Global call to action to address antimicrobial resistance

An appeal for keeping our medicines against infectious diseases effective to save lives

October 2025

World Health Organization

Executive Summary

Dr. Yukiko Nakatani
Assistant Director-General

Securing a future where life-saving treatments remain effective: In 2019, WHO identified AMR as one of the top ten global public health threats, jeopardizing our ability to treat common infections and perform routine medical procedures. Without urgent action, drug-resistant infections could claim 39 million lives by 2050 and cost up to USD 412 billion annually, disproportionately affecting vulnerable populations and low-resource settings.

Recognizing the scale of this crisis, WHO has led the global response, coordinating efforts through the One Health approach, strengthening health systems, and driving the implementation of national action plans (NAPs) worldwide. Since the adoption of the Global Action Plan on AMR (GAP) in 2015, progress has been made. As of 2024:

- 178 countries had AMR NAPs.
- The Global Antimicrobial Resistance and Use Surveillance System (GLASS) expanded to over 100 countries reporting AMR data.
- The AWaRe classification has helped improve antibiotic stewardship, with 58% of countries achieving the WHO target of 60% “Access” antibiotic use.
- The foundations of a global response have been established.

Despite these advancements, gaps remain in financing, implementation, and monitoring, preventing progress at country level. In 2024, the UN General Assembly adopted a Political Declaration on AMR, setting clear targets for 2030, including:

- 10% reduction in global AMR-related deaths.
- 60% of countries with fully funded AMR action plans.
- 80% of countries with bacterial and fungal resistance testing capacity.
- 70% of antibiotics used should be from the Access AWaRe category.

WHO remains at the forefront of this fight, leveraging its global mandate to set standards, coordinate multisectoral responses, track progress, and drive investments in prevention, diagnostics, treatment, and innovation. To meet the 2030 AMR targets, WHO will implement its strategic and operational priorities in a cross divisional, three level, result-based manner. We now call on donors and partners to:

- Coordinate actions at global, regional and country level to increase efficiencies;
- Secure sufficient financing for WHO at the level of USD 85 million per biennium.

AMR is not a future problem—it is an urgent crisis. Through global cooperation and strategic action, we can preserve the effectiveness of life-saving medicines and protect the health of future generations. We now have five years to deliver on the UNGA commitment.

A diagnosis of drug resistant tuberculosis often comes after numerous treatment attempts with different antibiotics.

The Bureau of Investigative Journalism / British Society for Antimicrobial Chemotherapy / Khaula Jamil

Cover image: Health care workers are at the forefront of the fight against drug resistant sepsis.

The Bureau of Investigative Journalism / British Society for Antimicrobial Chemotherapy / Damilola Onafuwa

1 Secure a future where life-saving medical treatments remain effective

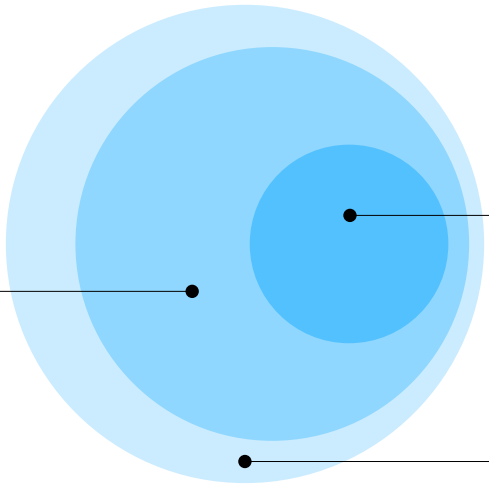
1.1. What is AMR?

Antimicrobial Resistance (AMR) occurs when bacteria, viruses, fungi and parasites do not respond to antimicrobial medicines. Exposure to antimicrobials and their inappropriate use are the leading drivers of this global health challenge that affects humans, animals, plants and the environment. As a result of drug resistance, antibiotics and other antimicrobial medicines become ineffective and infections become difficult or impossible to treat, increasing the risk of disease spread, severe illness, disability and death. Particularly concerning is bacterial resistance to antibiotics, where resistance emerges soon after a new antibiotic's introduction, outpacing drug development efforts. Since 2017, 13 new antibiotics have been approved, however more than three-quarters of these belong to existing antibiotic classes for which resistance mechanisms are well known (WHO, 2024)[i]

In 2019, WHO identified AMR as one of the top ten global public health threats[ii]. In addition, in 2024, the Global Burden of Disease GRAM project estimated that in 2021, 4.71 million deaths were linked to drug-resistant infections and 1.14 million directly caused by AMR-related diseases. This model also projected that AMR would be the attributable[iii] cause for 39 million deaths between 2025 and 2050. In addition, studies estimate that, globally, treating drug-resistant bacterial infections could cost up to 412 billion annually, with an additional 443 billion per year in lost productivity and reduced workforce participation over the next decade[iv]. However, with global cooperation, strategic investment, and immediate action, we can reverse this trajectory and address this health crisis.

Burden of Antimicrobial Resistance

Health burden:



4.71m
annual deaths
linked with AMR[iii]

2021 estimates

1.14m
annual deaths
associated with AMR[iii]

7.7m
annual deaths
due to bacterial infections[v]

Economic burden:

USD 855
billion/year
for treating resistant infections and productivity losses by 2050[iv]

Up to **11%**
decline in livestock by 2050[vi]

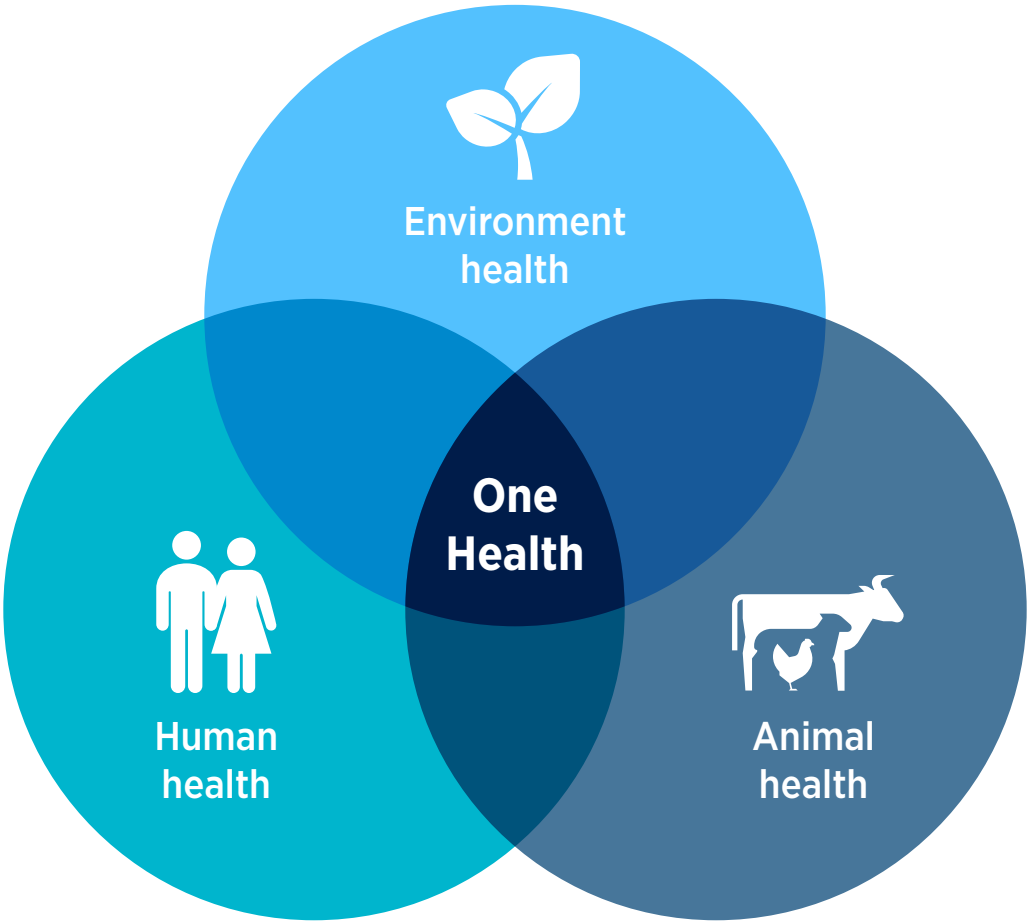
1.2. The human health sector's response to AMR: Strengthening health systems to prevent, diagnose, and treat infections

In 2015, acknowledging the serious impact that AMR will have on human health, the World Health Assembly adopted the Global Action Plan [GAP] to address AMR. The GAP provided the blueprint for countries to then develop and implement national action plans. WHO's people-centered approach to AMR recommends increasing access to services that provide (1) prevention, (2) timely, accurate diagnosis; and (3) quality assured treatment, including promoting appropriate antimicrobial use. The prevention agenda includes improving water, sanitation, and hygiene (WASH), enhancing infection prevention and control (IPC), and expanding vaccine coverage. Access to these services also requires foundational steps of strategic information (surveillance, research) and governance, awareness and education. Since AMR does not affect only humans, a One Health approach is needed to coordinate efforts between sector-specific strategies.

1.3. What is the One Health approach and why does it matter to AMR?

AMR does not stop at human infections - it spreads through animals, food, and the environment. Inappropriate use of antibiotics in healthcare, farming, and livestock production accelerates resistance. Resistant microbes can transfer through water, soil, and food systems, affecting entire ecosystems.

