



# The CwPAMS Story

## Tackling Antimicrobial Resistance Together



CwPAMS



Global Health  
Partnerships  
FORMERLY THET



The  
Fleming Fund

# Foreword

“Antimicrobial Resistance (AMR) is a growing threat to modern medicine and our ability to treat infections for humans, animals and plants.

Antibiotics matter; without them, even simple procedures could become dangerous enough to kill patients, and the illnesses that we have made global progress on treating, such as TB and malaria, would become untreatable. With AMR directly responsible for 1.27 million deaths globally and associated with almost 5 million deaths, we are accelerating towards the projected 10 million deaths a year by 2050 at a worrying rate.

Antimicrobial stewardship (AMS) and infection prevention and control (IPC) remain cornerstones for tackling AMR. I am grateful for the Commonwealth Partnerships for Antimicrobial Stewardship (CwPAMS) programme for being key leaders in this space, promoting strong AMS practices by strengthening the global health workforce, supporting the development and implementation of LMIC health institutions, and improving knowledge and understanding of the importance of using antibiotics sustainably and appropriately. Through collaborating across sectors, CwPAMS is building equitable, resilient, sustainable healthcare systems that contribute to the achievement of Universal Health Coverage.”

**Professor Dame Sally Davies, UK Special Envoy on Antimicrobial Resistance**



“CwPAMS offers a model for how global health collaboration and bilateral partnership working can tackle emerging health threats like AMR. With tens of thousands of direct and indirect beneficiaries, CwPAMS has been a high impact yet cost effective intervention that has empowered healthcare workers in sub-Saharan Africa to be leaders in the struggle to contain and control AMR. I am exceptionally proud to have played a leading role in this programme.”

**Maxencia Nabiryo, Head of Programmes,  
Commonwealth Pharmacists Association**

# CwPAMS at a Glance

The Commonwealth Partnerships for Antimicrobial Stewardship (CwPAMS) strengthens health systems and workforces in low- and middle-income countries (LMICs) to tackle antimicrobial resistance (AMR).

Funded by the UK Department of Health and Social Care's Fleming Fund and run by Global Health Partnerships (formerly THET) and the Commonwealth Pharmacists Association (CPA), CwPAMS works in Ghana, Kenya, Malawi, Nigeria, Sierra Leone, Tanzania, Uganda and Zambia.

Through training, effective data use and technical innovation, the programme strengthens national capacity for safer prescribing and health system resilience. Its integrated approach embeds behaviour change, quality improvement and national ownership to sustain impact and align with national health priorities.

CwPAMS has grown to include community pharmacy initiatives, clinical microbiology integration and a hub-and-spoke model that spreads best practice across regions. It also prioritises gender equality and social inclusion, ensuring Antimicrobial Stewardship (AMS) programmes reach every part of the health system.



## Outcomes

- Health workers are applying new skills and leadership leading to improved clinical practice.
- Improved recognition of the vital role of pharmacists play in AMS.
- Hospitals are introducing protocols, forming AMS Committees and empowering champions to lead audits.
- More facilities are generating and using data which has improved and guided decision-making.
- NHS staff developed leadership, teamwork and problem-solving skills that strengthen patient care and resilience in the UK.

By advancing sustainable antimicrobial stewardship, CwPAMS contributes directly to the WHO Global Action Plan and the UNGA Political Declarations (2024) - showing the power of Health Partnerships to address AMR worldwide.

# CwPAMS Impact Stats so far

## 2018-2025



**9**

Countries reached



**31**

Health Partnerships



**215+**

Organisations involved



**26,700+**

Healthcare workers trained  
(and counting)



**168+**

Intervention sites serving  
**27,870+** inpatient beds at  
national, regional and  
district levels



**170+**

Point Prevalence Surveys  
completed



**78**

Fully functioning  
AMS Committees



**34**

Peer-reviewed  
publications



**112**

Fellows (49 UK, 63 Africa)  
supported by over **67**  
mentors



Development of  
Tanzania's first  
Antibiotic Policy



Safer prescribing: overuse of powerful antibiotics cut, with  
greater use of WHO-recommended medicines

Data represents progress as of September 2025. Final programme data will be available at the end of CwPAMS 2.5

# From Evidence to Action: Data-Driven AMS Interventions

Accurate data is at the heart of effective antimicrobial stewardship. CwPAMS has made data generation, analysis and sharing central to the work, reducing unnecessary antibiotic use.

- **176 Point Prevalence Surveys (PPS):** reveal prescribing patterns, quick wins and progress over time.
- **26 antibiograms:** show local resistance trends, guiding smarter, targeted treatment.
- **Better prescribing:** improved outcomes, reduced treatment failure, more efficient use of resources.
- **Stronger systems:** evidence shapes policy, strengthens diagnostics and builds resilience.

