

People-centred approach to addressing

antimicrobial resistance in human health:

WHO core package of interventions to support national action plans

AMR National Action plans and Monitoring Unit (NPM)

WHO HQ – AMR Division



WHO core package: 5 foundational and 8 core high-level interventions



Reduced and slower development of AMR Reduced mortality and morbidity due to AMR



Pillar 1: Prevention

- 6. Universal access to WASH and waste management to mitigate AMR
- 7. Implementation of IPC components to mitigate AMR
- 8. Access to vaccines and extended immunization to manage AMR



Pillar 2: Access to essential health services

- 9. AMR diagnosis and management health services are affordable for all
- 10. Uninterrupted supply of quality-assured, essential antimicrobials and health products for AMR



Pillar 3: Timely, accurate diagnosis

11. Good-quality laboratory system and diagnostic stewardship to ensure clinical bacteriology and mycology testing



Pillar 4: Appropriate, qualityassured treatment

- 12. Up-to-date evidence-based treatment guidelines and programmes for antimicrobial stewardship
- 13. Regulation to restrict sales of non-prescription antimicrobials

Foundational step: Strategic information through surveillance and research

- 3. National AMR surveillance network to generate good-quality data for patient care and action on AMR
 - 4. Surveillance of antimicrobial consumption and use to guide patient care and action on AMR
 - 5. AMR research and innovation including behavioural and implementation science

Foundational step: Effective governance, awareness and education

- 1. AMR advocacy, governance and accountability in the human health sector, in collaboration with other sectors
 - 2. AMR awareness-raising, education and behaviour change of health workers and communities



Foundation 1: Effective governance, awareness and education

AMR advocacy, governance and accountability in the human health sector in collaboration with other sectors



National/sub-national

- Raise <u>political awareness</u> and secure <u>political/financial</u> commitment
- ☐ Develop, cost, implement and monitor human health AMR interventions as part of the One Health NAP on AMR
- Integrate AMR interventions into broader health sector programmes, plans and budgets and links with health sector governance mechanism
- Active participation of human health sector in the national AMR multisectoral coordination mechanism
- ☐ <u>Civil society and Community engagement</u> in One Health NAP on AMR



All healthcare levels

☐ Strengthen the AMR capacity of <u>health facility leadership</u>

AMR awareness-raising, education and behaviour change of health workers and communities



National/sub-national

- Develop and implement an <u>AMR communication</u> <u>strategy</u> to improve awareness of policy makers, health workers and communities
- ☐ Develop age appropriate <u>curricular on AMR for schools</u>
- ☐ Integrate <u>curricula</u> into pre-service education curriculum for health workers



All healthcare levels

☐ Develop, test and implement <u>behaviour change</u> <u>interventions</u> on AMR for health workers at various levels of health care.



Foundation 2: Strategic information through surveillance and research

National AMR surveillance network to generate goodquality data to inform patient care and action on AMR

National/sub-national Define/implement <u>national AMR</u> <u>surveillance strategy</u> that produces representative and quality assured AMR data overseen and supported by a national coordination centre

Use the collected data to <u>inform action and guidelines</u>, and monitor the burden and distribution of AMR



Secondary/tertiary healthcare

☐ Collect, collate, analyse and interpret data as part of <u>AMR and</u> <u>health-care-associated (HAI) surveillance</u> and to inform local empirical treatment, guidelines, and to monitor local AMR trends

Primary care

(syndromic and AMR) as part of <u>AMR/HAI surveillance</u> to guide local empirical treatment

Surveillance of antimicrobial consumption and use (AMC/U) to guide patient care and action on AMR



National/sub-national

- Establish and/or strengthen a <u>national AMC/U surveillance</u> system
- Conduct <u>routine surveillance of AMC</u> at national and subnational levels
- Ensure that AMC/U data collected at all levels are <u>analysed</u>, <u>reported and shared with relevant stakeholders</u> to signal possible under- and overuse, and inform corrective actions



Secondary/tertiary healthcare

Conduct <u>routine surveillance of AMC and selectively perform</u> <u>AMU surveys</u> based on local needs



Primary care

☐ Conduct <u>routine surveillance of AMC and periodic AMU surveys</u> in target populations

AMR research and innovation including behavioural and implementation science



National/sub-national

- ☐ Develop a <u>national AMR research agenda</u> adapted from global and regional AMR agendas according to local research priorities, including behavioural and implementation research
- Build capacity for implementation of AMR research priorities in collaboration with academia, the private sector and civil society
- Participate in <u>clinical trial networks and surveillance platforms</u>, share AMR and AMC/U data, and foster public and private collaboration to ensure that vaccine, diagnostic and antimicrobial development pipelines meet unmet public health needs
- ☐ Identify <u>sustainable financing and incentives</u> and <u>strengthen local capacity</u> for the development and/or production of novel and/or existing vaccines, diagnostics, and antimicrobials including appropriate paediatric and oral formulations that target priority pathogens

Universal access to WASH and waste management to mitigate AMR



National/sub-national

☐ Ensure <u>access to WASH</u> and <u>safe waste management</u> in community and health facilities by appropriate planning, budgeting and financing of WASH and safe waste management infrastructure and services



Secondary/tertiary healthcare

Assess WASH in health care facilities using standardized tools, and improve, maintain and sustain improvements in WASH and safe disposal of health care waste and antimicrobials



Community

- ☐ Ensure <u>clean drinking-water</u> and <u>improve sanitation</u> and <u>personal hygiene</u> (including hand hygiene) through community engagement and community approaches
- ☐ Develop mechanisms to return unused antimicrobials from households for safe disposal

