



ACHIEVING A SUCCESSFUL OUTCOME TO THE UN HIGH-LEVEL MEETING ON AMR: PERSPECTIVE OF THE GLOBAL ANTIBIOTIC RESEARCH & DEVELOPMENT PARTNERSHIP

The Global Antibiotic Research & Development Partnership (GARDP) is a not-for-profit organization that develops new antibiotic treatments for drug-resistant bacterial infections that pose the greatest threat to human health and makes them accessible to the people who need them. It puts public health needs at the centre of antibiotic drug development to address the immediate crisis of antimicrobial resistance (AMR).

In the run-up to this year's UN High-Level Meeting on AMR at the United Nations General Assembly (UNGA), GARDP wishes to share our perspective and key recommendations for a comprehensive, equitable and sustainable response to AMR. We wish to work with governments, civil society and the private sector to align global action on AMR to fully meet public health needs.

Significant progress, but insufficient to address a growing crisis

Despite significant progress over the last decade to address AMR, the global response is off course and not keeping pace with a public health crisis that is costing lives, harming the global economy, and threatening routine healthcare procedures. Although AMR affects all of us, people in low- and middle-income countries (LMICs) are disproportionately impacted by this crisis and our inadequate response. People in LMICs from all age groups suffer, with sub-Saharan Africa and South Asia hardest hit.

GARDP welcomes the positive developments that have brought together governments, not-for-profit entities, and the private sector to tackle AMR. The World Health Organization (WHO) has played a critical role in facilitating national and non-state efforts to address AMR, including research prioritization, such as the WHO Priority Pathogen List. The Global burden of bacterial antimicrobial resistance (GRAM) study has provided robust data that provides policymakers, funders, companies and organizations with new, alarming data. Several new inter-governmental organizations and agencies have been established, including GARDP, CARB-X and ICARS, as have new private sector initiatives such as the AMR Action Fund and AMR Industry Alliance. New national pull incentives have been validated as models for additional pull incentives or to facilitate registration and supply in smaller markets.

Nevertheless, the current pipeline to address priority drug-resistant infections is sparse from early-stage discovery through regulatory approval. In most countries, measures such as infection prevention and control (IPC) are not in place. The needs of children and newborns remain particularly urgent. Children under the age of five represent one out of every five deaths due to AMR, yet the development of antibiotics for children trails behind that of adults by nearly a decade. Few drugs have been labelled for neonates, who are the most vulnerable to drug-resistant infections. Of 40 antibiotics approved in adults since 2000, only four include dosing information for neonates in their label.

Where antibiotics are needed, they are not always accessible or used, due to a range of reasons including unavailability, unaffordability, lack of appropriate diagnosis and inadequate evidence to guide use. Inadequate access to antibiotics has especially affected LMICs. GARDP is also concerned about the growing problem of shortages, which affects all countries today. A lack of access to antibiotics and other critical public health interventions, such as IPC and diagnostic/laboratory capacity, results in increased morbidity and mortality

and fuels resistance. We urge governments to recognize that the lack of access to antibiotics and other public health interventions is a catastrophic, collective failure that is inequitable and unjust.

Addressing the public health failure of AMR: The role of GARDP

The growing burden of AMR is a public health failure. A lack of R&D and access to antibiotics is also a public health failure. To date, insufficient R&D and a lack of access is framed purely as a market failure, with market failure incorrectly considered to be completely analogous to public health failure. To address the market failure is to focus on funding and incentives that sustain pharmaceutical industry investment; to address the public health failure is to do the former and additionally, to also identify and zero in on unmet needs using the most effective approach for each need.

In the forthcoming Political Declaration on AMR, we urge global leaders to frame the international response as overcoming a public health failure, including inadequate R&D and access to antibiotics. This means addressing the drivers of morbidity and mortality due to drug-resistant infections—including a lack of access to antibiotics and shortages. It includes introducing good stewardship practices to extend the useful life of treatments, thereby improving access to effective treatments through optimal use and stewardship programmes. It involves investing in R&D that address the needs of vulnerable populations, including children of all ages. We further underscore that R&D should address the needs of all countries, which requires, for example, conducting R&D across demographic groups and in LMICs so that health systems and providers have the clinical evidence required to use antibiotics effectively and responsibly.

In the five years since it was legally established, GARDP has proven its ability to serve as an efficient, pragmatic and public health-focused solution for antibiotic development and access that addresses the most urgent public health needs. We draw attention to two aspects of our model that have contributed to this success.

First, we have placed public health at the centre of our decision-making. As a not-for-profit organization, GARDP can invest in projects with little or no commercial value that fulfil public health needs. We can focus our clinical development on populations, including children, and geographies worldwide for R&D with a public health perspective. As a not-for-profit partnership, we are perceived as a neutral, trusted partner by the public and private sector. Whereas other R&D partnerships have played this role for certain disease areas like tuberculosis or malaria or neglected diseases more generally, GARDP plays this role for antibiotics.

Second, GARDP takes an integrated R&D-to-access approach for timely development and sustainable antibiotic access. This approach ensures that research activities and access considerations are aligned from the outset and align with globally coordinated mechanisms. Key aspects include shaping clinical development to cater to real-world needs, optimizing pharmaceutical development to simplify administration and reduce production costs, and generating relevant clinical data and medical evidence to support appropriate use in diverse settings post-approval.

Recommendations

Considering GARDP's experience, we share several recommendations for a comprehensive, equitable and sustainable global response to AMR. We strongly encourage global leaders to consider these recommendations while shaping the Political Declaration that will emerge from this year's High-Level Meeting on AMR.