One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent. The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development[vii].



2 Scaling up global action against AMR: Progress, and new challenges

2.1. Progress since the 2015 World Health Assembly adoption of the global action plan on AMR and the 2016 United Nations General Assembly (UNGA) High-Level Meeting (HLM) on AMR

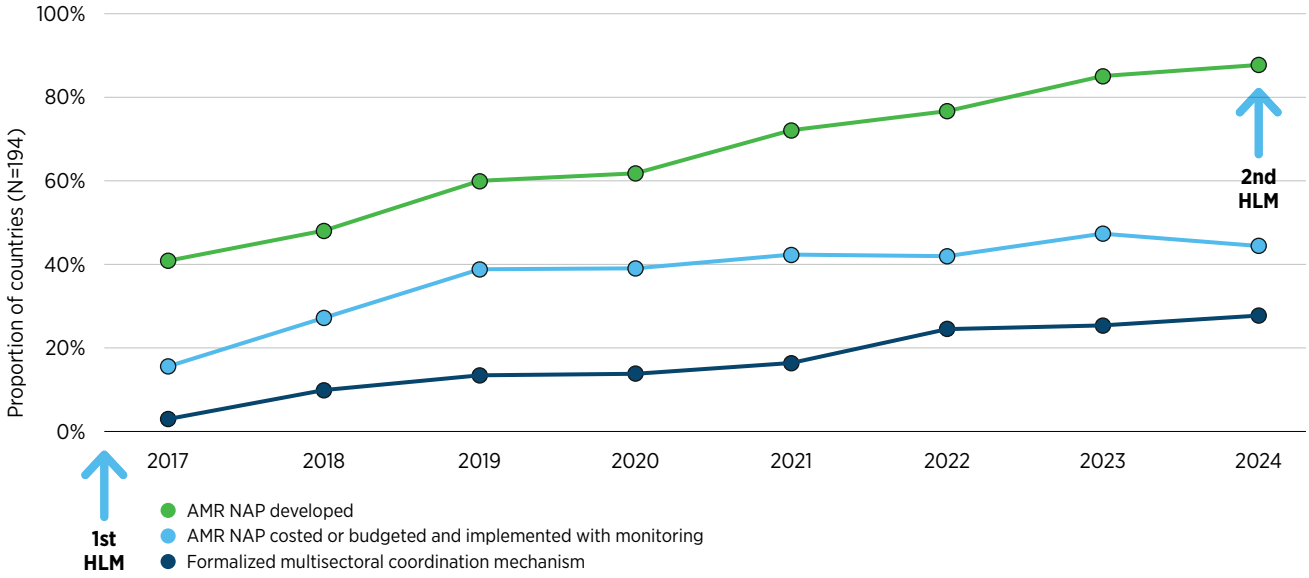
(WHO 2016)

- **Countries have committed to address AMR**. As of 2024, 178 countries had a national action plan to address AMR, based on the blueprint of the global action plan and 68% of them[viii] are implementing several elements of their plan.
- **AMR is embedded in development initiatives**, including in WHO's 14th General Programme of Work (GPW14), the Sustainable Development Goals (SDGs), and global strategies.
- **Global AMR Governance structures have been developed:**
  - **WHO hosts the Quadripartite Joint Secretariat for AMR (QJS)**, working with the Food and Agriculture Organization (FAO), the UN Environment Programme (UNEP), and the World Organisation for Animal Health (WOAH). The Secretariat hosts the Multi-Trust Partner Fund that catalyzes the multisectoral action against AMR.
  - **A Global Leaders Group (GLG) on AMR was constituted**, made of world leaders and experts from across sectors working together to accelerate political action on AMR. The GLG performs an independent global advisory and advocacy role, while simultaneously working to maintain urgency, public support, political momentum and visibility of AMR challenges on global health and development agendas.
  - **A Multi-Stakeholder Partnership Platform (MSPP) is facilitated by Quadripartite partners**. The MSPP aims to catalyze a global movement for action against AMR by fostering cooperation between a diverse range of stakeholders at all levels across the One Health spectrum.
- **Tracking AMR Country Self-Assessment Survey (TrACSS)**: WHO with the quadripartite established a global multisectoral survey to monitor the implementation of national action plans on AMR, identify trends, and share results in a public[viii] website. In 2024 a record 186 countries responded.
- **Normative standards and tools have been developed and disseminated**. These support national action plan governance, development, implementation, and monitoring; surveillance systems for AMR and antimicrobial use; laboratory strengthening and diagnostics; antimicrobial stewardship; health workforce and community awareness and education; regulations; and research and development (including research agendas for human health and One Health). In addition, complementary work has also been supported in immunization, infection, prevention and control, WASH, health emergencies preparedness and response, and health systems strengthening.
- **GLASS (Global Antimicrobial Resistance and Use Surveillance System)**: Since GLASS began in 2016, the number of countries reporting antimicrobial resistance (AMR) data has more than tripled. By 2022, 105 countries had reported over[ix] 19 million infection episodes with AMR data. In 2023, 60 countries also reported 2022 data to GLASS-antimicrobial use (AMU).
- **The AWaRe (Access, Watch, Reserve) system**: Antibiotics are now classified according to a simple traffic light system. In 2022, 58% (35 /60) reached the WHO target of 60% of overall use being from the Access category[x] and 32% (19/60) reached the new target of 70%.
- **Awareness and advocacy**: World AMR Awareness Week has been held regularly on 18-24 November each year. The Task force of AMR survivors has actively advocated for increased political and financing commitments for a concrete action on AMR.
- **Global R&D and access initiative were developed**: These include SECURE, AMR R&D Hub, GARDP, CARB-X, AMR action Fund.

Since GLASS began in 2016, the number of countries reporting antimicrobial resistance (AMR) data has more than tripled.

Progress of Tracking AMR Country Self-Assessment Survey [TrACSS] multisector indicators, worldwide, 2017-2024

More and more country plans, but funding, implementation and monitoring lagging behind.



2.2. 2024 was a year during which countries made additional critical commitments

A World Health Assembly resolution for the health sector

In May 2024, the Seventy seventh World Health Assembly (WHA) endorsed WHO's strategic and operational priorities for tackling drug-resistant bacterial infections (2025–2035[xi], emphasizing a people-centered, health system-based approach aligned with Universal Health Coverage (UHC).

A political declaration at the High-Level Meeting [HLM] of the United Nations General Assembly [UNGA]

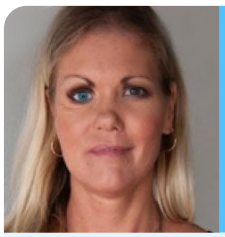
The Political Declaration on AMR adopted by the 79th UNGA offered a pivotal moment for countries to commit to clear action plans and financing mechanisms for multisectoral work. A whole-of-government, whole-of-society response — integrating human, animal, plant, environmental, financial and educational sectors — is essential for success under the One Health Approach.

Additional commitments and declarations

The G7[xii] and G20[xiii] Health and Agriculture Ministers' respective communiqués and declarations reaffirmed global commitments to combat AMR through cross-sectoral collaboration. In November 2024, the 4th High-Level Ministerial Conference on AMR endorsed the Jeddah Commitments supporting operationalization of commitments in the political declaration of UNGA HLM.

Neonatal sepsis accounts for a substantial portion of the burden of AMR in low and middle income countries.

The Bureau of Investigative Journalism / British Society for Antimicrobial Chemotherapy / Damilola Onafuwa



Survivors' voices:

Real stories of resilience against antimicrobial resistance

Vanessa Carter's ordeal with MRSA

After a severe car accident, Vanessa Carter from South Africa underwent facial reconstruction. She developed a Methicillin-resistant Staphylococcus aureus (MRSA) infection, enduring ineffective treatments and delayed diagnosis. The infection caused significant facial damage. Her experience underscores the critical need for timely diagnosis and appropriate treatment of drug-resistant infections. World Health Organization

3 Delivering for global impact along the 2030 AMR goals

Press briefing led by Mia Amor Mottley, Prime Minister of Barbados and Chair of the Global Leaders Group on AMR, ahead of the UNGA HLM on AMR.

Following the adoption of the Political Declaration[xiv] by the UNGA HLM on AMR and the AMR Resolution on WHO's strategic and operational priorities to address drug-resistant bacterial infections (2025-35) by the 77th WHA (2024), there is much work ahead. WHO, Member States and all other relevant AMR stakeholders are now equipped with important roadmaps, targets and timelines to address AMR at all levels, for which action must start now.

3.1. Global UN targets for AMR reduction by 2030: Measurable goals for a healthier future

By 2030, Member States need to achieve the global targets established during the UNGA HLM that are in the AMR Political Declaration, including:

- 10% reduction in global deaths associated with bacterial AMR compared with 2019 baseline.
- At least 60% of countries have funded National Action Plans [NAPs].
- At least 80% of countries can test resistance in all bacterial and fungal GLASS pathogens.
- All countries report annual surveillance data to GLASS.
- 70% of antibiotics used from the Access AWaRe category, denoting a more appropriate use of antibiotics.
- Diagnostic capacity: 80% countries with capacity to perform bacterial and fungal resistance testing.
- WASH: 100% of countries have basic WASH services in all healthcare facilities by 2030.
- IPC: 90% of countries meet all WHO minimum requirements for IPC programmes at national level by 2030.

