





Sustaining AMR surveillance beyond the Fleming Fund

An analysis of enablers and blockers

Executive Summary

The Fleming Fund is a UK Department of Health and Social Care (DHSC) initiative to support up to 25 low- and middle-income countries (LMICs) to strengthen national surveillance systems for antimicrobial resistance (AMR). Since 2017, much progress has been made towards building country-owned AMR surveillance systems, through investments by the Fleming Fund, working with in-country partners and grantees. The main challenge now is how to sustain these systems without ongoing support from the Fleming Fund which is due to end at the beginning of 2026.

The prospects for sustainability in some countries are good but there will inevitably also be gaps in terms of continuation of specific activities. This document provides information to support continuation of AMR surveillance; first, by identifying enablers that help country programmes to transition to full country ownership; second, to identify challenges to sustainability, specific sustainability gaps and ways to mitigate these. These lessons learnt are organised in three thematic sections, each important pillars of sustainability:

- 1. Government ownership and budget allocation.
- 2. Technical capacity built and retained.
- 3. AMR data use integrated within national systems.

Enablers of and challenges to sustainability are identified and explained, and country case studies then used to elaborate on the sustainability factors. The countries included in this analysis are Indonesia, Vietnam, Bangladesh, Pakistan, Kenya, Nigeria, and Uganda.

Government ownership and budget allocation

Enablers of AMR Surveillance



High level political champions

As AMR cuts across multiple sectors, a political champion at the highest level of government brings influence that an individual line ministry lacks.



Economic evidence

Economic evidence on the future burden and cost of AMR is playing an important role in moving AMR up the political agenda.



Multisectoral approach

Building multisectoral coalitions are important to balance interests of different parties, leading to a more durable national response.



Decentralised AMR governance and budgeting

Building capacity for AMR stewardship and governance at all the relevant tiers, especially within devolved contexts, is crucial.



Public financial management (PFM)

Where AMR surveillance is new, PFM support to ministries of finance to introduce budget lines relating to AMR into budgets is key.



Costed National Action Plan

Related to the above, a fully costed National Action Plan and incorporation of indicators relating to combatting resistance in national development plans are important levers for budget requests for AMR.



Integration of AMR into national health insurance

Where national health insurance exists, inclusion of bacteriology testing services within benefit packages provides a sustainable and equitable source of financing for AMR surveillance.



Models for equipment maintenance

New supply arrangements which combine maintenance with consumables supply address issues sustaining high-tech equipment.



International reporting obligations

Positive pressure and normative expectations result from participating in international reporting communities such as WHO's GLASS.

Blockers of AMR Surveillance



Competing priorities

Other priorities plus declining external funding means that governments struggle to fully fund AMR surveillance even where political commitment and capacity is there. Viewing surveillance as a biproduct of better diagnostic services and advocating for dual benefits – better quality care and data for health security – is one way to address this.



Cost of consumables and reagents

Funding for consumable supplies is often heavily constrained which impacts the volume of testing and therefore its cost-effectiveness. This can be partially remedied by tightening up clinical protocol to focus on those most in need and through pooled procurement and market shaping approaches.



Proprietary branded consumables

The requirement for manufacturers' own branded consumables as well as periodic shortages of items such as blood culture bottles drives up prices. Pooled procurement is a well-used approach which can reduce costs and de-risk supply chains, allowing other commercial sector actors to enter otherwise risky markets.



Cost of active surveillance in animal health sector

The animal health sector generally uses active surveillance which is relatively costly. Exploring ways in which sample collection can be incorporated into other national animal health activities, such as vaccine rounds, or outbreak response, can improve efficiency and value for money.



Vertical funding of AMR outside government systems

The lack of AMR funds flowing through government systems results in official budgets lacking budget lines for tackling AMR. Engagement with ministries of finance at the design stage of programmes and national strategies is crucial for sustainability. Embedding diagnostics within clinical care may provide better incentives to maintain services.



Changes in funding landscape

Across the board there has been a very significant impact of the withdrawal of donor programmes (most notably from the US), which is causing an abrupt exit in many countries, rupture of activities, and making domestic and alternative sources of financing more urgent than ever.

Technical capacity built and retained

Enablers of AMR Surveillance



Integration of AMR into pre-service education

Incorporating content on antimicrobial resistance into preservice education for medical personnel and veterinarians embeds sustainability after a programme ends.



National mentorship programmes / communities of practice

System strengthening approaches build domestic capacity to sustain interventions. National mentorship programmes are a way of transferring skills to new cohorts and accounting for staff turnover.



