



Commonwealth Partnerships for Antimicrobial Stewardship 2: Scoping Exercise - Executive Summary

1. BACKGROUND

The Commonwealth Partnerships for Antimicrobial Stewardship 2 (CwPAMS2) programme is a project within the Fleming Fund.

The Department of Health and Social Care (DHSC) Fleming Fund

The Department of Health and Social Care (DHSC)'s [Fleming Fund](#) is a UK aid programme supporting up to 25 countries across Africa and Asia to tackle antimicrobial resistance (AMR), a leading public health threat across the world. The Fleming Fund invests in strengthening surveillance systems through a portfolio of country grants, regional grants and fellowships managed by Mott MacDonald, and global projects managed by DHSC partners. By supporting the capture of AMR surveillance data, and other relevant data, we will collectively be better able to understand the scale and scope of the problem in order to effectively tackle the issue of resistance.

The Fleming Fund does this through the following objectives:

1. Supporting the development of National Action Plans for AMR.
2. Developing and supporting the implementation of protocols and guidance for AMR surveillance and antimicrobial use.
3. Building laboratory capacity for diagnosis.
4. Collecting drug resistance data.
5. Enabling the sharing of drug resistance data locally, regionally, and internationally.
6. Collating and analysing data on the sale and use of antimicrobial medicines.
7. Advocating the application of data to promote the rational use of antimicrobials.
8. Shaping a sustainable system for AMR surveillance and data sharing.
9. Supporting fellowships to provide strong national leadership in addressing AMR.

The Fleming Fund will achieve these objectives through funding a number of projects with a diverse range of delivery partners, each focussing on a specific set of objectives and outputs, with a focus on sustainability and training.

The Commonwealth Partnerships for Antimicrobial Stewardship Programme 2

CwPAMS2 will build upon the work in earlier funded programmes (CwPAMS1, CwPAMS1.5), and contribute to achieving objectives 2, 7 and 9 from the above list – i.e.:

- Developing and supporting the implementation of protocols and guidance for AMR surveillance and antimicrobial use.
- Advocating the application of data to promote the rational use of antimicrobials.
- Supporting fellowships to provide strong national leadership in addressing AMR.

The programme will leverage the expertise of UK health institutions and technical experts to strengthen the capacity of the national health workforce and institutions in eight Commonwealth countries (Ghana, Kenya, Malawi, Nigeria, Sierra Leone, Tanzania, Uganda and Zambia), to address AMR challenges identified in countries individual AMR National Action Plans in existence or being drawn up with the support of the Fleming Fund.

Target countries have been carefully selected to derive maximum benefit from the established relationships already held by THET, the Fleming Fund and the UK Government more broadly in these locations. The project will be delivered to galvanise action amongst, and between, Commonwealth actors on AMR.

This programme of works can be seen as an extension of the Commonwealth's partnership working that has been an ever-present feature of the network. The importance of collaborative efforts such as these in progressing the development of nations, are emphasised in Sustainable Development Goal (SDG) 17, and aims to tackle the same priorities as the initial phase of CwPAMS through the Health Partnerships approach, while expanding its scope in line with the Fleming Fund strategy and aligns with the UK NAP for AMR ambition 1: *To be a good global partner.*

The Fleming Fund currently identifies its five core funding areas as:

- **Laboratory Infrastructure Enhancement:** building renovation, microbiology equipment purchase, biosafety and security equipment, reagents, durables and consumables and transport and logistics for goods and specimens.
- **Human Resource Strengthening:** training in AMR laboratory techniques, biomedical data management, bio data safety and biosecurity for fellows and country grant beneficiaries.
- **Surveillance System Strengthening:** support for AMRCCs, cross-sectoral meetings, strategy reviews, quality assurance control and data analysis and storage.
- **Building Foundations for Surveillance Data Use:** support for awareness raising, publications, evidence-based strategy, data sharing platforms, etc.
- **Rational use of Antimicrobial Medicines:** Development of Antimicrobial Usage (AMU) or AMC (Antimicrobial Consumption) surveillance strategies and stewardship programmes

Priority Themes

The grant will **target themes and areas of investment currently not being developed by other Fleming Fund funded projects**, but which will make an important contribution to the overall success of the Fund. It aims to increase the rational use of antibiotics and ultimately a reduction in morbidity and mortality associated with AMR.

In particular, this grant will support partnerships to address priorities in the following areas:

- Improving antimicrobial stewardship, including surveillance at hospital and community level (**Rational use of Antimicrobial Medicines**)
- Building antimicrobial pharmacy expertise and capacity (**Human Resource Strengthening**)
- Enhancing infection prevention and control (**Human Resource Strengthening, Surveillance System Strengthening**)
- Improving the use of clinical microbiology and antimicrobial prescribing data to inform clinical decisions (**Building Foundations for Surveillance Data Use, Laboratory Infrastructure Enhancement**)
- Enhancing the detection and reporting of substandard and falsified antimicrobial medicines (**Laboratory Infrastructure Enhancement, Human Resource Strengthening, Building Foundations for Surveillance Data Use**)

2. SCOPING EXERCISE - SUMMARY FINDING - SIERRA LEONE

The previous programme scoping was completed in November 2021; it assessed the status of AMS in each of the 8 CwPAMS Extension countries, and how health partnerships could support institutions and contribute to each country’s AMR National Action Plan. Recommendations from that previous scoping will inform implementation of CwPAMS 2 projects.