Outcomes of the UNGA Resolution A/79/L.5-2024

- **Global commitment to combat AMR**: Unified international effort to address AMR through equitable access to prevention, diagnosis, treatment and resources.
- **Governance and accountability**: Development and implementation of NAPs with measurable targets by 2030; establish an Independent Panel on Evidence for Action against AMR by 2025; and update the AMR Global Action Plan by 2026.
- **Access**: Equitable access to affordable, effective, and quality- assured antimicrobials, diagnostics (including point of case) and vaccines.
- **Enhanced surveillance**: Strengthened AMR data collection and sharing through global surveillance systems.
- **Environmental measures**: Commitment to reduce antimicrobial contamination in the environment.
- **Sector-specific commitments**: Focused strategies for human health, agriculture, and environmental sectors to reduce AMR impact.
- **Education and awareness**: Promotion of public awareness campaigns and integration of AMR topics into education systems.
- **R&D and innovation**: Invest in R&D and research based on the WHO Global Research Agenda for AMR in Human Health and the One Health Priority Research Agenda for AMR.
- **One Health approach**: Integration of human, animal, and environmental health sectors to holistically tackle AMR. Sustainable financing: Target of $100 million by 2030 to fund NAPs action plans and strengthen AMR responses globally.

3.2. Strategic priorities in the health sector

WHO will focus on curbing the public health and socioeconomic crisis caused by drug-resistant infections, with focus on four specific strategic priorities: prevention, universal access, strategic information and effective governance and financing.

i. Prevention

- **WASH**: Improving basic hygiene to prevent infections.
- **IPC**: Strengthening infection control protocols in healthcare settings.
- **Immunization**: Expanding vaccine coverage to reduce infection risks.

ii. Universal access to essential health services, timely accurate diagnosis and appropriate, quality-assured treatment

We need to ensure that everyone can access affordable and high-quality diagnostics (under the framework of the AMR Diagnostics Initiative)[xv], appropriate treatments, and essential medicines. The AWaRe system classifies antibiotics into three categories (Access, Watch, and Reserve), which guides their use in clinical care to optimize treatment and prevent the development of AMR. This includes integrating antibiotic stewardship and appropriate medicine use into healthcare delivery.

iii. Strategic information systems

Establishing a global AMR data system allows estimating prevalence, health, and economic burdens, while measuring progress across the results chain (from structure and processes to outcomes and impact). Core deliverables of this work include:

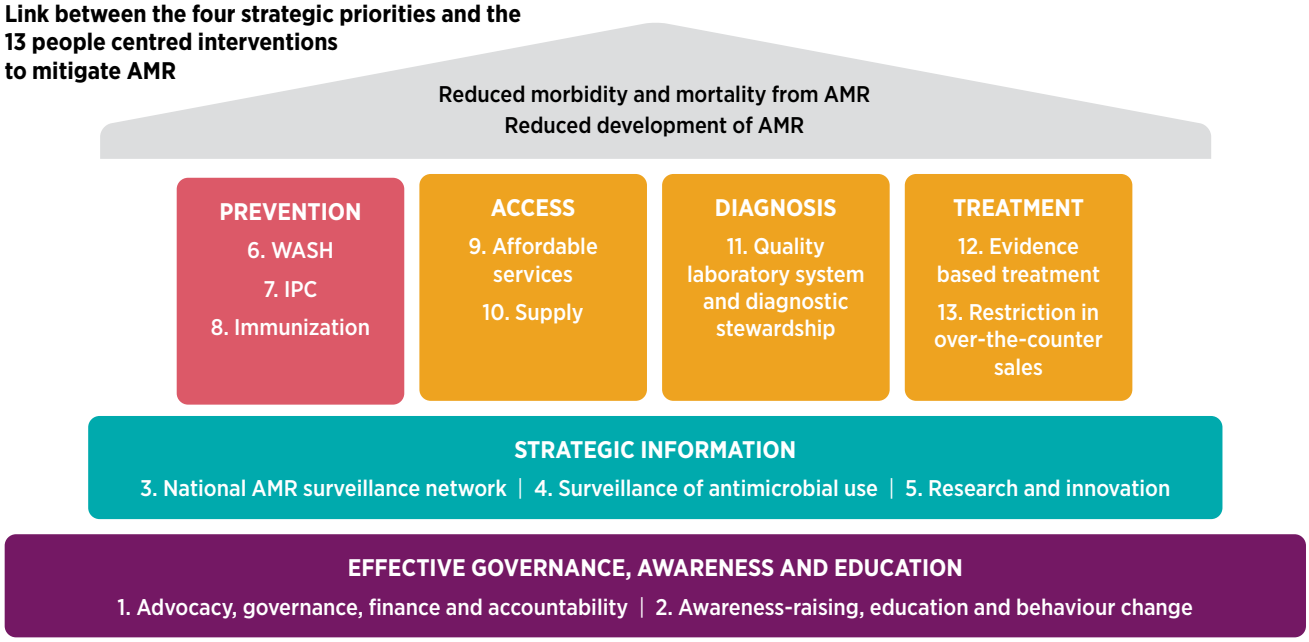
- **GLASS**: Tracking levels of trends of AMR and antibiotic use to inform national and global health policies and interventions.
- **Research agenda on AMR**: Prioritizing research areas on AMR with the highest public health impact.
- **Bacterial and Fungal Priority Pathogens Lists (BPPL, FPPL)**: Identifying pathogens of greatest public health importance to guide R&D and AMR response strategies.
- **Medically Important Antimicrobials (MIA) list**: Identifying antimicrobials most critical for human medicine that need to be preserved by reducing their use in non-human sectors.
- **R&D pipeline reports**: Tracking global R&D progress for antibacterials, antifungals, diagnostics and vaccines.

iv. Effective governance and financing

This includes:

- **Costing, budgeting, and financing frameworks for AMR responses**. (WHO, 2023)
- **Strengthening public awareness, education, and behaviour change** through targeted advocacy campaigns and tools like the WHO Task Force of AMR Survivors[xvi]; the Quadripartite Working Group on Youth Engagement for AMR[xvii]; the Global AMR Media Alliance; and the Competency Framework for Health Workers' Education and Training on AMR[xviii].
- **Enhancing global multisectoral coordination** using a One Health approach, leveraging WHO's leadership among quadripartite organizations.

Mainstreaming the response to AMR as part of UHC and health security: Link between the four strategic priorities and the 13 people centred interventions to mitigate AMR



WHO will focus on curbing the public health and socioeconomic crisis caused by drug-resistant infections, with focus on four specific strategic priorities: prevention, access, diagnosis, and treatment that *correspond to the people centered approach to addressing AMR in human health.*

3.3. Multisectoral action through the Quadripartite

Multisectoral action is key to success in the health sector. WHO also strengthens cross-sectoral action by leveraging the Quadripartite's collective expertise. This includes addressing challenges in the antibiotic development pipeline; continuing to roll-out the Strategic Framework for Collaboration on AMR in countries, including through UN Sustainable Development Cooperation Frameworks; and advocating for multisectoral support to countries through the AMR Multi- Partner Trust Fund.

3.4. Tracking progress together to document accountability

WHO has a key role in monitoring the progress towards the 2030 goals of the UNGA. Key contributions include:

- **The annual TrACSS** that monitors self-reported country progress in terms of systems, processes, structure, and inputs, and help identify critical gaps in countries.
- **GLASS** that monitors levels of antimicrobial resistance and use. The WHO coordinated data collaborative will also monitor impact in terms of morbidity, mortality and burden.
- **The World Health Survey Plus (WHS+)** monitors household level antibiotic use practices and awareness [xix].
- **Routine tracking of the antibacterial R&D pipeline** as well as R&D efforts in other areas (antifungals, diagnostics and vaccines)[xx].
- **International Health Regulations (IHR) / Joint External Evaluations (JEE)** scores on key AMR indicators
- **Relevant indicators from cross-cutting work**: UHC Index, WASH, IPC, Immunization.

Addressing AMR in Fragile and Conflict-Affected Situations

The risks of AMR are particularly acute in fragile and conflict-affected situations (FCS), where disrupted health systems, population displacement, poor access to medicines, and weakened infection prevention and control drive the emergence and the spread of drug-resistant infections.

There is an urgent need to integrate AMR mitigation into humanitarian and emergency responses, grounded in a people-centred approach. This is one of the evolving areas of WHO's AMR work, with the WHO Eastern Mediterranean Regional Office (EMRO) set to publish a policy brief, highlighting key interventions across priority domains and recommended action by stakeholders.

