regulatory Information Management System (OpenRIMS) to streamline pharmaceutical product registration applications, improve drug quality control, and build capacity using innovative methods.^{3,4,5,6} The strategic approach focuses on institutionalization and sustainability, aiming to embed changes within the health system for long-term impact.

KEY MILESTONES



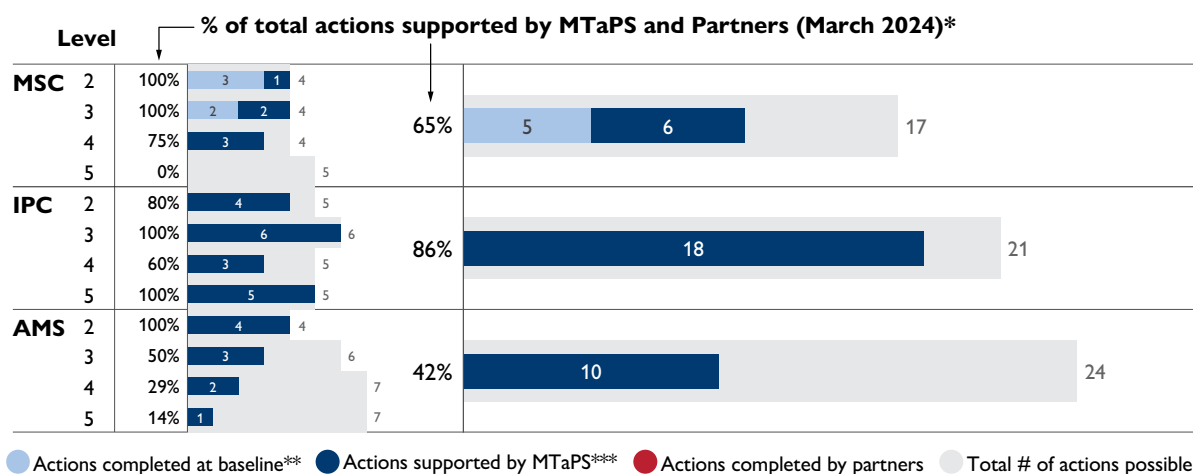
KEY RESULTS



GLOBAL HEALTH SECURITY AGENDA/ANTIMICROBIAL RESISTANCE (GHS/AMR)

Cameroon received a score of level 1 (no capacity) for both IPC and AMS during the baseline JEE conducted in September 2017. The version of the JEE tool used for this evaluation did not have an MSC indicator. During program commencement in 2019, MTaPS used the WHO Benchmarks for IHR Capacities (2019) tool to conduct a situational analysis. This analysis showed that the country at that time had partially or fully addressed 5/17 (29%) benchmark actions in MSC, 0/21 (0%) actions in IPC, and 0/24 (0%) actions in AMS.

Over the life of the project, MTaPS collaborated with and provided technical assistance to national counterparts to fully or partially address additional benchmark actions based on the second edition of the JEE (2018) and the 2019 benchmarks tool. The figure below provides the percentage of benchmark actions fully or partially completed with MTaPS support and actions completed with support from other partners, as of March 2024.



*Total number of actions completed include both fully and partially completed actions based on the WHO Benchmarks for IHR Capacity 2019
 **Actions assessed to have been completed at baseline is MTaPS initial situational analysis using the WHO Benchmarks for IHR Capacities 2019 tool, not an official JEE score
 ***MTaPS supported actions may have been completed with or without the additional support of other partners

Figure 1. Number of WHO Benchmarks for IHR Capacities (2019) completed at baseline, supported by MTaPS, and completed by partners for each of the technical areas from levels 2 to 5 and their cumulative counts



Effective Multisectoral Coordination on Antimicrobial Resistance

- 11/17 (65%) benchmark actions achieved between 2019 and 2024 to strengthen the collaborative and cross-sector response to AMR.
- AMR-TS and TWGs established and meet regularly to coordinate and monitor AMR activities, enhance AMR awareness, and strengthen MSC.
- NAP-AMR 2018–2020 reviewed and updated to guide long-term implementation of AMR containment activities from 2024 to 2028.
- Monitoring framework for the NAP-AMR developed and implemented to guide effective implementation of AMR containment activities.
- One Health Platform regulatory framework reviewed and updated to streamline One Health implementation.
- IPC e-Learning content developed and uploaded onto the DPLM/CENAME e-Learning platform through which 60 professionals have completed the course as of April 2024.
- e-Learning course content for AMR developed for a master's degree program and as a short course to continually build a workforce to tackle AMR.
- AMR awareness increased by educating the public, including health workers, and disseminating key messages about key drivers of AMR and strategies for containment.