Trust in data quality

Improved quality of AMR data means data is trusted which then generates demand for data as a condition for sustainability. One mechanism through which countries have seen improvements in data quality is training in Quality Management Systems (QMS) and in laboratory audit skills.



Plans for future scaling

Given that the number of qualified laboratory personnel including microbiologists are generally low, plans to scale up microbiology testing provide future career pathways and create a demand for new skills.



Quadripartite organisations (WHO, FAO, WOAH and UNEP)

Close linkage with the Quadripartite organisations ensures standardised, country-centric approaches which are more likely to be sustained.

Blockers of AMR Surveillance

The following challenges to sustainability relating to building and retaining technical capacity are identified, along with suggested actions to mitigate or eliminate them:



Brain drain and HR transfers

In many LMICs the perennial challenge to sustaining investments in skills is the transfer of personnel which can be subject to local political influences or other operational demands within a health system. Institutionalising capacity building approaches is a way to mitigate this problem.



Lack of private sector involvement

Many healthcare services are delivered by the private sector, yet capacity building within the private sector in AMR testing is patchy. Integrating private sector laboratories and providers into the AMR surveillance network is important.



AMR data use integrated within national systems

Enablers of AMR Surveillance



Multi-sectoral stakeholder collaboration

One Health governance structures for AMR are essential for sustainable use of data within national systems. In most settings, functioning multisectoral structures such as AMR Coordinating Committees (AMRCC) and national action plans drive demand for AMR data.

Blockers of AMR Surveillance

The following challenges to sustainability in terms of integrated data use are identified:



Shortage of time for implementation

Inevitably the time required for institutionalising data use is insufficient in some settings. Emphasising the benefits of bacterial diagnostic services as part of quality clinical care may help to maintain funding for testing.

Enablers of AMR Surveillance



Digital data systems

Replacement of paper-based systems with user-friendly digital systems has been important for establishing workable data use routines. It is important that new technologies are tailored to local context, infrastructure, systems and capacity.



Primary health care reform agendas

In countries actively pursuing a primary health care (PHC) reform agenda, focusing on universal access to quality health services and preventive health, opportunities to integrate AMR as part of better diagnostic services emerge.



Antibiotic stewardship and inclusion of private sector in surveillance

Efforts to expand AMR surveillance to the private sector create stronger linkages between AMR surveillance and real-world prescribing behaviours and AMR control.



Domestic demand for data

Linking AMR data with shorter term financial benefits for the wider health system, e.g. through rational antibiotic prescribing and evidence-based essential drugs lists – enhances commitment to sustained AMR surveillance.

Blockers of AMR Surveillance



Difficulty regulating AMC

In many settings there is still a gap in terms of AMR stewardship at primary care level, in the private sector, and in the animal health sector. This gap poses a challenge to governments' ability to use AMR data effectively.



Reluctance or difficulty sharing data

Governments as well as the private sector can be overly protective of data which hinders timely data sharing and data use. Robust systems for managing and protecting data are required.



Vertical approaches not affordable

Some 'vertical' approaches – such as active surveillance in animals – may require modified approaches in future. There is a need for more integrated ways of working to reduce transaction costs for single interventions.

Conclusion

The Fleming Fund has made a real contribution to putting AMR firmly on the agenda. Significant gains have been made in establishing quality data generation and use which are increasingly embedded in countries' internal systems and decision making. While these gains are important to identify and celebrate, so too is the 'unfinished agenda' which is important to recognise in support of domestic and external resource mobilisation and policy advocacy.

While the Fleming Fund's design provided a layer of accountability and assurance, there is arguably a missed opportunity to use funding to leverage commitment from government to sustain investments through national budgets. As inflows from external development budgets shrink, channelling funding with fewer intermediaries and other ways of minimising fiduciary risks should be considered. However technical cooperation between countries will also be important to maintain momentum and services.

Future investments will need to 'do more with less' through a process of prioritisation – something that surveillance data can and should support. Potential areas for coordinated 'optimised' solutions include:

- A form of regional pooled procurement mechanism like the approach adopted by the Fleming Fund for laboratory equipment and supplies to help with market shaping.
- A cross-border network of trained personnel to support south to south skills transfer, based on the Fleming Fellowship Scheme, would be possible to replicate and could add immense value to existing initiatives.
- Integration of AMR into other programmes for example pooling resources in animal health to cover agricultural extension services, animal sample collection and vaccination in ioint visits.
- Ensuring that laboratory services that provide bacteriological diagnosis are integrated into health sector planning, and do not remain overlooked in funding decisions for health sector improvement.

Overall, improving access to bacterial diagnosis in all sectors will help to strengthen systems, as well as provide evidence for action through surveillance data.

Download the full report on the Fleming Fund website.