4 WHO: COORDINATING THE FIGHT AGAINST AMR WORLDWIDE

As the leading authority on international public health, the WHO combats AMR through its global mandate. Its role, includes evidence generation, developing strategic frameworks, normative standards and tools, supporting country-level implementation, and encouraging global partnerships. WHO also coordinates multisectoral action, including hosting the QJS, to ensure that actions taken to address AMR are science-driven, equitable, and aligned with international health goals. (WHO 2016)

4.1. WHO's unique positioning and deliverables

The global challenge of AMR requires a coordinated international response. While high-income countries have made progress, many low- and middle-income countries (LMICs) face substantial gaps in their AMR response due to lack of technical capacity and adequate financial resources. Key contributions include:

- **Setting global standards**: Establishing evidence-based standards to guide national and international AMR strategies.
- **Coordinating technical support for country implementation**: Assisting countries in adopting a core package of AMR interventions aligned with Primary Health Care (PHC) approach to achieve UHC, and emergency preparedness and response strategies, based on country needs.
- **Ensuring accountability**: Monitoring country and global progress through tools such as TrACSS and GLASS. (WHO, 2023).
- **Advocating**: Ensuring visibility and greater understanding of AMR among key stakeholder groups through awareness-raising products, targeted campaigns and global advocacy mechanisms.
- **Research and Development (R&D)**: Providing guidance on R&D priorities to reflect areas with the greatest public health need, as well as monitoring of R&D activities and progress.
- **Collaborating on data**: Convening a global AMR data collaborative through partnerships with research institutions and WHO Collaborating Centres.
- **Coordinating multisectoral action**: Hosting the QJS while ensuring the health sector remains central to AMR interventions. WHO strengthens cross-sectoral action by leveraging the Quadripartite's collective expertise. This includes defining critically important antibiotics for human health, promoting responsible antibiotic use, and addressing challenges in the antibiotic development pipeline.

Argentina
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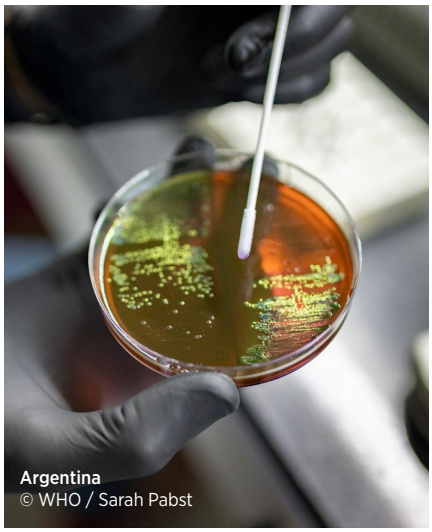

Argentina
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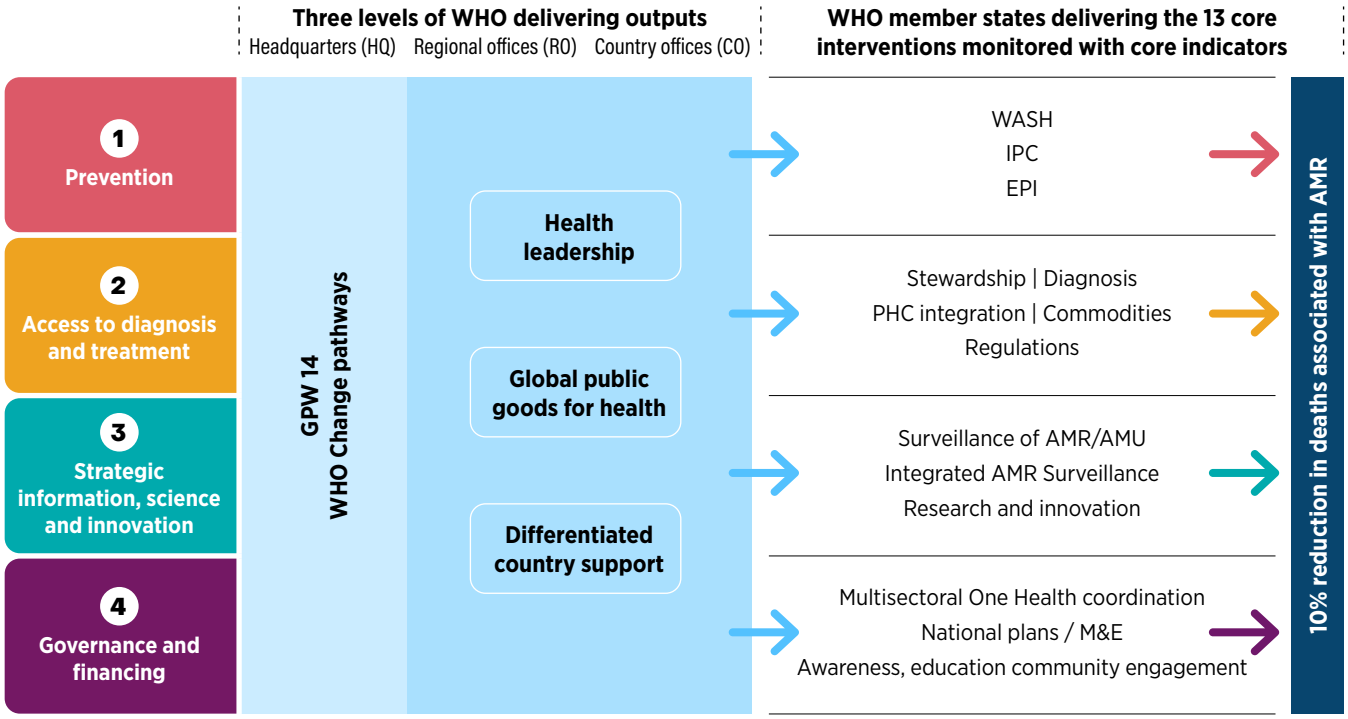
Strong laboratory services for bacteriology and mycology are key for surveillance and patient management.

4.2. A three-level, cross-divisional approach

WHO's contribution will be delivered through a results-based, three level, cross divisional approach (See theory of change below) for country impact that can be measured through core indicators (see figure and tables in appendix)

Theory of change for WHO to contribute to impact at country level



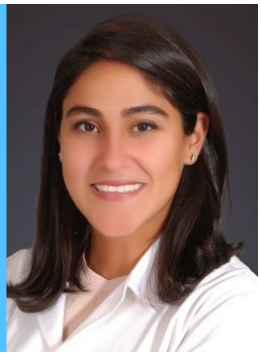
4.3. WHO convening and leveraging technical and financial partners:

To ensure coordinated and effective technical support, WHO plans to regularly engage with technical partners, financial institutions, and WHO Collaborating Centres (WHOCCs). As part of the AMR Technical Assistance Mechanism [TeAM], some of the products and services proposed by WHO could be implemented or delivered by partners.

- **Identify the technical capacities and expertise**, along with the regions and countries where technical and financial partners operate.
- **Share information** on country-level technical support needs and requests.
- **Match country needs with the offer of technical assistance and financial support** from partners based on WHO normative guidance.
- **Monitor country–level technical assistance** delivered by technical partners in terms of outputs, outcome and impact against targets.
- **Monitor country outcomes** to ensure progress toward WHA and UNGA targets.

Survivors' voices:

Real stories of resilience against antimicrobial resistance



Nour's journey from helplessness to AMR advocacy

Nour's mother developed a drug-resistant kidney and urinary tract infection after spinal surgery. Multiple hospitalizations and treatment failures followed, complicated by Lebanon's weak health system. Even as a clinical pharmacist, Nour felt helpless. Inspired by this experience, she became a champion for AMR in the Middle East. Now in Saudi Arabia, Nour leads the Antimicrobial Stewardship Program at the Ministry of National Guard-Health Affairs. World Health Organization

XDR typhoid survivor in South Asia.
The Bureau of Investigative Journalism / British Society for Antimicrobial Chemotherapy / Saiyna Bashir

CALL TO ACTION:
URGENT ACTION TO COMBAT AMR

Antimicrobial Resistance (AMR) threatens global health, economic stability, and medical progress. While commitments from UNGA and WHO have set clear 2030 targets, urgent, coordinated, and adequately financed action is required to close gaps in implementation. To meet the 2030 AMR targets, WHO will implement its strategic and operational priorities in a cross divisional, three level, result-based manner. We now call on donors and partners to:

- **Coordinate actions at global, regional and country level to increase efficiencies.**
- **Secure sufficient financing for WHO at the level of USD 85 million per biennium.**

AMR is not a future problem—it is an urgent crisis. Through global cooperation and strategic action, we can preserve the effectiveness of life-saving medicines and protect the health of future generations. We now have five years to deliver on the UNGA commitment.

Breakdown of resource requirements (in USD million)*

		Headquarters / Region							
Biennium	**Cost**	**Africa**	**Americas**	**Eastern Mediterranean**	**Europe**	**Headquarters**	**Southeast Asia**	**Western Pacific**	**Total**
2026-27	Staff	4.80	2.49	2.54	3.84	24.74	4.05	2.07	44.54
	Activities	4.06	2.98	3.61	4.91	18.84	4.05	2.35	40.80
	Total	8.86	5.47	6.15	8.75	43.58	8.10	4.42	85.34

*Resource requirements derived from the World Health Assembly Resolution "Antimicrobial resistance: accelerating national and global responses" (A77/A/CONF./1 Add.1). Row and column totals may not always add up, owing to rounding.

Recognition of partners and contributors

Much of the progress in addressing AMR since the first political declaration of the United Nations General Assembly in 2016 was made possible thanks to the support of contributors and close partners, including through direct support to WHO.[1]

1-With thanks to all Member States and AMR partners for support and collaboration, it is important to give particular recognition to Denmark, France, Germany, Japan, Kingdom of Saudi Arabia, Republic of Korea, Kingdom of the Netherlands, Norway, the United Kingdom of Great Britain and Northern Ireland (via the Fleming Fund, Department of Health and Social Care), and the United States of America, as well as the Asia-Europe Foundation, European Commission (Directorate Generals for Health Emergency Preparedness and Response Authority [HERA] and International Partnerships [INTPA]), Foundation for Innovative Diagnostics (FIND), Gates Foundation, Global Antibiotic Research and Development Partnership (GARDP), International Centre for AMR Solutions (ICARS), Susan Thompson Buffet Foundation, United Nations Multi-Partner Trust Fund for AMR, and Wellcome Trust.

