

# A best practice partnership for improving antimicrobial resistance surveillance

### Inaugural WHO Partners Forum Case Study

## Challenge 🛆



Antimicrobial resistance (AMR), or the ability of a microbe to resist the effects of medication that once could successfully treat the infection, is a threat to both human and animal health. Increasingly a global problem, AMR respects no borders and can affect anyone. Urgent action is required.

Although AMR is not a new issue,<sup>1</sup> it is only in the last 10 years that the full implications of the problem have been understood and only recently has action to tackle the problem gained momentum, thanks largely to the leading role Sweden and others have taken in putting AMR on the international agenda.<sup>2,3</sup>



A turning point came at the Sixty-eighth World Health Assembly in 2015, when WHO Member States adopted the Global Action Plan (GAP) on AMR,<sup>4</sup> which reflects the global consensus that AMR poses a profound threat to human health. It was affirmed then that all countries should have multi-sectoral AMR action plans in place by 2017. The UN General Assembly also adopted a

political declaration in 2016 that recognized the need for a multisectoral approach to combat AMR.<sup>5</sup> The global health community's ability to address AMR will have a significant impact on the achievement of the Sustainable Development Goals (SDGs), as many SDG actions and objectives are closely related to AMR.

One of the five strategic objectives of the GAP is to strengthen the evidence base through enhanced global surveillance and research. AMR surveillance is the cornerstone of assessing the burden of AMR and providing the information necessary for action.

# Solution

The need for a global AMR surveillance programme was reaffirmed in a consultation in Sweden in 2014, with participants that included 30 WHO Member States from all WHO regions. WHO, together with Member States, developed the Global AMR Surveillance System (GLASS), launched in 2015, to strengthen the evidence base on AMR.

The aim of GLASS is to support global surveillance of AMR while providing harmonized methods for strengthening national and local surveillance, and to help inform national, regional and global decision-making, strategies and advocacy. GLASS provides a standardized approach to the collection, analysis and sharing of AMR data by countries, and seeks to monitor the status of national AMR surveillance systems. GLASS has adopted a stepwise approach to country participation, building on existing structures, which has permitted countries at any stage of development to enroll in GLASS and progressively develop their surveillance systems.

<sup>&</sup>lt;sup>1</sup> Codex Alimentarius (1963) FAO and WHO for harmonized food standards to protect consumer health; AMR has also been addressed many times at the WHA (1998/WHA 51.17; 2001/WHA A54.11, 54.14; 2005/WHA 58.27; 2007/WHA 60.16; 2014/WHA 67.25; 2015/WHA 68.20. In 2011 WHO published a 6-point policy package to combat AMR.

<sup>&</sup>lt;sup>2</sup> See www.reactgroup.org.

<sup>&</sup>lt;sup>3</sup> Cars O et al, Meeting the challenge of antibiotic resistance. BMJ 2008;337:a1438.

<sup>&</sup>lt;sup>4</sup> Pursuant to the political declaration, a UN coordination group, the Interagency Coordination Group on AMR (IACG), was established. The IACG will report to the UN Secretary-General, who will present its final report to the UN General Assembly in 2019.

<sup>&</sup>lt;sup>5</sup> When the drugs don't work: antibiotic resistance as a global development problem. https://www.reactgroup.org/wp-content/uploads/2019/02/When-the-Drugs-Don%E2%80%99t-Work-Antibiotic-Resistance-as-a-Global-Development-Problem-Feb-2019.pdf

GLASS is now in the final stage of its early implementation phase, in which the focus has largely been on advocacy and capacity building to expand the reach and knowledge of GLASS and to increase countries' engagement. The next phase will focus on strengthening implementation and capacity. This means moving from a phase where resource requirements have been relatively modest to one where access to flexible and effective financing will become more important for successful implementation. The participating countries have diverse needs and capacities and access to financing and resources will likely be a determining factor in how much they can engage in GLASS. Increasing domestic resources, more effective resource allocation and access to external financing sources will become more important as the programme progresses. Increased flexible resources at all three levels of WHO will enable more responsive and tailored capacity development and support to countries in planning and implementing action plans.

WHO established a GLASS Collaborative Platform to bring together all stakeholders working on AMR surveillance (WHO collaborating centres (CCs), technical institutions and international AMR surveillance networks) to ensure harmonization of efforts, avoid duplication and share lessons learned and best practices.

For GLASS implementation in countries, WHO partners with more than 20 WHO collaborating centres worldwide working on AMR containment. In 2016 WHO established the AMR Surveillance and Quality Assessment Collaborating Centres Network<sup>6</sup> (CC Network) to provide in-kind technical support to countries. Its mission is to support countries, particularly low- and middle-income countries, to build capacity to implement AMR surveillance through international collaboration, improved coordination between network members and other stakeholders active in AMR surveillance and thorough practical implementation based on countries' needs.

The CC Network benefits individual collaborating centres, WHO and, most importantly, countries. Institutions benefit from enhanced visibility and recognition by national authorities, calling public attention to AMR. The CC Network opens up opportunities to exchange information and develop technical cooperation with other institutions, and to mobilize resources from funding partners. WHO gains access to leading centres worldwide as well as the institutional capacity to support countries with implementation of AMR surveillance. Countries benefit from being able to access expertise on AMR surveillance

from a pool of institutions. The CC Network demonstrates that with relatively little funding, significant efforts can be put in place to address the global threat of AMR.

WHO also convenes and maintains regular communication with members of the GLASS Collaborative Platform to coordinate AMR surveillance efforts with partners, including the CC Network. The network is managed by the WHO AMR Secretariat and is supported at all three levels of WHO, with the work prioritized according to the needs of countries. CCs support WHO to coordinate the CC Network on a rotating basis. The WHO CC for AMR Containment, hosted by the Public Health Agency of Sweden, supported WHO for the first three years.

### Impact

GLASS is now in its early implementation phase (2015-2019). The key objectives of this phase have been to launch the global surveillance system and provide guidance to countries on the development of an effective AMR surveillance system.

As of 21 March 2019, 75 countries were enrolled in GLASS. The rapid increase of in-country enrolment and active participation in a global system to monitor AMR reflects a collective understanding of the global effort to control AMR, particularly for countries that have never shared AMR data with international systems. GLASS is also collating sex-disaggregated data, allowing countries to identify gender patterns in the distribution of infectious agents and tailor actions accordingly.

### Conclusion



The active involvement of Member States in the development and implementation of GLASS has been critical to its success. The partnership of Sweden and WHO with CCs dramatically expanded the reach of GLASS. This is a best practice partnership that can be replicated by other country-based initiatives. The approach to GLASS is an example of value for money, demonstrating how a small investment can go a long way. GLASS provides a framework that invites in-country financing mechanisms and makes a case for the importance of global flexible funds that will further translate the success of GLASS into broad implementation.

<sup>&</sup>lt;sup>6</sup> https://www.who.int/glass/collaborating-centres-network/en/.