Infection Prevention and Control

IPCAT2 scores
increased
an average of



10% in 2019 to **48%**

in 2023, across six IPC
core components

- Achievement of 18/21 (86%) benchmark actions in IPC to strengthen the prevention and control of AMR and limit the spread of infections in HFs.
- National IPCAT2 scores improved from an average of 10% across six IPC core components in 2019 to 48% in 2023, signaling improved capacity for IPC at the national level.
- IPC national and regional focal points designated to monitor IPC implementation nationwide.
- National IPC guidelines developed, approved, and disseminated to guide IPC practices.
- 45 master trainers and 128 IPC committee members trained to support IPC training in HFs.
 - These master trainers, along with the IPC committee members, cascaded training on IPC and continuous quality improvement (CQI) to 1,174 HCWs to enhance IPC practices and to contribute to the improvement of health care quality.
- Circular letter signed by MOPH mandating all HFs to mobilize funds internally to sustain IPC implementation.
- e-Learning platforms established at the University of Buea and MOPH to sustain pre- and in-service training on IPC and AMR.
- Based on the IPCAF, facility capacity for IPC increased in 11 out of 12 facilities.
 - 11 facilities moved from an inadequate or basic IPC capacity level in 2019 to intermediate (6 facilities) or advanced (5 facilities) capacity by 2024.
- 13 IPC committees were established and capacitated to use CQI for IPC improvement in HFs (MTaPS provided IPC support to 12 facilities and added a 13th facility in 2023).



Use of Antimicrobial Medicines Optimized

- 10/24 (42%) WHO benchmark actions supported between 2021 and 2024 to improve appropriate use of and access to antimicrobials when needed, while reducing inappropriate use.
- Integrated AMS NAP developed and approved by the MOPH and the Ministry of Livestock and Animal Husbandry to guide implementation of AMS activities across human and animal sectors.
- AMS training curriculum developed, approved, and handed over to MOPH and partners to successfully train 239 health staff in AMS.
- National Essential Medicines List revised using the WHO AWaRe categorization to guide AMS and ensure proper antibiotic prescribing, with national STG aligned accordingly.

- National HCAI surveillance protocol and data collection tools developed, and pilot systems established in 13 supported HFs, initially focusing on high-priority infections such as surgical site infections, central line-associated bloodstream infections, ventilator-associated pneumonia, and catheter-associated urinary tract infections, aiming to improve infection control and patient safety.
- Drug and therapeutics committees (DTCs) established in 12 HFs with terms of reference and improvement plans to provide leadership and implement CQI of AMS practices.
- DTCs capacitated using the WHO practical toolkit⁶ adapted by DPML to monitor progress of AMS core elements: 10/12 (83%) HFs attained the basic level, 2/12 (17%) attained the intermediate level, 8/12 (67%) were above the basic level but below the intermediate level, and 2/12 (17%) dropped in points between 2022 and 2023, thus remaining below the basic level.
- 239 health care providers (134 female, 105 male) trained in AMS to improve compliance of HCWs on AMS procedures.
- 11 out of 12 MTaPS-supported facilities have documented evidence of improved antimicrobial prescribing or use practices, with at least 60% of prescribed antibiotics now classified under the WHO AWaRe “Access” category, signaling more appropriate and effective antibiotic use.



COVID-19

- Just-in-time trainings of 1,288 health workers conducted on IPC, including waste management, to limit the spread of COVID-19 in HFs.
- COVID-19 IPC activities monitored in more than 30 HFs using the WHO scorecard to troubleshoot implementation gaps and improve compliance to IPC practices: mean score (out of 800) in 12 supported facilities improved from 302 (basic) in 2020 to 498 (intermediate) in 2022.
- SOPs developed, disseminated, and implemented to improve waste management in HFs.
- COVID-19 IPC training package, SOPs, and job aids developed and disseminated to improve IPC and case management practices in HFs.
- COVID-19 vaccination mass campaign and COVID-19 vaccination in hard-to-reach areas organized in Center, Littoral, and West regions to enlarge vaccination coverage with 683,589 doses administered.
- 140 health professionals from 37 private and faith-based HFs trained on vaccination practices, including COVID-19 vaccine administration, to increase COVID-19 vaccination service provision.
- Biomedical waste management manual developed, adopted, and disseminated in all 10 regions to improve waste management practices.