## Case study: Strengthening Diagnostics and Rational Antibiotic Use – The Lasting Impact of the iAIMS Project in Lira Regional Referral Hospital

**Health Partnership:** Lira Regional Referral Hospital (LRRH), Uganda and University Hospitals Dorset NHS Foundation Trust

Since the establishment of this Health Partnership in 2023, the laboratory at LRRH has undergone a remarkable transformation, spearheaded by Healthcare Partnership leads and implemented by a dedicated team of laboratory and clinical staff. The integrated antimicrobial stewardship, infection prevention and control and microbiology services (iAIMS) project, supported by the Ministry of Health, the Infectious Diseases Institute, and international partners, worked collaboratively to address the gap and provide a comprehensive solution, one that has since become a model of impactful, scalable health system strengthening.

The iAIMS project implemented measures to improve the quality of laboratory services at LRRH, for example:

- Training on standard operating procedures, allowing the laboratory to monitor reproducibility, identify any issues in training and significantly improve the quality of test results.
- Awareness and engagement activities such as laboratory-clinician interface initiatives, creating a collaborative culture of valuing microbiology diagnostics to improve patient care.
- Development of the first hospital antibiogram has enabled LRRH to monitor antibiotic resistance patterns, which has subsequently led to development of policies to restrict use of selected antibiotics with the Ministry of Health and the National Medical Stores agreeing to procure alternative, more cost-effective products.
- Leadership development through the Africa-Leadership Fellowship in AMS (ALF-A, see the 'Building Leadership in AMS' section), which has enabled the ALFA Fellow to become a national leader for AMS.

**Impact:** This has led to substantial improvements in the microbiology department - for example:

- Significant rise in sample submissions, from 314 samples in 2021 to 1,391 samples in 2024, reflecting improved clinician engagement and community awareness.
- Data-driven decision-making embedded into the hospital's operations, creating lasting change for patient care and health system efficiency.

The Lira-Dorset Health Partnership's experience shows what can be achieved with focused investment and collaboration. It provides a practical, cost-effective model for how diagnostic capacity can be scaled across Uganda and beyond.



Pharmacist at Lagos University Teaching Hospital LUTH, Nigeria

## Substandard and Falsified Medicines (SF Meds)

CwPAMS has trained over 25 SFMeds Champions, giving pharmacists and health workers the skills to identify, report and prevent unsafe medicines. Through webinars, mentoring and campaigns, they have built awareness, influenced policies and integrated vigilance into everyday practice - helping protect patients and strengthen antimicrobial use.



### Spotlight: Nigeria

A partnership between University of Nigeria Teaching Hospital (UNTH) and Milton Keynes University Hospital UK has improved Nigeria's fight against substandard medicines.

- UNTH's Pharmacy Quality Control Lab now runs routine checks on antibiotics and other medicines.
- 434 assays completed by Nov 2024, with around 1 in 10 antibiotics failing quality standards.
- Three more hospitals supported to strengthen medicines testing.
- Results feed into Nigeria's drug regulator (NAFDAC) and back to suppliers, driving up quality nationwide.



### Spotlight: Ghana

A partnership between the University of Health and Allied Sciences, Ho Teaching Hospital and University College London Hospitals NHS Foundation Trust has increased awareness of substandard medicines and antimicrobial resistance.

- Pharmacy staff and the public trained to spot risks.
- Pharmacies now use an SFMeds checklist as part of quality assurance.
- Regulators engaged in discussions to strengthen community pharmacy inspections.

# Point Prevalence Surveillance

Health Partnerships now use PPS data to guide evidence-based decisions, driving policy change from hospitals to the national level.



## Spotlight: Tanzania

Kilimanjaro Christian Medical Centre (KCMC) in Tanzania and Northumbria Healthcare NHS Foundation Trust in the UK developed Tanzania's **first Antibiotic Policy**, paving the way for wider adoption.

- PPS data led to a local Antimicrobial Guideline now used by all clinicians at KCMC.
- Evidence from the project enabled investment to be secured for two full-time microbiologists at KCMC.
- Tanzania's Ministry of Health recognised KCMC for cutting antimicrobial use more than peer hospitals.

# AMS Committees

CwPAMS has strengthened or established 78 AMS Committees, bringing together multidisciplinary teams to review data, drive collective decisions and implement guidelines that improve stewardship and infection control.



## Spotlight: Zambia

At Ndola Teaching Hospital, a partnership with King's Global Health Partnerships UK strengthened the AMS Committee through leadership training and UK observerships.

- Governance, behaviour change and local training improved AMS capacity.
- PPS and lab data facilitated new prescribing guidelines to be aligned with WHO AWaRE.
- **Ceftriaxone use dropped** from 73% to 29%, while WHO Access Group antibiotics rose by 45%.