References

i WHO releases report on state of development of antibacterials. Geneva: World Health Organization; 2024 (https://www.who.int/news/item/14-06-2024-who-releases-report-on-state-of-development-of-antibacterials)

ii Ten threats to global health in 2019 (online). Geneva: World Health Organization. (https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019)

iii GBD 2021. Antimicrobial Resistance Collaborators. Global burden of bacterial antimicrobial resistance 1990-2021: a systematic analysis with forecasts to 2050. Lancet. 2024 Sep 28;404(10459):1199-1226. https://doi.org/10.1016/S0140-6736(24)01867-1

iv GLG report: Towards specific commitments and action in the response to antimicrobial resistance. Geneva: Global Leaders Group on Antimicrobial Resistance; 2024 (https://www.amrleaders.org/resources/m/item/glg-report)

v GBD 2019 Antimicrobial Resistance Collaborators. Global mortality associated with 33 bacterial pathogens in 2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet. 2022 Dec 17;400(10369):2221-2248. (https://doi.org/10.1016/S0140-6736(22)02185-7)

vi Drug Resistant Infections: A Threat to Our Economic Future. Washington DC: World Bank Group; 2017 (https://www.worldbank.org/en/topic/health/publication/drug-resistant-infections-a-threat-to-our-economic-future)

vii Tripartite and UNEP support OHHLEP's definition of "One Health". Geneva: World Health Organization; 2021 (https://www.who.int/news/item/01-12-2021-tripartite-and-unep-support-ohhlep-s-definition-of-one-health)

viii Global database for tracking antimicrobial resistance country self-assessment survey (online). Geneva: World Health Organization (https://amrcountryprogress.org/resources/)

ix GLASS-AMR Antimicrobial Resistance surveillance (online). Geneva: World Health Organization (https://www.who.int/initiatives/glass/glass-routine-data-surveillance)

x Global Antimicrobial Resistance and Use Surveillance System (GLASS) report: antibiotic use data for 2022. Geneva: World Health Organization; 2025. (https://www.who.int/publications/i/item/9789240108127)

xi Antimicrobial resistance: accelerating national and global responses, WHA 77.6. Geneva: World Health Organization; 2024 (https://apps.who.int/gb/ebwha/pdf_files/WHA77/A77_R6-en.pdf)

xii G7 Health Ministers' Communiqué. Ancona: G7 Italia; 2024 (https://www.g7italy.it/wp-content/uploads/G7-Health-Ministers-Communique.pdf)

xiii G20 Agriculture Ministers Declaration. Rio de Janeiro: G20 Brazil; 2024 (https://www.gov.br/g20/pt-br/trilhas/trilha-de-sherpas/agricultura/g20-agriculture-ministers-declaration-2024.pdf)

xiv Political declaration of the high-level meeting on antimicrobial resistance. New York: United Nations; 2024. (https://documents.un.org/doc/undoc/ltd/n24/278/35/pdf/n2427835.pdf)

xv Antimicrobial Resistance Diagnostic Initiative. Geneva: World Health Organization; 2024 (https://www.who.int/publications/i/item/9789240072015)

xvi Task Force of AMR Survivors (online). Geneva: World Health Organization. (https://www.who.int/groups/task-force-of-amr-survivors)

xvii Quadripartite Working Group on Youth Engagement for AMR (online). Geneva: Quadripartite Joint Secretariat on Antimicrobial Resistance. (https://www.qjsamr.org/technical-work/working-group-on-youth-engagement)

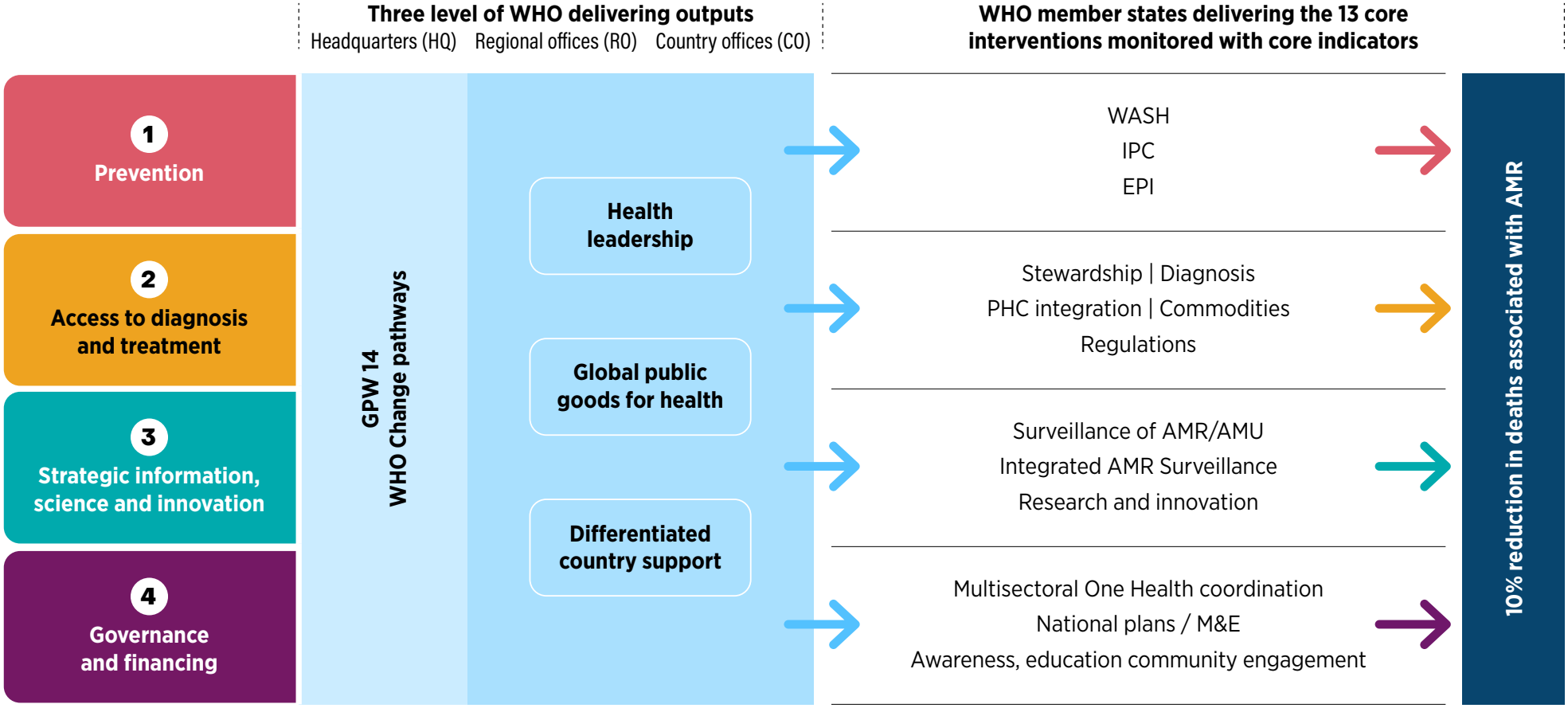
xviii WHO Competency Framework for Health Workers' Education and Training on Antimicrobial Resistance. Geneva: World Health Organization; 2018. (https://www.who.int/publications/i/item/who-competency-framework-for-health-workers%E2%80%99-education-and-training-on-antimicrobial-resistance)

xix World Health Survey Plus (online). Geneva: World Health organization (https://www.who.int/data/data-collection-tools/world-health-survey-plus)

xx 2023 Antibacterial Agents in Clinical and Preclinical Development: An Overview and Analysis. Geneva: World Health Organization; 2024 (https://www.who.int/publications/i/item/9789240094000)

Cross-divisional, three level results framework to implement WHO's strategic and operational priorities to address AMR (2025-35)

Theory of change for WHO to contribute to impact at country level



See indicators framework for WHO Strategic and Operational Priorities 2025-2035: [link]

Overall vision, impact and outcome

Level	Vision	Indicator	UNGA HLM AMR* Targets	Data source	Baseline (Year)
Impact	**Control and reverse the urgent public health crisis due to drug-resistant infections in humans**	Number of global deaths from bacterial infections in the human health sector (total)	N/A	IHME / Global Burden of Disease	7.7 million deaths (2019)
		Number of global deaths associated with drug-resistant bacterial infections in the human health sector	10% reduction [against the 2019 baseline of 4.95 million deaths]	IHME / Global Burden of Disease	4.95 million deaths (2019)
Outcome	**Slow the emergence and spread of drug-resistant bacterial infections and preserve antibiotics for future generations**	SDG 3.d.2: Percentage of bloodstream infections due to two selected bacterial pathogens that are resistant to specific antibiotics	N/A	WHO GLASS	Median resistance to third-generation cephalosporins in *Escherichia coli* was 41% and methicillin resistance in *Staphylococcus aureus* was 32% in 2021

In the result framework below:

- **domains linked with a quantified UNGA PD target;**
- domains linked with a UNGA PD commitment;
- *domains not directly linked with a UNGA PD target or commitment.*