Malaria

- Guidelines developed for the registration of medical products.
- Marketing authorization variation guidelines produced for the authorization of pharmaceutical products.
- 24 specialists trained on the evaluation of marketing authorization applications for pharmaceutical products to ease and improve effectiveness in the treatment of registration files.
- OpenRIMS implemented for the electronic submission and evaluation of pharmaceutical products registration applications. This will help to facilitate submission and follow-up of registration files, granting marketing authorization, and archiving 200 marketing authorization applications submitted to the OpenRIMS platform.
- Continuous professional development training curricula, including e-Learning modules in supply chain management, developed to complement in-person training of stakeholders.

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“

Before USAID's support, we didn't think that IPC was important. It wasn't uncommon to find trash everywhere inside and outside the hospital, creating a breeding ground for mosquitoes. We were not giving a lot of importance to hand hygiene. MTaPS supported us to become leaders in IPC.”

—Mr. Gnitedem

Nurse Anesthetist and IPC focal point, Mbouda District Hospital



USAID assistance boosts Mbouda Hospital's best practices in IPC

To assess the magnitude of IPC issues in Cameroon, the MOPH, with the financial and technical support of MTaPS and WHO, assessed IPC practices in selected HFs, revealing the absence of trained and dedicated IPC staff. Mbouda Hospital, one of the district hospitals in the West Region of Cameroon, has been struggling with poor IPC practices for years. MTaPS supported IPC training for the hospital staff. Mr. Gnitedem, the principal nurse, became an IPC champion who consistently challenges his colleagues to implement IPC best practices. The hospital is now very clean with hand washing stations across various services. In turn, this help attracts more clients who find it a welcoming hospital. In November 2021, Mbouda Hospital received the prize for being the second cleanest facility in the West Region.



Mr. Gnitedem exhibiting the certificate of the second cleanest HF in the West Region. Photo credit: Alphonse Acho, MTaPS Cameroon

PATHWAY TO SUSTAINABILITY

MTaPS provides technical guidance and supports countries in establishing strategic direction and development of critical capacities on a pathway to sustainable and resilient pharmaceutical systems. Through its activities in-country, MTaPS strengthened the capacity of government and organizations (public, private, and civil society) for improved, locally led, and more sustainable pharmaceutical service delivery, as highlighted below:

- 13 HFs have taken ownership of both IPC and AMS, using CQI approaches introduced by MTaPS to identify gaps and implement interventions. These CQI practices can be replicated in other HFs nationwide, promoting sustainable improvements in infection prevention and AMS and contributing to AMR containment.
- The AWaRe classification is now available to help facilities develop formularies for management of common infectious diseases and to guide antibiotic procurement and distribution at the central level.
- AMR and IPC e-Learning content for a master's degree program and for short courses is now available and accessible to HCWs and students in the e-Learning platforms of the University of Buea (master's degree program) and the DPML (short courses).



PEER-REVIEWED PUBLICATIONS

- Joshi MP, Hafner T, Twesigye G, Ndiaye A, Kiggundu R, Mekonnen N, Kusu N, Berthé S, Lusaya EP, Acho A, Tuala Tuala R, Siddiqua A, Kaboré H, Sadiya Aidara S, Guzman J. [Strengthening multisectoral coordination on antimicrobial resistance: a landscape analysis of efforts in 11 countries](#). J of Pharm Policy and Pract. 2021;14(27).
- Joshi MP, Alombah F, Konduri N, Ndiaye A, Kusu N, Kiggundu R, Lusaya EP, Tuala Tuala R, Embrey M, Hafner T, Traore O, Mbaye M, Akinola B, Namburete D, Acho A, Hema Y, Getahun W, Sayem Md. A, Nfor E. [Moving from assessments to implementation: promising practices for strengthening multisectoral antimicrobial resistance containment capacity](#). One Health Outlook. 2023;5(7).
- Acho A, Toby R, Tandji T, Boris K, Mefoug S, Mapou C, Tambe B. [Assessment of Infection Prevention and Control Programs in Some Health Facilities in Cameroon using the World Health Organization Assessment Framework](#). Texila International Journal of Public Health. 2024;12(2).
- Acho A, Boris K, Tambe B, Toby R, Mendjime P, Abessolo H, Bayong M, Nzoume J, Emtom S, Mvuh H. [Establishing a National Healthcare Associated Infection Surveillance System in Cameroon: Promising Practices and Challenges from Pilot Health Facilities](#). Texila International Journal of Public Health. DOI: 10.21522/TIJPH.2013.12.02.Art028

- The country has an updated NAP-AMR 2024–2028 with a monitoring and evaluation framework to guide the implementation and follow-up of AMR activities.
- MTaPS supported the development of HCAI surveillance tools which are being used by the MOPH.
- Waste management SOP manuals developed and disseminated in all 10 regions serve as a guide for the management of vaccine-related waste.