Pharmacy at Kalindawalo General Hospital, Zambia

# Local Leadership, Sustained Impact

CwPAMS builds leadership through training, engagement and fellowships. In Tanzania, the project leads now act as AMS ambassadors across their regions, while junior staff are gaining skills, recognition and motivation to become the next generation of AMS leaders.



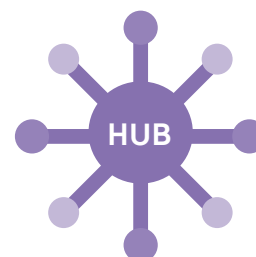
## Spotlight: Sierra Leone

At Connaught Hospital, in partnership with King's Global Health Partnerships in the UK and the Pharmaceutical Society of Sierra Leone, AMS governance is **now embedded in a public hospital for the first time**.

- Multidisciplinary AMS subcommittee and five-year Action Plan established.
- Pharmacist-led, gender-balanced AMS Champions trained to drive awareness and better prescribing.
- Staff and community engagement strengthened through local champions.

## Leveraging the Hub and Spoke Model to Strengthen Best-Practices

CwPAMS used hub hospitals as centres of excellence, training and supporting spoke facilities to adopt standardised, sustainable AMS practices. Strong leadership, dedicated project managers and policymaker buy-in made the model a success - scaling interventions, strengthening collaboration and building lasting capacity.



### Case study: Generating and using Data to improve Knowledge, Practice, and Outcomes

**Health Partnership:** Kakamega County Referral Hospital, Kenya and Cambridge University Hospital NHS Foundation Trust, UK

#### Impact:

- PPS carried out at all four sites showed a significant improvement in antibiotic prevalence compared to the start of the project, showing the impact of training at the sites.
- PPS data collected during the project revealed the emergence of ESBL (Extended-Spectrum Beta-Lactamase) isolates in the hub, prompting a critical revision of the first-choice antibiotic which improved the efficacy of treatment protocols, aligning with evidence-based practices to combat resistance.
- The PPS conducted at the hub site revealed a reduction in healthcare-associated infections (HAIs) and a marked reduction in surgical site infections and maternal sepsis.
- Established a specimen referral system, resulting in susceptibility patterns at the hub being shared with the clinical team every month. This led to the development of the antibiogram for the hub - the first of its kind in the western region of Kenya.
- The project played an important role in advocating for the hospital administration to lease a VITEK 2 machine, which has reduced the turnaround time for urine specimens from 10 days to 48 hours and for blood specimens to 72 hours. Additionally, there has been a decrease in sepsis referrals to the hub, due to the specimen referral system being established during the project to run microbiology diagnostics from the spoke sites.



Pharmacists, Connaught Hospital, Sierra Leone

- Established alcohol hand rub manufacturing facilities, leading to a significant improvement in hand hygiene practices exceeding the national average of 57%.
- Developed an AMS policy for Kakamega County which aims to enhance the prudent use of antibiotics and improve patient outcomes across healthcare facilities, resulting in the county allocating budget for AMS activities.

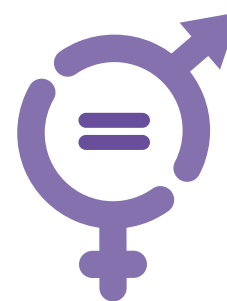


### Spotlight: Malawi

The Pharmaceutical Society of Malawi and Betsi Cadwaladr University Health Board, Wales used a hub-and-spoke model to expand AMS training and practice nationwide.

- Training materials for AMS using CwPAMS practical examples were adopted by the National AMR Centre.
- An extra **1,500 health workers** were trained using the revised training material.
- Three hospitals allocated budgets for AMS activities.
- Shared labs and supervision cut costs and raised care standards.
- AMS added to job descriptions, embedding it into daily practice.

## Gender Equality & Social Inclusion



### Spotlight: Kenya

Nanyuki Teaching & Referral Hospital and Dharura: Global Emergency Care worked with female community leaders to break down barriers to AMS awareness.

- Four elders received a week's training on human, animal and environmental health.
- They acted as **trainers of trainers**, reaching 100+ pastoralists and farmers.
- A One Health song, *One Kenya, One Health*, in the local dialect was broadcast on community radio.

# Mutual Benefit in Global Health

CwPAMS has created real two-way learning between the UK NHS and partner countries. UK staff have contributed **3,400+ volunteering days**, gaining leadership, teamwork and problem-solving skills while sharing best practice across borders.

From the volunteer survey (2025):

**97%** shared what they learned with colleagues.

**87%** reported learning more about best practice, applying it in their work and gaining greater job satisfaction.

**87%** said they were more sensitive and respectful of other cultures

**84%** developed ideas for new ways to do more with less.

NHS institutions report stronger staff retention, global networks and enhanced reputation.