* United Nations General Assembly High Level Meeting

Strategic priority 1: PREVENTION

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
First pillar of prevention: WASH & waste management [People Centred Approach (PCA) #6] WHO lead: PPC UNGA commitment: 100% of countries have basic WASH services in all healthcare facilities by 2030 (+ SDG WASH targets)					
1.1 Overarching WASH and wastewater management from all sources	• Awareness raising and capacity building with Quadripartite • Rapid assessment tool to prioritize National Action Plan (NAP) risks and actions	• Awareness and capacity building in collaboration with relevant units • Rapid assessment tool deployment • Coordinated Quadripartite action	• Rapid assessment tool used for NAP prioritization • Implementation of priority actions • Coordinated Quadripartite action	• Proportion of countries that have linked AMR NAPs with WASH Tracking Antimicrobial Resistance (AMR) Country Self-assessment Survey (TrACSS)	• Proportion of population using safely managed sanitation services
1.2 WASH and health care waste management (HCWM) in health care facilities (HCFs)	• **Global monitoring/ reporting of WASH and HCWM in HCFs** • **Norms/ tools for national and facility improvement** • **Leadership and capacity building for prioritization**	• **Regional AMR priorities and commitments** • **Inclusion of indicators on WASH in HCFs**	• **Monitoring of services with WASH, AMR and health actors**	• **Proportion of countries with costed roadmaps on WASH/waste in HCFs and proportion of HCFs that have basic WASH services (WHO/ UNICEF service data and country tracker*†)**	• **Proportion of HCFs with access to basic water services**
1.3 WASH in communities	• Global monitoring of WASH access, wastewater and enabling environment • Inclusion of AMR risks in relevant WASH guidelines • RegNet / for uptake of norms in national regulations • Global WASH partnerships	• Facilitation of collection, validation, use of data • Norms - Support to update of national policies, standards, training and implementation approaches	• Facilitation of collection, validation and use of data • Norms - Support to update of national policies, standards, training and implementation approaches	• Service levels and enabling environment indicators within Joint Monitoring Programme and GLASS	• Proportion of population using a hand-washing facility with soap and water

* https://washdata.org/

† https://www.washinhcf.org/country-progress-tracker/

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
1.4 Safe management of pharmaceutical waste	• Guidance on wastewater from manufacturing sites • Safe disposal of unused pharmaceuticals	• Dissemination and capacity building with waste managers, regulators and procurers	• National capacity building / technical support to implement norms (including support for national policy development & updating national guidelines)	• Number/proportion of countries with safe and sustainable health care waste standards	–
1.5 Wastewater/ environmental surveillance (WES)	• Guidance on multi-pathogen WES with collaborative surveillance	• Regional capacity building on WES methods	• Pilot and scale up of WES protocols • Public health use case for WES data	• WES included in collaborative environmental surveillance	–
Second pillar of prevention: Infection Prevention and Control (IPC) [PCA #7]- WHO lead: HDS UNGA commitment: 90% of countries meet all WHO minimum requirements for IPC programmes at national level by 2030 (+ IPC Global Action Plan targets)					
1.6 Implementation of IPC core components and associated advocacy, education and training and monitoring (WHO IPC Global Action Plan and (GAP) monitoring framework (MF)	• **Global guidance on IPC national action plans** • **Global initiatives and campaigns to promote and support action on IPC improvement** • **Monitoring and reporting on implementation of the IPC GAP/MF**	• **Regional support to development and implementation of national IPC action plans in Member States** • **Tracking and achieving the global and national targets for IPC, according to the GAP/MF**	• **Support to MOH to develop and adopt national IPC Standard Operating Procedures (SOPs) for healthcare facilities** • **Support to development and implementation of IPC national action plans to achieve the targets listed in the GAP/MF**	• **Number of countries where all WHO IPC minimum requirements are met at the national level**	• **Number/proportion of countries where all IPC minimum requirements are met in at least 90% of health facilities by 2030**
1.7 Prevention of secondary spread of infections in health care facilities in emergencies	• Monitoring of the IPC indicators in International Health Regulations (IHR) / Joint External Evaluations (JEE);	• Support to review of IPC in regional emergency preparedness and response strategies	• Support healthcare associated infections (HAI) and AMR surveillance systems • Review data to guide outbreak preparedness and response	• IPC Indicator scores from IHR/JEE	–
1.8 Antimicrobial stewardship (AMS) and IPC integration	• *Global guidance on the integration of IPC and AMS*	• *Dissemination of guidance and support for Member States*	• *Support for capacity building and incorporation of guidance*	–	–

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
Third pillar of prevention: Vaccines & immunization [PCA #8]- WHO lead: PPC - UNGA commitment: IA2030 targets and SDG 3.b.1					
1.9 Vaccine introduction and increase in coverage	• **Norm, standards and evidence to introduce and increase coverage of vaccines to reduce AMR and antibiotic consumption** • **Monitoring global uptake of policy on vaccine introduction and increase in coverage for vaccines that impact AMR and antibiotic consumption**	• **Support to member states to introduce and increase coverage of vaccines impacting AMR and antibiotic use** • **Regional intelligence on coverage and introduction** • **Mobilization of stakeholders on AMR- immunization goals**	• **Assistance to introduction vaccines with impact on AMR** • **Support campaigns to increase acceptance and coverage, for vaccines with impact on AMR** • **Support for data collection on vaccine introduction and coverage**	• **Number / proportion of countries that include pneumococcal, typhoid, rotavirus, influenza, and Hib vaccines in their EPI**	• **Coverage of DTP3, pneumococcal, typhoid, rotavirus, influenza, and Hib vaccines within member states, disaggregated by target populations**
1.10 Shape and promote research to inform the role of vaccines in reducing AMR	• *Methods to measure vaccine impact on AMR and antibiotic use* • *Updated vaccine pipeline against AMR Pathogen Priority List (PPL)* • *Evidence /research to enable development of vaccines against K. pneumoniae and extra-intestinal pathogenic E. Coli* • *Addressing challenges to assessing the impact of vaccines on AMR with regulatory agencies*	• *Support regional collection of data to inform methods* • *Regional evidence and communication with stakeholders to support the development of vaccines against K. pneumoniae and E. coli* • *Facilitated communication with regulatory agencies*	• *Support data sharing on vaccine efficacy and AMR trends* • *Support national institutions and MoH to conduct relevant studies* • *Integration of vaccines into NAPs on AMR with appropriate indicators and metrics*	• *National research collaborations contributing data to global impact studies* • *Evidence disseminated to facilitate vaccine introduction and acceptance* • *Regulatory capacity and research oversight on AMR-related vaccine impact*	• *Number of vaccines in Research and Development (R&D) pipeline based on bacterial PPL*

Strategic priority 2: ACCESS TO DIAGNOSIS AND APPROPRIATE TREATMENT

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
Affordable health services [PCA #9]. WHO linkages: UHC, Primary Health Care (PHC), health financing, integrated health services, medicines, emergencies UNGA commitment: Equitable access to affordable, effective and quality antimicrobials and diagnostics					
2.1 Mainstreaming of AMR interventions into UHC/PHC efforts and health emergency preparedness and response	• Global evidence based guidance and tools to integrate AMR interventions into PHC	• Dissemination of guidance and tools • Support to capacity building and country assessments • Regional collaboration with health systems, and health emergency teams, including the JEE focusing on AMR and other relevant areas	• Dissemination of guidance • Support to use of tools to generate evidence in country • Capacity building and assessments • Enhanced collaboration with UHC/PHC and Emergency Preparedness and Response (EPR) teams, including the JEE	• Links between AMR NAPs with other national health plans and budgets (TrACSS)	• SDG 3.8.1: Universal Health Coverage of essential health services – Index of 14 tracer indicators
2.2 Including AMR in benefits and service packages / health-insurance schemes	• Incorporation of AMR relevant resources in service packages modules in Service Planning, Delivery & Implementation (SPDI) • Enhance awareness about AMR resources and consideration in service and benefit packages	• Dissemination of information in countries • Monitoring of requests and approaches in countries	• Support to countries in incorporating relevant AMR interventions in other service/benefit packages	• Sustainable AMR response through incorporation in other service packages	
2.3 Ensuring the affordability of quality-assured products	• Supply mapping and Cost Of Goods Sold (GOGS) analysis for high-cost products • Use of findings to support procurement efforts	• Use of findings to support regional procurement efforts	• Use of findings to support country procurement efforts	• Procurement prices of target products	–

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
Uninterrupted supply of quality-assured essential antimicrobials & health products [PCA #10] - WHO linkages: Essential medicines					
2.4 Adequate forecasting, procurement and distribution of health products for management of (drug-resistant) infections	• Forecasting tools and guidance for key health products • Support /collaboration with global/ regional/ national procurement bodies on procurement and market shaping • Data collection on antibiotic shortages and guidance on effective mitigation measures • Market intelligence to support procurement and market shaping	• Dissemination / adoption of tools and guidance • Capacity building • Inclusion of key products in regional pooled procurement mechanisms • Dissemination /promotion of mitigation measures (eg. via regional regulators networks) • Use of findings to support procurement and access efforts	• Dissemination / adoption of tools and guidance • Support to building robust supply chain management capacity • Support to national procurement and capacity building, • Participation in pooled procurement • Support prioritization, implementation of country mitigation measures • Use of findings to support country procurement and access efforts	• Forecast accuracy – mean deviation from actual demand • Number of procurement bodies sourcing target products	• Number of antibiotic shortages reported • Number of procurement bodies sourcing target products, mean price
2.5 Prevent, detect, respond to substandard and falsified medical products	• Data on substandard and falsified antimicrobials (respond: alerts; detect: watchlists ; prevent: threat assessments)	• Dissemination to appropriate authorities and technical support to take timely action to address issues	• Support national authorities in risk mitigation and support information feedback loop to headquarters	• Number of countries that have regulations and systems to prevent, monitor and report sub-standard and falsified (TrACSS)	–
2.6 New products introduction and optimization	• Guidance and tools for new product introduction and appropriate use • Antibiotics portfolio optimization to support clinical best practices and market efficiencies	• Support dissemination and country pilots to strengthen guidance • Support regional/ national antibiotic portfolio optimization	• Support implementation and use of the guidance in countries • Support national antibiotic portfolio optimization	• New products introduced in efficient and appropriate manner • Streamlined antibiotic portfolios that support clinical best practice and market efficiencies	–