This Executive Summary draws on detailed data available at Appendix 1 (COUNTRY NAME), and highlights gaps in AMS activities in-country. This document is developed as a non-judgemental tool, to be used to guide grant seekers through their application process, to highlight areas which would benefit from partnership activities, develop networks in-country as well as provide resilience and sustainable models of work and training to roll out in the future.

<p>Key needs and priorities identified</p>	<ul style="list-style-type: none"> ● Development of microbiology lab capacity for AMS, main developments have been in the context of outbreaks and epidemics. ● AMS interventions in one health/animal health space. The NAP stipulates good activities but there is no evidence of any progress/implementation to date. ● AMS pre-service training and leadership training, not much has been documented in-country. ● Need to involve government staff/ incorporate existing structure in CQI programmes as shown in local research¹ ● Support the government in strengthening supply chain management systems.
<p>Good practice from previous CwPAMS phases</p>	<ul style="list-style-type: none"> ● Use of GPPS data to develop a three (3) year AMS action plan for Connaught. ● Review of surgical prophylaxis guidelines, which led to a structure for future review of guidelines. ● Delivery of an accredited training programme to the AMS champions

¹ <https://bmjopenquality.bmj.com/content/7/4/e000495>

FF partners in country with AMR/AMS projects (titles)	<ul style="list-style-type: none"> • WHO - Sierra Leone Country Grant - Strengthened One Health governance structure for AMR and AMU surveillance; Strengthened AMR and AMU surveillance system in the human health sector • FAO - Sierra Leone Country Grant 2- Strengthened One Health governance structure for AMR and AMU surveillance; Strengthened AMR and AMU surveillance system in the human health sector
Non-FF grant holders in country with AMR/AMS projects (titles)	<ul style="list-style-type: none"> • Small grant schemes on AMR funded by NIHR Global health research as part of an initiative between TDR and WHO - Surveillance of health care-associated infections and antibiotic resistance in urban and rural secondary hospitals in Sierra Leone led by Sulaiman Lakoh / College of Medicine and Allied Health Sciences, University of Sierra Leone • Klinikpartnerschaften, Hospital Partnerships - Capacity building in Medical Microbiology, Partnership between Masanga Hospital and Westfälische Wilhelms-Universität Münster
AMS activity in-country since 2021 (GPPS, WHO PPS, other)	WHO PPS was conducted in September 2021.
AMU reviews in-country since 2021 (non-PPS)	No
Evidence of use of data gathered in development of NAP (especially GPPS methodology)	Evidence not seen nationally for this scoping review, but the GPPS data was used in the development of the 3-year partnership AMS plan at Connaught Hospital.
Principal stakeholders in AMS arena in-county	Ministry of Health and Sanitation, Pharmacy Board of Sierra Leone, Ministry of Agriculture, Forestry and Food Security, Directorate of Drugs and Medical Supplies, National Multi-Sectoral Coordinating Group, Environment Protection Agency
Training	<p>Pre-service Health Care professionals</p> <ul style="list-style-type: none"> • Through the UK public health rapid response Support team (UK-PHRST) a virology module was incorporated in the University of Sierra Leone BSc for Medical Laboratory Science curriculum, which includes practical classes using the UK-PHRST mobile laboratory, the “lab-in-a-bag”² <p>In-Service Health Care professional - Yes</p>

² <https://bmcpublikealth.biomedcentral.com/articles/10.1186/s12889-021-11433-0>

	<ul style="list-style-type: none"> • Structured Operational Research and Training (SORT IT) programme and <i>SORT IT online training platform</i> • Infection Control Africa Network (ICAN) training funded by CDC • CWPAMS AMS champion's training
Registered pharmacist numbers in-country (2021-2022)	203 registered pharmacists and 364 Pharmacy Technicians ³ .
Other registered healthcare professionals	Information not available during scoping review.
Evidence of leadership training for HCPs	No evidence available during the scoping period.
Evidence of CQI/Behaviour Change training for HCPs in the AM arena	Through the training programme at Connaught hospital, changes in behaviour were seen in prescribing and dosing, with the pharmacists reporting that now some of the prescribers double check with them before prescribing. This strengthened Multidisciplinary collaboration. However more can be done to achieve long term impact on practices.
Registered numbers of clinical microbiologists	Information not available.
Evidence of Good Practice in AMS, AMU, AMR in Community Health arena	Yes, although not well developed outside AMR partner programs e.g. AMR Champions engaged the media through the Freetown Television and Radio Network, Public awareness campaigns by AMR champions targeting two transport routes with vulnerable groups and at schools
Evidence of Supply Chain management processes in-country	Under the Ministry of Health and Sanitation, Directorate of Pharmacy Services, National Medical Supplies Agency (NMSA) handles the procurement, storage and distribution of drugs and medical supplies . However, efforts are not well coordinated due to a number of parallel donor/ Program supply chain initiatives. The aspirational goal is to take over management of all partner-managed medical procurement and supply services; yet the financial and technical capacity to do so is still lukewarm. The government in 2018 committed to adopting a new electronic Logistic Management and Information System, but there is no clear evidence of successful implementation
Evidence of Substandard and Falsified Medicines reporting	With oversight from the Directorate of Pharmacy Services, MoHS, the Pharmaceutical Regulation & Legislation ensures

³ <https://pharmacyboard.gov.sl/Gazettes.php>

mechanisms	Quality and Safety of all medicines in circulation in-country through Drug Regulation and enforcement of drug laws by the Pharmacy Board of Sierra Leone. Information on reporting systems is not well established.
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