Implementation of IPC core components to mitigate AMR



National/sub-national

☐ Implement <u>WHO core components for IPC</u>, starting with the minimum requirements for improving IPC in health-care settings including the prevention of multi-drug resistant organisms



Secondary/tertiary healthcare

Adapt <u>health care facility IPC guidelines</u> based on national IPC guidelines and use HAI/AMR surveillance data to guide outbreak preparedness and response



Adapt <u>primary care facility standard operating procedures</u> for IPC based on national IPC guidelines and monitor implementation



Community

☐ Implement <u>infectious disease prevention services in the</u> <u>community</u>, including <u>food safety</u> standards

Access to vaccines and expanded immunization to manage AMR



National/sub-national

- ☐ Expand <u>national immunization programmes</u> and ensure that developed and licensed vaccines are available and accessible to <u>prevent infections</u> and <u>subsequent use of antibiotics</u>
- ☐ Update national recommendations and normative guidance to include the role of vaccines in controlling AMR.



Secondary/tertiary healthcare

☐ Ensure that health workers are vaccinated and trained to meet national immunization programme targets for yearchical impact AMR



Community

Raise <u>awareness of the role of vaccines</u> in limiting the emergence of AMR and use of antibiotics.

Health services for the prevention, diagnosis and management of infectious disease syndromes are available and affordable for all

National/sub-national

- Ensure <u>equitable access</u> to and timely national and local adoption of <u>new and existing vaccines, diagnostics and antimicrobials</u>, including timely inclusion into <u>policies</u>, <u>guidelines</u>, <u>procurement and reimbursement schemes</u>
- ☐ Ensure that <u>access</u> to diagnosis, treatment and care of (drug-resistant) infections is not barred by financial constrains by <u>including the services in pooled financing schemes</u> (e.g. UHC health benefit packages) while ensuring rational use
- ☐ Ensure the <u>affordability of quality-assured essential vaccines, diagnostics and antimicrobials</u> for all including key vulnerable groups through <u>appropriate financing and pricing policies</u>.
- Improve <u>public awareness</u> of the <u>coverage of health services and products</u> related to the prevention, diagnosis and treatment of (drug-resistant) infections <u>in health benefits packages</u>.

All healthcare levels

- □ <u>Dedicate budget</u> to procure <u>essential diagnostics and antimicrobials</u> for diagnosis and treatment of infectious (including drugresistant) syndromes.
- ☐ <u>Train health workers</u> to prevent, diagnose, treat, and care for patients with infectious (including drug-resistant) syndromes.

Community

☐ Ensure the <u>availability</u> and <u>affordability</u> of preventative testing and counselling services for common infections

Uninterrupted supply of quality-assured, essential health products for the prevention, diagnosis and management of infectious disease syndromes



National/sub-national

- ☐ Ensure adequate <u>forecasting</u>, <u>procurement and distribution</u> of essential diagnostics, reagents, antibiotics, and other health products for management of (drug-resistant) infections
- Implement policies and procedures to prevent, detect and respond to <u>substandard and falsified</u> (SF) medical products products to manage (drug-resistant) infections



All healthcare levels

☐ Build the capacity of health workers, regulatory authorities and procurement and supply chain authorities on effective procurement and supply of essential health products and on prevention, detecting and report of SF medical products.



Community

Increase <u>community engagement</u> in the prevention, detection and reporting of <u>supply issues of medical products</u> including <u>SF medical products</u>

Good-quality laboratory system and diagnostic stewardship to ensure clinical bacteriology and mycology testing



- Establish/strengthen a <u>national quality-assured bacteriology</u> (and mycology) laboratory system, including a national reference lab which supports capacity building and external quality control
- Develop <u>national diagnostic stewardship guidelines</u> and integrate them into pre- and in-service training of health workers



Secondary/tertiary healthcare

☐ Strengthen <u>clinical bacteriology and mycology testing capacity</u> for isolation and identification of pathogens and AST with rapid turn around time for clinical management



Primary care

☐ Ensure access to <u>laboratory diagnostics</u> for infections and AST by a referral mechanism with rapid turnaround time for optimal patient care



Community

☐ Raise <u>awareness of the general public and community health workers</u> on the importance of timely and accurate diagnosis of suspected infections



Pillar 4: Appropriate, quality-assured treatment

Up-to-date evidence-based treatment guidelines and AMS programmes



National/sub-national

- ☐ Develop/revise, implement & monitor compliance of implementation of up-to date <u>treatment guidelines</u> based on AMS, AWaRe antibiotic book & evidence
- ☐ Integrate the <u>AWaRe classification into the national EML &</u> formulary
- ☐ Develop & implement <u>national AMS plan/policy</u>



Secondary & tertiary healthcare

☐ Develop, implement & monitor <u>facility AMS</u> programmes including <u>multi-disciplinary AMS teams</u>



Primary care

☐ Develop, implement & monitor targeted <u>AMS activities</u> to improve antibiotic prescribing in primary care

Implementation of regulation to restrict nonprescription antimicrobial sales



National/sub-national

- Develop, implement & enforce <u>regulation to restrict OTC</u> <u>sales</u> to prescriptions from qualified health-care professional
- Restrict inappropriate promotion and advertisement of antimicrobials



Secondary & tertiary healthcare

☐ Strengthen capacity to <u>implement legislation and</u> regulations to restrict OTC sales of antimicrobials



Community

Raise awareness of the dangers of inappropriate use of antimicrobials without a prescription and the importance of seeking and following advice of health professionals

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