

Financing Antimicrobial Resistance Interventions: Optimizing Current and New Funding Mechanisms for Mitigation

Summary brief from a high-level side event during the World Health Assembly, May 2024

During the 77th World Health Assembly in May 2024 in Geneva, the Ministry for the Interior and Health of Denmark, AMR Action Fund, Novo Nordisk Foundation, and the International Centre for Antimicrobial Resistance Solutions (ICARS) convened governments and key stakeholders for a high-level side event to address one of the most pressing global health challenges today: antimicrobial resistance (AMR).

Participants discussed financing for AMR interventions and the need to optimize current and new funding mechanisms for mitigation and scale up current efforts significantly. This dialogue contributes to the various conversations leading up to the high-level meeting on AMR during the UN General Assembly in September to ensure tangible global actions are taken and that mitigating AMR is seen as a financial priority.

The roundtable brought together senior government officials from Ethiopia, Zambia, Brazil, Thailand, France, Germany, United Kingdom, and Denmark as well as senior level representatives from the World Bank, the Quadripartite Joint Secretariat, Africa CDC, Wellcome Trust, Novo Nordisk Foundation, AMR Action Fund, and ICARS. It was opened with an introductory speech on the theme by Dr Sujith J. Chandy, Executive Director of ICARS, and the discussion was moderated by Dr Jonas Egebart, Director General of the Danish Health Authority. The event was hosted by the Ambassador and Permanent Representative of Denmark to the United Nations in Geneva.

The purpose of this summary brief is to translate momentum into action. The brief presents the essential points raised during this high-level global roundtable dialogue so that countries, the global community, political leaders, and funding authorities can bring these messages forward into action on the ground.

Antimicrobial Resistance (AMR) poses a severe global threat to the health of humans, animals, plants, and the environment, and endangers food security and the global economy. If nothing is done, the economic cost of AMR could become as severe as the 2008-2009 financial crisis with losses of up to 3.8% of GDP, with an annual shortfall of USD 3.4 trillion by 2030, according to the World Bank. Furthermore, AMR-related mortality is projected to be the leading cause of death by 2050 with more than 10 million deaths annually. AMR is much more than a health challenge: it is a global development challenge that affects economies at scale and significantly threatens the achievement of the Sustainable Development Goals.

Since the launch of the World Health Organization (WHO)'s Global Action Plan on Antimicrobial Resistance in 2015, the threat of AMR has gained recognition as one of the world's most pressing global health challenges. In 2019, WHO declared AMR a top 10 public health threat, and in 2022 the European Commission identified AMR as one of the top three priority health threats. However, despite increased political awareness at global, regional, and national levels, rates of AMR continue to increase all over the world with the most severe consequences for Low- and Middle-Income Countries (LMICs) as they face the highest burden of AMR. Furthermore, these countries are less prepared to handle this burden due to weaker health systems and vulnerable economies.

Today, 178 countries have developed multisectoral National Action Plans (NAPs) on AMR, yet only 27% have effectively implemented their NAPs and only 11% of countries have allocated national budgets to do so. Hence, efforts to address AMR are impaired by low levels of implementation together with a lack of coordination and financial priority in most countries and at a global scale.

This year, 2024, the UN General Assembly has prioritized AMR with a High-Level Meeting in September. AMR is gaining significant political attention, and stakeholders are actively engaged in high-level discussions in various fora, inputting to the UNGA HLM Declaration particularly on target setting, accountability, and financing. To facilitate significant and sustainable impact on the global AMR burden, action-taking after UNGA will be crucial. AMR mitigation needs prioritization. While initial efforts have been taken to support programmes and initiatives, international investments in mitigating AMR continue to be relatively low and lack coordination. To achieve more globally relevant sustainable financing and impact, there is a need to transform the way we invest and mobilize resources for AMR mitigation.

The high-level side event discussion summarized in this brief gathered leading cross-regional voices from governments and AMR leaders in a joint discussion on optimization of current funding mechanisms and new

financing models to scale AMR mitigation efforts significantly. The objective is to impact and strengthen the global dialogue and response to AMR to amplify mitigation activities following the 2024 UNGA HLM on AMR in September and the Ministerial Conference on AMR in the Kingdom of Saudi Arabia in November.

Political and Financial Commitment for AMR must go Hand in Hand

The economic challenges posed by AMR are as multifaceted as the biological complexities of the microbes. As the international community grapples with AMR, it is evident that financial mechanisms must be fortified to support the multifarious strategies required to mitigate this complex issue impacting global health and development. Financing for AMR is one of the areas that has not progressed much since the Declaration on AMR from 2016.

As part of the discussions, participants emphasized the necessity of a global robust financial prioritization to mitigate AMR. At the same time, it was felt that there is a need for domestic resource prioritization from country governments considering national contexts with multiple competing challenges and priorities. The discussion provided several good examples of prioritizing interventions with the highest impact.

Also, the necessity to integrate AMR into other agendas and systems approaches such as Universal Health Coverage was stressed. AMR must be addressed with a One Health approach. The AMR challenge escalated because of climate change and other global crises. Access to funding is challenging, and AMR mitigation must be integrated with other national and global development challenges. Existing mechanisms for financing global health interventions must incorporate AMR, as illustrated by the World Bank's AMR framework.

Overall, with 2024 being a crucial year for AMR, participants called for an ambitious Declaration on AMR in New York in September with clear targets. However, they also stressed the importance of what happens after the UN General Assembly and the Saudi Ministerial Conference on AMR in November. Will political commitments be backed by financial commitments?

