

Comprehensive Review of the WHO Global Action Plan on Antimicrobial Resistance

Evaluation brief – September 2021

Purpose, objective and scope of the review

The Global Action Plan on Antimicrobial Resistance (GAP AMR) provides a framework of actions across five objectives for three stakeholder groups (Member States, the Secretariat and national/international partners) to take over the next five to ten years, and for countries to develop national action plans. The purpose of the comprehensive review was to enhance current work on AMR. Based on the five primary objectives of the GAP AMR, the review documented successes, challenges and best practices, and provided lessons learned and recommendations for use by WHO and other GAP AMR stakeholders to guide future implementation and inform decision-making. Its scope was set by the GAP AMR, covering not just antibiotic but also antimicrobial resistance and considering all stakeholders through a WHO lens.

Key findings and conclusions

Assessment of overall progress towards outcomes was very difficult as these are not clearly defined. While the GAP AMR M&E framework provides a menu of possible outcome indicators for the GAP AMR, a smaller number is needed that can be actively monitored and tracked.

Objective 1: Improve awareness and understanding of antimicrobial resistance through effective communication, education and training. The GAP AMR has raised awareness of AMR globally and in many countries but, without any clear purposive plan of action, this has not translated into increased financial resources available to the AMR response. There is a lack of clarity as to precisely what awareness and understanding needs to be promoted, among whom and for what purpose. The outcome indicator for this objective is not clearly defined, and the efforts made to collect outcome data so far have been sporadic and fragmented.

Objective 2: Strengthen the knowledge and evidence base through surveillance and research. There has been strong commitment to develop the Global Antimicrobial Resistance and Use Surveillance System (GLASS), resulting in more countries enrolling in GLASS and a greater number of areas/modules being covered. However, GLASS is not currently able to provide representative and comparable data on AMR across countries and it is unlikely that any system based on

sentinel surveillance could do this in the foreseeable future because of differences in laboratory capacity and clinical testing practices. Integration of surveillance across sectors remains a challenge with many countries reportedly lacking a One Health approach to surveillance due to technical, financial and coordination constraints. In practice, research activities under the GAP are mainly focused on product research and development.

Objective 3: Reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures. The main challenge with this objective is the breadth of infection prevention and control measures and that they benefit a wide range of other diseases and issues apart from AMR. As a result, the AMR Division does not have direct control and responsibility for this objective and needs to work with others to make progress. Analysis shows that there had been little progress in this area in many countries as of 2020.

Objective 4: Optimize the use of antimicrobial medicines in human and animal health. There are concerns that this objective focuses only on human and animal health, and excludes important areas such as plant health, food production, food safety and the environment. Available data on how antimicrobials are currently being used is limited and there are concerns that the GAP and its implementation focuses more on excessive use of antibiotics rather than ensuring access to appropriate antibiotics when they are needed. Despite extensive work on a stewardship framework for AMR, there are no longer plans to negotiate a specific AMR stewardship framework, but it is expected that AMR would be reflected in the proposed pandemic treaty. Some WHO Secretariat initiatives, e.g. AWaRe classification, revision of Essential Medicines List, priority pathogens list and List of Critically Important Antimicrobials, are considered to have been particularly influential.

Objective 5: Develop the economic case for sustainable investment that takes account of the needs of all countries, and increase investment in new medicines, diagnostic tools, vaccines and other interventions. Relatively little has been done on developing an economic case for sustainable development, due to a lack of information on the disease burden caused by AMR globally, regionally and in particular countries. The development of the Multi-Partner Trust Fund is welcome, but it is of concern that it is currently only very

partially funded. However, the WHO Secretariat has played a key role in many important initiatives, including establishing the Global Antibiotic Research and Development Partnership and the AMR Action Fund, providing valued reports on the antibiotic pipeline, and developing a priority list of bacterial pathogens for new product development and a number of target product profiles for antibacterial agents and diagnostics.

Coordination with international and national partners:

Despite no clear shared understanding of what One Health means in practice, the clearest expression of One Health coordination/collaboration is perhaps found in the Tripartite Strategic Framework, in which IOE and FAO are key international partners. There is a call for more focus on environmental issues within the GAP AMR and more inclusion of UNEP. Efforts are under way to establish global governance structures but the important roles of other multilaterals and UN agencies, and other sectors including civil society and the private sector, in responding to AMR are largely overlooked in the GAP AMR and progress reports.

Equity and inclusion: While the importance of equity and inclusion is recognized in the GAP AMR, there are concerns that GAP AMR implementation is not sufficiently focused on gender, inclusion and human rights.

Health systems: Weak laboratory systems are a major barrier to effective programmes to respond to AMR but these are not explicitly recognized in the GAP AMR. Other elements of health systems building blocks are also extremely relevant to responses to GAP AMR but it is unclear how responses to AMR fit into a wider health systems view.

WHO internal structures and systems: WHO has signalled its commitment to AMR by establishing and resourcing an AMR Division. The appointment of an ADG for AMR has increased the visibility and profile of AMR both within and outside WHO. However, while links between AMR and broader WHO objectives, e.g. the health SDGs exist, these could be emphasized more.

COVID-19: COVID-19 caused many AMR responses and programmes to be disrupted or adapted but it also provided opportunities for enhanced action, including issues such as the importance of diagnostic testing and laboratory capacity, the need for infection prevention and control and the important role of health-care settings as amplifiers of infectious diseases. In addition, COVID-19 responses may have had mixed effects on levels of antibiotic use and, through that, on levels of AMR. COVID-19 has clearly demonstrated what a pandemic can be like particularly in the absence of effective medical countermeasures and has heightened understanding of the connection between the health of humans, animals and the environment. It also

highlighted the deficiencies of some accepted approaches to research and development and showed what is possible, e.g. in terms of developing vaccines and therapeutics, when there is sufficient imperative.

Recommendations

Recommendation 1: WHO Secretariat and Member States to determine how best to strengthen the current GAP AMR both in the short-term and in the medium- and longer term.

Recommendation 2: WHO Secretariat and Member States to clarify understanding and scope of objective 1.

Recommendation 3: WHO Secretariat and Member States to maintain support to GLASS and to supplement with methods to collect accurate, representative, comparable AMR data nationally, regionally and globally.

Recommendation 4: WHO Secretariat and Member States to identify ways in which effective sanitation, hygiene and infection prevention measures can be promoted in ways which reduce AMR.

Recommendation 5: WHO Secretariat and Member States to consider how progress under objective 4 can be expanded and monitored more effectively.

Recommendation 6: WHO Secretariat to explain how the economic case for investment in AMR responses will be made and used to advocate for the resources needed including globally, regionally and nationally.

Recommendation 7: Member States and the WHO Secretariat to sustain and expand progress made on research and development for products.

Recommendation 8: The WHO Secretariat and other Tripartite organizations to identify ways in which coordination can be enhanced and the contribution of other actors recognized and maximized.

Recommendation 9: Member States and the WHO Secretariat to identify ways in which equity and inclusion can be better reflected in AMR programmes and responses.

Recommendation 10: Member States and the WHO Secretariat to identify ways in which the importance of an approach based on understanding of health systems can be incorporated more effectively into AMR responses.

Recommendation 11: Member States and the WHO Secretariat to review WHO internal structures and systems to ensure they are able to support effectively AMR responses.

Recommendation 12: The WHO Secretariat to conduct a review of lessons learned relating to AMR responses as a result of the COVID-19 pandemic.

Contacts

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Hyperlinks: [Evaluation Report](#) and its [Annexes](#).