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
Timely, accurate diagnosis [PCA #11] - WHO linkages: Integrated health services, essential medicines, emergencies, PPC, HSD (TB, HIV, Malaria) UNGA commitment: 80% of countries with capacity to perform bacterial and fungal resistance testing					
2.7 WHO strategic and operational framework to strengthen bacteriology and mycology laboratory testing capacity	• **Norms and standards to increase capacity** • **List of essential tests for bacteriology, mycology and AMR** • **SOP toolkit for bacteriology and mycology** • **Diagnostic stewardship guidance** • **Tool to assess country capacity** • **Evidence based recommendation for diagnostic tests**	• **Support to uptake of WHO norms and standards** • **Monitoring of regional uptake of norms and standards** • **Resource mobilization to support countries**	• **Dissemination of norms and standards** • **Uptake monitoring** • **Support to integration of essential tests into national laboratory strategic plan** • **Support country-level implementation**	• **Presence of national plan to strengthen bacteriology and mycology / guidelines and accountability mechanisms** • **Adoption of WHO list of essential tests for bacteriology and mycology**	• **Number of countries that can test for antimicrobial resistance in all bacterial and fungal GLASS pathogens using recognized international standards, at least in (the) reference laboratory(ies)**
2.8 WHO global AMR laboratory network	• **Coordination of the AMR Global Laboratory Network by auditing and granting WHO designation to National Reference Laboratory (NRL) for AMR**	• **Dissemination of WHO Global Laboratory Network goals and process** • **Facilitation of designation and technical guidance**	• **Facilitation of nomination of candidate laboratories** • **Support to NRL assessment** • **Support to laboratory networks based on gaps identified**	• **National Bacteriology and Mycology Reference Laboratory qualified for WHO designation**	
2.9 Research and innovation	• Target product profile • Guidance on sequencing standards • Guidance on AMR mutations catalogue • Pipeline diagnostics landscape	• Contribution to the development and dissemination of norms and standards in the region • Contribution to the documentation of the implementation	• Contribution to the development and dissemination of norms and standards in the region	–	–

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
Appropriate and quality-assured treatment [PCA #12] - WHO linkages: Essential medicines, UHC, PHC, maternal/child health, IPC, emergencies PPC (TB, HIV, Malaria) UNGA commitment: 70% of antibiotics used are from the AWaRe "Access" category					
2.10 Treatment guidelines based on AWaRe and the AWaRe antibiotic book	• **Regularly updated AWaRe classification** • **Framework for adoption/ adaptation and monitoring of implementation of national treatment guidelines**	• **Technical guidance and monitoring national treatment guidelines development, and uptake of AWaRe in national essential medicine lists (NEMLs) in the region**	• **Support to revision of national treatment guidelines based on AWaRe and the AWaRe antibiotic book** • **Support to integration of AWaRe in NEML** • **Support of use of AWaRe for regulatory purposes**	• **Number of countries adopting AWaRe classification in their NEML (TrACSS)**	• **Antibiotic use in defined daily dose per 1000 population per day; overall and by AWaRe classification** • **Number of CTAs reaching or exceeding the 70% Access target of national medicine-level use**
2.11 National AMS programmes	• **Guidance on AMS programmes, including in primary care** • **Competency guides/ curriculum for education and training on AMS**	• **Monitoring education and training for health workers on AMS, including behaviour change initiatives for prescribers** • **Dissemination in regions, including translation**	• **Support to development of national AMS programme, including training, and mainstreaming at PHC and hospitals** • **Support to integration of AMS/IPC/ diagnostics / surveillance data to guide prescribing**	• **Number of countries with national policies/ guidelines on optimizing antimicrobial use (TrACSS)**	
2.12 AMS in Fragile, Conflict and Vulnerable (FCV) settings	• *Guidance on essential antibiotics in humanitarian settings /health kits*	• *Liaison with emergency coordinators to include AMS in preparedness and response*	• *Support targeted AMS initiatives among vulnerable populations*	• *Essential stewardship activities in FCV setting*	–

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
Regulations to restrict sales of antibiotics without prescription [PCA #13] - WHO linkage: Essential Medicines					
2.13 Policy to restrict non-prescription & over the counter (OTC) sales	• Comprehensive global policy framework for restricting OTC sales of antimicrobials • Guidelines on regulatory measures • Global monitoring and evaluation • Guidance/ advocacy on phasing out OTC sales	• Sharing of best practices and challenges • Technical assistance to countries in developing and enforcing regulations • Monitoring of implementation of regulations on OTC sales of antimicrobials	• Assistance to drafting and implementing national legislation to restrict OTC sales of antimicrobials • Support to mechanisms to enforce regulations • Support to regulations on OTC sales of antimicrobials	• National legislation / regulation requirements to restrict OTC sales of antimicrobials (TrACSS)	–
2.14 Strengthening the role of medicines regulatory agencies across sectors in AMR	• Global convening, facilitating alignment of regulatory measures for action against AMR across sectors • Global regulatory benchmarking and guidance	• Best practice sharing among regulators • Regional adaptation of regulatory guidance • Regional regulatory networks and capacity-building: collaboration and learning	• Support to regulatory agencies implementing AMR-related policies across sectors	• Proportion of countries with strengthened regulatory frameworks for antimicrobial use across sectors	–
2.15 Specific training, education, awareness to restrict non-prescription sales of antibiotics	• *Training programmes for national regulatory authorities and healthcare professionals* • *Global awareness campaigns on dangers of non-prescription antimicrobial use*	• *Support countries in tracking the movement of antimicrobials along the value chain (Track and trace)*	• *Design /implementation of local solutions to increase accountability in antimicrobial sales* • *Community-based awareness programmes on dangers of non-prescription antimicrobial use*	• *Restriction of inappropriate promotion of antimicrobials* • *Local solutions to increase accountability in sales* • *Awareness of dangers of use of antimicrobials without a prescription*	–

Strategic priority 3: STRATEGIC INFORMATION, SCIENCE AND INNOVATION

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
Surveillance of AMR [PCA #3]- WHO linkage: Data, IPC, emergencies, IPC UNGA commitment: All countries to report quality surveillance data on antimicrobial resistance and antimicrobial use by 2030, through existing global surveillance systems, including the Global Antimicrobial Resistance and Use Surveillance System (GLASS)					
3.1 Routine national GLASS AMR data collection and reporting	• **GLASS guidance and tools for AMR data collection, sharing, analysis and interpretation** • **Online GLASS dashboard and reports** • **GLASS information technology (IT) platform, WHONET software, helpdesk and technical assistance**	• **Support to GLASS data call** • **Regional trainings** • **Advocacy for enrollment** • **Contribution of regional data**	• **Dissemination of norms and standards / tools** • **Support to MoH** • **Support to AMR surveillance**	• **Number of countries with national surveillance systems that meet minimum WHO-GLASS standards for quality and representativeness for AMR**	• **Proportion of countries reporting on blood-stream infections due to two resistant organisms" (SDG 3.d.2 indicator) and trends over time** • **Number of countries that have reported quality AMR data to GLASS according to pre-defined WHO standards, for at least once over the previous three years (GLASS dashboard)**
3.2 Monitoring of AMR burden	• **AMR prevalence estimates** • **Monitoring of progress towards Sustainable Development Goals (SDG) and UN targets** • **Global standards for methods for AMR burden estimates**	• **Review of regional estimates** • **Dissemination of norms and standards**	• **Review of country AMR prevalence estimates**		
3.3 National AMR surveys	• Technical guidance, protocol template and implementation tools for design, implementation and analysis of national surveys of prevalence, health and economic burden of AMR	• Facilitation of inter-country exchanges • Regional training	• Local coordination, and logistics • Workplan and budget monitoring	• Proportion of countries with nationally representative quality data on AMR prevalence, mortality, and cost	