Strategic Funding for National and Global Action Plans

The discussion highlighted that while political will is growing, it must be matched by strategic financial commitments to drive the implementation of effective AMR interventions. Participants emphasized the importance of equipping NAPs with clear accountability and dedicated funding, which currently is scarce, particularly at the national level.

Participants concurred that the current investment in AMR interventions is insufficient to meet the escalating needs for novel antimicrobials, vaccines, and diagnostic tools and acknowledged that high-income countries

need to take a leading role in facilitating a coordinated global financial response to AMR. It is incumbent upon these nations to spearhead efforts in establishing robust financial frameworks that not only incentivize the development of new diagnostics, preventatives, and therapeutics but also ensure the sustainable implementation of NAPs with a One Health approach.

At the same time, it is crucial to identify local challenges and develop context-specific solutions towards implementing the elements of NAPs, considering the entire spectrum of interventions from prevention to treatment and access to antibiotics. Preventive strategies through Infection Prevention and Control (IPC) and immunization are vital tools to reduce the risk of AMR. Several participants mentioned the need to identify and address evidence gaps, recognizing that more research and data are part of the solutions.

Financing Access to and Appropriate Use of Antibiotics

The discussion also touched on the necessity of behavioral change in antibiotic usage and the importance of antimicrobial stewardship programs. It was recognized that addressing the varying perceptions on the use of antibiotics is pivotal to preserving their effectiveness for future generations. Simultaneously, it was stressed that access and availability of antibiotics is often a larger issue in LMICs than overconsumption.

The implementation of antimicrobial stewardship programs, particularly in LMICs, requires dedicated funding, particularly in resource-constrained settings and against competing health priorities. The disparity in access to antimicrobials calls for a reevaluation of financial strategies that aim to level out the imbalance between lack of access and excess consumption. It is imperative to establish an economic environment where diagnostics and treatments are accessible and affordable for all, thereby reducing the tendency towards inappropriate prescription practices.

In this context, it is important to recognize that human resource capacity for AMR mitigation interventions and national budgetary prioritization are challenging for most countries. Also, to achieve the behavior and change needed, we must recognize that communities are fundamental building blocks and therefore part of the solution. Effective communication and community engagement are crucial.

The lack of commercial incentives for antibiotic research and development (R&D) emerges as a critical barrier to innovation. The conventional market dynamics of supply and demand do not apply to antibiotics due to low pricing coupled with the unique requirement of stewardship over profit. Participants pointed out that the misalignment between the cost of developing new antibiotics and the economic return deters investment in R&D. There is a need, therefore, for the development of novel financing models that can stimulate research,

innovation, and development while balancing public health imperatives with economic viability. Push and pull incentives – including procurement mechanisms - were highlighted as examples of financial instruments that could revolutionize the antibiotic market landscape. The discussion spotlighted the crucial role of public-private partnerships and global collaboration in creating robust financial incentives for innovation in the AMR space and underscored the imperative to balance the focus on access and stewardship with equity as a central value.

Broadening Financing and Investment Horizons in AMR

Experts around the table called for innovative financial models to stimulate R&D of new antimicrobials and alternative therapies. They pointed out the misalignment between the cost of developing new antibiotics and the economic return, which hampers investment in R&D.

A consensus emerged on the pivotal role of high-income countries in leading a coordinated global financial response to AMR. Participants concurred that the current investment in AMR interventions is insufficient to meet the escalating needs in all areas of the AMR response. It is incumbent upon these nations to spearhead efforts in establishing robust financial frameworks that not only incentivize the development of new tools, but also ensure the sustainable implementation of NAPs with a One Health approach.

Furthermore, investing in AMR mitigation extends beyond NAPs and the pharmaceutical realm. There is a pressing need to fund innovative research into alternative technologies, digital solutions, behavioral science, and educational programs for healthcare providers. Such investments are crucial for preserving the effectiveness of current antimicrobials and preventing the further emergence of resistance. Also, community engagement is a fundamental building block in the solution. Effective communication is essential in public health. We must remember amid political and financing debates that this is really about patients and people.

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To effectively address AMR, robust financial commitment and strategic implementation of National Action Plans are essential and high-income countries must lead with innovative financing models. Communities are fundamental as a building block and part of the solution. Effective communication and community engagement is crucial, and we must remember amid political and financing debates that this is really about patients and people.

Recommendations

- ➔ Foster government engagement to elevate AMR as a critical issue with financial prioritization.
- ➔ Use the current political momentum to secure financial commitment and action.
- ➔ Realign and innovate international funding mechanisms for AMR mitigation and interventions.
- ➔ Develop novel financing models with push and pull incentives to stimulate antibiotic R&D investment
- ➔ Develop context specific and cost-effective interventions and capacity strengthening models in LMICs that can be scaled nationally and regionally.
- ➔ Integrate AMR into other health and development agendas.
- ➔ Embrace a One Health approach to address the multifaceted nature of AMR.
- ➔ Enhance coordination mechanisms and share best practices across countries.
- ➔ Ensure effective communication and community engagement.

“Integrating the science case, the economic case and the narrative about AMR is imperative if we want to move forward with tackling this global challenge. Furthermore, decisive actions on financing through globally innovative mechanisms and domestic resource prioritization will be critical to sustain our efforts in tackling AMR.”

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