Additionally, institutions have benefitted from opportunities to develop global networking opportunities; improved staff retention and wellbeing; and involvement in CwPAMS aiding the reputation of the institution.

## Volunteer Voices

“I am now able to lead projects and teams more confidently and efficiently. I understand the meaning of compassionate leadership far more and am able to apply some behavioural science aspects to my work.”

“Volunteers have learned new skills or approach problems with more lateral thinking and are more aware of global inequalities which becomes embedded in practice.”

“Greater job satisfaction has probably led to it being more likely that I will be retained as a staff member.”

“It has been one of the best things I have done in my career, [I’ve] grown as a pharmacist and can’t wait for what’s next.”

# Building Leadership in AMS

CwPAMS has built a strong pipeline of AMS leaders through year-long fellowships for early- to mid-career pharmacists. Fellows receive training in leadership, project management, quality improvement and behaviour change, alongside structured mentorship and cross-country collaboration.

Across all phases, **112 Fellows (49 UK, 63 Africa)** supported by over **67 mentors** have delivered measurable improvements in leadership capacity, AMS projects and policy influence.

Evaluations highlight significant professional growth, stronger teamwork and cost-effectiveness. Fellows consistently reported greater confidence, adaptability and collaboration, though applying new skills in resource-constrained settings remains a challenge.

|                  |                                                                   |                                                                                                                                 |
|------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| CwPAMS 1 and 1.5 | Chief Pharmaceutical Officer's Global Health Fellowship (CPhOGHF) | 29 UK pharmacists strengthened their leadership skills while contributing to AMS initiatives through the HP model.              |
| CwPAMS 2         | Africa Leadership Fellowship for AMS (ALF-A)                      | 43 pharmacists trained and supported to be AMS leaders working in health facilities across participating African countries.     |
| CwPAMS 2.5       | UK-Africa Leadership Fellowship (UK-ALF-A)                        | Jointly engaging 20 UK and 20 Africa-based pharmacists, fostering a resilient network of emerging AMS leaders across countries. |

## Spotlighting Fellows

In Zambia, pharmacist **Hope Kalasa** reported that the fellowship introduced him to new methods of leadership, shifting his perspective and enabling him to use evidence to guide decisions and improve departmental performance.

In Nigeria, **Yinka Adeyemi**, Deputy Director and Paediatric Pharmacist at University College Hospital Ibadan, described how the programme strengthened her communication, presentation and leadership skills, boosting her confidence, improving team trust and empathy and underlining the importance of her role as a pharmacist.

Collectively, the fellowships show the transformative power of mentorship and global collaboration in creating a skilled, connected and resilient AMS workforce.



# Acknowledgements

Global Health Partnerships (formerly THET) and the Commonwealth Pharmacists Association (CPA) would like to express their sincere gratitude to all those who enabled the Commonwealth Partnerships for Antimicrobial Stewardship (CwPAMS) programme to achieve its successes so far; our funding and implementation partner, the UK Department of Health and Social Care's Fleming Fund, The Change Exchange, UK and Partner Country institutions, and Health Partnerships who designed and led the programmes. We would also like to say a special thank you to the thousands of volunteers and health workers across the world whose dedication and expertise made this programme possible.

## Resources



**Meet the CwPAMS 2  
Health Partnerships**  
2023



**CwPAMS 1 Impact  
Report**  
2024



**CwPAMS Policy  
Brief**  
2024



**How the CPA's  
ALF-A programme  
empowers  
pharmacists in the  
fight against AMR**

## About the partners



**Global Health  
Partnerships**  
FORMERLY THET

Global Health Partnerships (GHP) is a global health organisation managing programmes across low- and middle-income countries to strengthen health systems, working to achieve better access to quality healthcare. This is done through a Health Partnerships model, with institutions from the UK and LMICs working together to co-develop responses to locally identified health system priorities. GHP has been managing programmes to strengthen health systems and Human Resources for Health for over 30 years. Ducit Blue Solutions supports CwPAMS as coordination partner in Nigeria and grant management partner in Ghana.

[www.globalhealthpartnerships.org](http://www.globalhealthpartnerships.org)



**COMMONWEALTH  
PHARMACISTS  
ASSOCIATION**

The Commonwealth Pharmacists Association (CPA) is an Accredited Organisation of the Commonwealth, in official relations with the World Health Organisation, and a leading member of the Commonwealth Health Professions and Partners Alliance. Established in 1969, CPA serves as the international body of the National Pharmacy Associations of the Commonwealth, representing over one million pharmacists on the global stage, and since 2015, has operated as a UK-registered charity (1176132).

CPA's vision is to advance equitable access to safe and effective medicines and pharmacy services for a healthier world, and pursues this by spearheading projects that build capability in the health workforce, strengthen health systems, and advocate for patients and the pharmacy profession.

[www.commonwealthpharmacy.org](http://www.commonwealthpharmacy.org)