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
3.4 Detect, assess and report threats	• GLASS-EAR system for emerging threats • Simulation exercises • Response to threats	• Threat detection / management • Capacity-building • Simulation exercises	• Capacity-building for outbreaks involving drug-resistant pathogens • Participation in simulation exercises	• Number of emerging threats detected and reported	–
3.5 Integrated, One Health surveillance	• Integrated, inter-operable surveillance guidance on AMR/ AMU • WHO protocol on Tricycle survey and report	• Capacity-building in countries, including for One Health AMR Integrated surveillance	• Support to national surveillance based on WHO standards • Multisectoral support to national One Health integrated surveillance, including Tricycle protocol	• Proportion of countries with integrated surveillance systems and/or implementing the Tricycle protocol	–
Surveillance of AMU to guide patient care and action on AMR [PCA #4]- WHO linkage: Essential medicines UNGA commitment: All countries to report quality surveillance data on antimicrobial resistance and antimicrobial use by 2030, through existing global surveillance systems, including the Global Antimicrobial Resistance and Use Surveillance System (GLASS)					
3.6 Surveillance of national medicine-level AMU, AMU in hospitals and surveillance of AMU in primary care	• **Norms, standards and guidance (including indicators and targets)** • **IT platforms, helpdesk and training packages** • **Regular reports on the global situation**	• **Technical support for operationalization** • **Facilitation of regional data collection and data sharing** • **Regional intelligence to guide national strategies** • **Regional peer networks on AMU**	• **Dissemination of norms, standards and tools** • **Facilitation of technical support and capacity-building** • **Support for AMU surveys (facility-level)** • **Identification of areas in need of intervention** • **Linkage with other national programmes (e.g., HIV, tuberculosis and Malaria (HTM))**	• **Number of countries with national surveillance systems that meet minimum WHO-GLASS standards for quality and representativeness for AMU (medicines level)**	–

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
Research and innovation [PCA #5] - WHO linkages: Science, Emergencies, IPC, vaccines, medicines, WASH, TB, PHC UNGA commitment: Invest in research based on WHO global research agenda for AMR in human health; and One Health AMR agenda					
3.7 AMR research agendas (human health and One Health)	• Capacity building for implementation • Advocate for research funding as per agenda • Track research and funding allocation to research priorities and share information	• Regional AMR research agendas, adapted from global agendas, according to regional priorities	• Facilitation of a national AMR research agenda adapted from global and regional AMR agendas according to local priorities	• Number of countries with national AMR research agendas included in their AMR NAPs (TrACSS indicator)	–
3.8 Prioritized research, development and innovation targeting areas of greatest public health needs	• Updated global priority pathogens lists by infection/ setting • Blueprint to respond to priority fungal pathogens • Regular pipeline reviews (medicines, diagnostics, vaccines) • Target product profiles • Priority pediatric formulations / regulatory streamlining • Policy dialogue /analysis on R&D financing (push/pull incentives) • Evidence based recommendations for traditional / non-traditional agents	• Regional adaptations of priority pathogens lists • Support for implementation of the FPPL implementation blueprint at regional level	• National adaptations of priority pathogens lists; associated capacity-building • Support for implementation of the Fungal Pathogen Priority List (FPPL) implementation blueprint at country level	–	• Number of diagnostic products in R&D pipeline based on pathogen priority lists • Number of antibiotics / antibacterials in clinical development in R&D pipeline based on priority pathogens lists

Strategic priority 4: EFFECTIVE GOVERNANCE AND FINANCING

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
National plans and Monitoring and evaluation (M&E) [PCA #1]: WHO linkage: UHC, PHC, health financing, Emergencies UNGA commitment: Mobilize USD 100 million to support at least 60% of countries to have funded NAPs					
4.1 Coordination, and supporting the governance, development, prioritization, costing, financing and monitoring the implementation of human health interventions in AMR NAPs integrated into health sector planning and budgeting processes	• Guidance and tools on AMR NAP development, multisectoral coordination, costing, monitoring, and assessments, embedded in health sector planning, costing and budgeting processes • Technical assistance on coordinating, developing, implementing and monitoring AMR NAPs that are integrated in health sector planning	• Capacity building • Dissemination of guidance and tools, oriented in overall PHC-focused support • Regional data collection, analysis and reporting	• Dissemination of guidance and tools in country • Capacity building on AMR NAP • Support country-level data collection, reporting and assessments (incl. for NAPs monitoring) & dissemination of results	• Number of countries which have an AMR national action plan (TrACSS) • Number of countries in which the national action plan on AMR and its activities are linked to the national health sector plans and strategies (TrACSS) • Proportion of countries that are implementing costed AMR NAPs with financing and monitoring mechanisms in place (TrACSS)	• Number of countries which report that finances are available for the implementation of the AMR national action plan through national plans and budgets (TrACSS)
4.2 AMR One Health global governance, advocacy and coordination via the Quadripartite Joint Secretariat on AMR	• Secretariat of AMR global governance structures e.g Global Leaders Group (GLG), Multi Stakeholders Partnership Platform (MSPP), Independent Panel on Evidence for Action against AMR • Capacity development and knowledge exchange on multisectoral AMR governance and coordinating mechanisms • Global guidance and policy documents on AMR One Health coordination	• Adaptation of global advocacy strategies to regional contexts • Regional One Health mechanisms • Support to Member States in coordinating multi-sectoral AMR actions across sectors	• Strengthening One Health coordination mechanisms • Facilitation of engagement of national stakeholders across sectors in AMR governance • Facilitation of country-participation Quadripartite one health initiatives	• Number of countries with functional One Health AMR coordination mechanisms (TrACSS)	

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
4.3 Investment case to support AMR NAPs financing, & integration in overall health and other sectors planning/financing	• **Global AMR investment case and financing frameworks embedded in relevant sector plans and financing frameworks** • **Engagement with global donors, financial institutions, and lenders** • **Guidance on innovative financing mechanisms and mapping of funding sources**	• **Country support to tailored investment cases and integration in sector financing frameworks** • **Facilitated donor engagement and region-wide approaches with key donors**	• **Country support to national AMR investment cases** • **Support to integration of AMR financing in national budgets** • **Engagement of funding partners**	• **Increased domestic and international investment in AMR NAPs and relevant activities, functions & priorities to address AMR**	–
4.4 Coordination of implementation of the 2024 UNGA Political Declaration on AMR	• Road map, guidance, and implementation framework including GAP-AMR update, IPEA establishment, monitoring and report back to UNGA • Guidance on integrating AMR commitments into national policies and plans • Global accountability mechanisms	• Support to countries in implementing UNGA commitments • Capacity-building on integration of UNGA commitments into NAPs and policy • Adaptation of framework for regional progress reporting on implementation	• Support to countries in aligning policies with the 2024 UNGA Declaration • Facilitation of stakeholder engagement to integrate AMR in relevant plans/ priorities • Adaptation of national monitoring and reporting frameworks, national baselines and roadmaps	• Proportion of countries integrating 2024 UNGA AMR commitments into their NAPs development frameworks	–
4.5 Monitoring of national and global progress in addressing AMR	• **Global M&E guidance with Quadripartite** • **M&E tools and capacity building** • **Global surveys and dashboards (TrACSS)** • **GAP M&E biennial reporting to World Health Assembly, UNGA**	• **Dissemination of guidance** • **Capacity building** • **Support to data collection in regions** • **Support regional data analysis and reporting**	• **Capacity building on M&E** • **Support to TrACSS** • **Support country data analysis and reporting** • **Support engagement of all sectors in monitoring NAP implementation**	• **Number of countries where the NAP has a clear monitoring mechanism (TrACSS)** • **Proportion of countries that participates and responds to TrACSS annually; (95% UNGA target)**	–

Sub-component	WHO contributions			Country level indicators	
	WHO HQ outputs	WHO RO outputs	WHO CO outputs	Policy uptake	Outcomes
4.6 Addressing inequalities in AMR NAP (gender, equity, disability, inclusion)	• Global guidance on equity considerations, monitoring, analysis, and actions in NAPs • Evidence generation • Awareness raising	• Dissemination of guidance • Evidence generation • Support to awareness raising	• Awareness raising on impact of inequalities • Support to country-specific evidence and approaches	• Number of countries where data are disaggregated by sex, age, wealth quintile and other characteristics (TrACSS)	–
Awareness, education, and community engagement [PCA #2]- WHO linkages: UHC, PHC, IPC, disease programmes (TB, NTDs, malaria), data/digital, communications					
4.7 Enhance AMR awareness among key stakeholders such as policy makers, communities, health workers, youth and media	• Assets and tools for awareness coordinated with quadripartite • Global advocacy tools for key stakeholder groups (e.g. patients, youth, media, parliamentarians) • Global campaigns developed (e.g., World AMR Awareness Week (WAAW), survivors)	• Regional advocacy mechanisms • Regional WAAW events	• Local and national events • Communication assets & capacity-building • Dissemination of WHO communication and awareness assets and tools • AMR module of World Health Survey+ (WHS+) rolled out to collect household-level data on AMR awareness	• Number of countries with government-supported nationwide AMR awareness campaigns that are targeted to priority stakeholder groups (TrACSS)	–
4.8 Integrate AMR prevention and curricula in primary, secondary school systems and pre-service training of health workers	• Guidance and tools, to integrate AMR curricula in schools coordinated with quadripartite, UNESCO and UNICEF • Age-appropriate curricula integrated in school health/ wellbeing systems • Curricula, competencies and assessment tools to integrate AMR into pre-service curricula of all health workers	• Guidance and tools adopted and disseminated • Capacity building among countries to review / revise school curricula • Capacity building among countries to review / revise curricula for all health workers	• Ministries of education supported for contextualized age-appropriate AMR curricula for primary and secondary schools • Ministries and universities supported for AMR in pre-service curricula for health workers and community health workers	• School-going children and youth receiving education on AMR (TrACSS) • Training and professional education on AMR in the human health sector (TrACSS)	–

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World Health Organization
Avenue Appia 20
1211 Geneva
Switzerland

www.who.int