RECOMMENDATIONS

The Cameroon MOPH is encouraged to:

- Continue to strengthen CQI techniques for IPC and AMS in HFs and scale up activity nationwide.
- Improve data collection and sharing from HFs to central level for evidence-based planning and interventions by integrating data collection tools in DHIS2.
- Invest in the establishment of a National Laboratory Network to strengthen HF infrastructure, especially in the microbiology laboratory, to improve HCAI surveillance.
- Scale up the HCAI surveillance system to other HFs nationwide.
- Support HF DTCs or AMS committees to take responsibility for monitoring antibiotic selection and consumption through repeated assessments.
- Strengthen AMS by mandating ongoing antibiotic use reviews through the national AMS strategic plan, including them in the AMS curriculum, and developing an antibiotic use review guide for HF DTCs to support this process.
- Strengthen MSC by formally establishing a One Health platform with an AMR TWG to coordinate AMR activities.
- Fully implement the OpenRIMS electronic platform to facilitate the online filing, tracking, and archiving of registration dossiers—ensuring national capacity to manage OpenRIMS is essential, and transfer of the developed system to MOPH prioritized.

FUTURE CONSIDERATIONS

- Prioritize investment in AMS and IPC infrastructure and human resource capacity at the HF level to improve quality of health care delivery and reduce AMR and HCAI.
- Leverage the successes in the human sector to strengthen IPC and AMS in the animal sector.
- Strengthen regulatory enforcement bodies to monitor HCW compliance with standard practices as recommended by WHO.
- Strengthen national pandemic preparedness and response by investing in emergency response training for HCWs, upgrading diagnostic and laboratory facilities, developing stockpiles of essential medical supplies, and promoting local production of critical health commodities.
- Invest in improving the maturity level of the national medicines regulatory authority by identifying gaps using the WHO GBT, developing a roadmap for improvement, providing targeted training for regulatory staff, advancing regulatory information management systems, developing comprehensive guidelines and protocols, and collaborating with local and international partners to ensure alignment with local priorities and international standards.
- Support the national scale-up of the HCAI surveillance system by leveraging MTaPS-supported facilities' successes, providing additional training for HCWs, enhancing infrastructure, further advancing and integrating data management systems, and securing sustainable funding and key partnerships.
- Develop an updated NAP-AMR by conducting a thorough analysis of the current plan and utilizing data from HFs and stakeholders to identify shortcomings and address known performance gaps, incorporating specific, measurable targets and actions for sustained AMR containment.
- Engage the private sector in IPC and AMS by revising policies to include private health care providers in national health initiatives, offering incentives for private facilities to adopt IPC and AMS practices, and promoting public-private partnerships to enhance the quality of health care.



FEATURED RESOURCES

- [Continuous Quality Improvement of Infection Prevention and Control Practices in Health Facilities in Cameroon: Lessons Learned](#)
- [Infection Prevention and Control Interventions in Targeted Health Facilities](#)
- [Strengthening Multisectoral Coordination to Contain Antimicrobial Resistance in Cameroon: Lessons Learned from Using the One Health Approach \(Technical Highlight\)](#)

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1. [The White House \(2022\). U.S. COVID-19 Global Response and Recovery Framework](#)
2. [WHO \(2024\). Global Benchmarking Tool \(GBT\) for evaluation of national regulatory system of medical products: manual for benchmarking and formulation of institutional development plans](#)
3. [WHO \(2023\). Guidance on operational micro planning for COVID-19 vaccination](#)
4. [WHO \(2021\). Access, Watch, Reserve \(AWaRe\) classification of antibiotics for evaluation and monitoring of use](#)
5. [WHO \(2019\). WHO Benchmarks for International Health Regulations \(IHR\) Capacities](#)
6. [WHO \(2019\). Antimicrobial stewardship programs in health-care facilities in low-and middle-income countries: a WHO practical toolkit](#)

RECOMMENDED CITATION

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