1. **Implement a One Health approach:** We underscore the need for a One Health approach to address AMR. Antibiotic resistance requires a whole of government approach as well as a society-wide response across human health, the agricultural sector and the environment.
2. **Increase investment in critical public health interventions to strengthen health systems:** We urge investments in critical public health interventions, such as infection prevention and control, appropriate surveillance, improved stewardship, and diagnostic and laboratory capacity. Without these investments, neither governments nor international agencies will be able to sustainably address AMR, and antibiotics will be used even more widely. Such interventions are also highly cost-effective.
3. **Strengthen equitable access to essential antibiotics during R&D:** We urge greater research and attention to the causes and impact of drug-resistant infections on account of age, gender identity and sex, and socioeconomic status. All R&D actors should integrate and align access considerations as early as possible, including shaping clinical development to cater to real-world needs, optimizing pharmaceutical development to simplify administration and reduce production costs, and generating relevant clinical data and medical evidence to support appropriate use in diverse settings post-approval.
4. **Prioritize access to antibiotics for those with the greatest need:** We recommend that antibiotics are prioritized for use by those populations that have the greatest need, including disease burden, resistance patterns, and a lack of other alternatives – such as infection prevention and control. Thus, new antibiotics should be prioritized for use where public health returns will be greatest, not the largest commercial benefit or profit.
5. **Strengthen stewardship-driven access:** We support safeguards to ensure that new treatments are used sustainably in all countries. This includes evidence as well as additional tools, such as diagnostic instruments, to provide a timely and accurate diagnosis. The Declaration should support good antimicrobial stewardship while rejecting the use of it as a rationale to withhold lifesaving treatments or to introduce barriers to use, such as high prices or refusing to register a treatment in a high-burden country.
6. **Improve the international response to shortages:** We urge cooperation and collaboration between governments to address shortages of antibiotics. This should include that limited supply is distributed equitably where required, and to develop durable mechanisms, including pooled procurement mechanisms and revenue guarantees, to help ensure supply is commensurate with demand over the long term.
7. **Support international, regional and local efforts to ensure equitable access to existing and new antibiotics:** Governments should support key mechanisms that seek to improve equitable access to antibiotics. This includes SECURE, a collaborative initiative established by WHO and GARDP, to expand access to essential antibiotics in partnership with participating countries.
8. **Define key obligations all governments should achieve to strengthen domestic responses to AMR:** Governments should define the key requirements that should be followed domestically to improve sustainable access to antibiotics. This can include: (a) Timely updates to the national Essential Medicines List and treatment guidelines; (b) budgetary allocations to procure and provide relevant treatments; (c) pharmaceutical policies to protect and regulate the distribution of antibiotics in the supply chain; and (d) investments in regulatory systems, including regional mechanisms as appropriate, to support the accelerated registration of treatments and enforcement mechanisms to assure access to quality-assured antibiotics.

9. **Place children and newborns at the centre, not the periphery, of the AMR response:** We recommend that governments ensure that the needs of children are considered within every aspect of national responses and the global response to AMR, including improved R&D and access to antibiotics.
10. **Support push funding to sustain R&D and ensure new and existing antibiotics meet all public health needs:** We recommend support for push funding as indispensable in completing R&D for new antibiotics and combinations, ensuring such R&D addresses all needs, including across countries and for specific populations, such as children of all ages, and facilitating access to such treatments where needed.
11. **Provide support to pharmaceutical companies to carry out public health-driven R&D while ensuring access:** We support governments providing push funding and specific pull incentives, such as revenue guarantees and milestone prizes, that encourage the pharmaceutical industry to address unmet needs according to the WHO Priority Pathogen List. Any push funding or pull mechanism should include requirements to ensure sustainable access, generate medical evidence and clinical data to promote appropriate use of antibiotics in all settings, and the timely development of formulations, especially for children. Non-profits should also be supported to partner with industry to accelerate R&D and access and may be an effective way to deliver public funding.
12. **Target setting for the Political Declaration:** We support the introduction of targets in the Political Declaration. These targets should be focused on measurable outcomes and reflect the varying challenges and consequences faced in low- and middle-income countries and high-income countries. Specific targets should include: (1) access to antibiotics and diagnostics; (2) use of antibiotics; (3) R&D-specific targets; (4) IPC; and (5) surveillance. We also support ambitious, outcome-related targets or interim targets that aim to reduce mortality due to drug-resistant infections, including for specific groups, such as children and newborns, and for specific conditions such as sepsis.
13. **Improve research, awareness and policymaking to account for global trends that affect AMR:** Increasingly global trends like climate change, conflict, economic migration, and urbanization are driving the spread and growth of antimicrobial resistance. Urgent, definitive research and an appropriate response is needed to understand how such trends are increasing the risk of multidrug-resistant bacterial infections, and whether current investments are sufficient to meet current and future needs.
14. **Support and fully integrate civil society:** We support the funding and integration of civil society into governance and accountability mechanisms dedicated to the AMR response, and the ability of civil society to speak independently and critically.
15. **Strengthen global governance of AMR:** We recommend Member States commit to developing a functioning global governance framework for AMR that serves as a platform between countries to convene and negotiate political decisions to guide the AMR response and for governments to hold one another mutually accountable.
16. **Allocate increased financing to respond to AMR:** We recommend governments mobilize and sustain long-term financing, including through international cooperation and domestic investment. Funding should help implement National Action Plans.
17. **Full funding and support of GARDP:** We call for governments to commit to fully funding GARDP to carry out its objectives and recognize GARDP within the Political Declaration as a critical international organization at the centre of a global response to AMR for all countries.