



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

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### 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 AMU or AMC 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 - TANZANIA

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.

Key needs and priorities identified	<p>Areas needing AMS training</p> <ul style="list-style-type: none"> <li>● Pre and in-service health care providers at the health facilities and in the community</li> <li>● Enhancing clinical pharmacy setup for placements and training. Clinical pharmacy in-service training needs to be developed in terms of AMS in Tanzania. In Muhimbili University of Health and Allied Sciences (MUHAS) a two-week clinical pharmacy training developed to train clinical pharmacists in-service starting from June, 2022. Working in collaboration with MUHAS to develop clinical pharmacy training has been seen as a chance for future activities.</li> </ul>
Good practice from previous CwPAMS phases	<p>According to In country consultants’ (ICCs) inputs, partners from MUHAS were excited to audit prescribing practice. When they analysed Global Point Prevalence Survey (GPPS) data, it was found that most of the patients were given the most expensive antibiotics for a very long time. From the GPPS data it was found that the most prescribed antimicrobial across Tanzanian hospitals was metronidazole for systemic use (32% of total prescriptions; 94/290). GPPS data encouraged healthcare professionals in</p>

	CwPAMS institutions in Tanzania to audit antimicrobial prescriptions and to review antibiotic prescribing.
FF partners in country with AMR/AMS projects (titles)	<p>Organisation: American Society for Microbiology (ASM)  NMRL:  Project title: Tanzania Country Grant 2 (CG2)</p> <p>Northumbria NHS Foundation Trust; Kilimanjaro Christian Medical Centre  Interventions that are designed to change antimicrobial use for better patient outcomes and avoiding AMR (Antimicrobial resistance)</p> <p>Northumbria Healthcare NHS Foundation Trust (NHCFT) - Kilimanjaro Christian Medical Centre  Goal: Strengthen AMS within Tanzania through surveillance, training and targeted activity</p>
Non-FF grant holders in country with AMR/AMS projects (titles)	
AMS activity in-country since 2021 (GPPS, WHO PPS, other)	<p>Regularly undertaking prescribing audits to make sure that antibiotics were stopped appropriately by taking GPPS data into account. (Note this activity hasn't been published yet).</p> <p>After CwPAMS 1.0 there was a decline in antibiotic prescribing observed at participating hospitals.</p> <p>The team from KCMC, consisting of a clinician and a doctor presented some results on antibiogram as a hospital activity. Some lab equipment was purchased to mic labs. ICC will check which equipment bought and will get back to us.</p> <p>A presentation was made during the World Antimicrobial Day (WAAW) in 2021. Almost 300 healthcare professionals and community were there. Awareness was raised on AMS and CwPAMS. People got excited about what they learnt.</p>
AMU reviews in-country since 2021 (non-PPS)	None identified during the scoping.
Evidence of use of data gathered in development of NAP (especially GPPS methodology)	<p>Yes.  NAP took place in June 2022 in Tanzania.  Teams of healthcare professionals including pharmacists, medical doctors, and nurses are choosing to participate in PPS.</p>
Principal stakeholders in AMS arena in-country	<ul style="list-style-type: none"> <li>● Pharmaceutical Society of Tanzania (PST)</li> <li>● National AMR Committee</li> <li>● Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC)</li> </ul>

	<ul style="list-style-type: none"> <li>the National Multi-sectoral Coordinating Committee (MCC)</li> </ul>
Training	<p>Pre-service HealthCare professionals (Yes/No)</p> <ul style="list-style-type: none"> <li>AMS related topics are planned to be included in the curriculum.</li> </ul> <p>In-Service Health Care professional (Yes/No)</p> <ul style="list-style-type: none"> <li>In-service training is not currently being conducted. Some healthcare facilities are planning to deliver in-service training on AMR. This training is planned as compulsory for interns to contribute to their pre-service training.</li> <li>An induction training will take place before pharmacists, doctors and nurses get into service by Pharmaceutical Society of Tanzania (PST). AMS, AMU, and AMR are going to be included in this training. The first training will be in November 2022.</li> <li>CPD compulsory courses have been credited by PST. This is necessary to be promoted in Tanzania. Unclear whether the subject matter is compulsory but attending to CPDs is compulsory for promotions.</li> </ul>
Registered pharmacist numbers in-country (2021-2022)	Currently in Tanzania there are approximately 800 pharmacists registered to PST, there are almost 1800 pharmacists serving.
Other registered healthcare professionals	Medical doctors, and nurses are on the AMS team but no clinical microbiologists. Exact numbers are not known.
Evidence of leadership training for HCPs	Yes, there is leadership training delivered at colleges.
Evidence of CQI/Behaviour Change training for HCPs in the AM arena	<p>Yes, the regional referral hospitals in Tanzania are delivering several ad-hoc training events on how to develop hospital formulary and how the prescriptions should be written and dispensed.</p> <p>There is a policy of national antimicrobial stewardship and standard treatment guidelines for Tanzania. Being thought on those, it was emphasised that regional referral hospitals should follow these policies and guidelines. In addition, multidisciplinary working teams are encouraged in Tanzania.</p> <p>Based on the comments of in-country consultants (ICCs), there is a need for supporting training for quality improvement and behaviour change in-country.</p>

Registered numbers of clinical microbiologists	No clinical microbiologists.
Evidence of Good Practice in AMS, AMU, AMR in Community Health arena	GPPS in Muhimbili Fliers were developed to disseminate the information to the public in WAAW.
Evidence of Supply Chain management processes in-country	Tanzania Food and Drug Authority (TFDA) checks the importation of medicines. TFDA also checks the entry of medicines into community pharmacies and hospital pharmacies. TFDA oversees the quality control of the medicines within the country. There is also a pharmacovigilance centre. In Tanzania, they do not have many manufacturers to produce medicines. There is a new plan to establish an infusion manufacturer. They usually import drugs. If you want to import a medicine from abroad, you have to show the qualifications of the medicines to the authority. For example, whether the factory manufacturing the medicines is following GMP (Good Manufacturing Practices) or not. If certain criteria are met, then the medicine should be registered by TFDA.
Evidence of Substandard and Falsified Medicines reporting mechanisms	Yes, if there is a substandard or falsified medicine detected, the official gazette announces that this batch number of this particular medicine should not be used. There are also announcements to the public and to outlets which sell medicines. Hospitals receive warnings that they should not dispense such medicines detected as falsified or substandard.

### **Examples of good practice developing AMS within Animal Health settings**

#### ***Use of tools, resources, training etc***

In some of the discussions during CwPAMS 1.0, partners wanted to check the chickens that are being sold in the markets. The antibiotic residue was planned to be checked in chickens. However, this was just a plan and this part of the project hasn't been executed yet.

An antibiogram was developed.