Progress on new WHO initiatives that address crucial AMR response gaps at country level

Dr Kitty van Weezenbeek

WHO Director Surveillance, prevention, and control of Antimicrobial Resistance

Member State briefing
April 5th, 2022
Presentation outline:

• Status of the country AMR response

• Crucial AMR response gaps at country level

• The WHO response:
  1. WHO NAP Implementation Handbook
  2. A People Centred AMR Response Framework
  3. Nationally representative AMR surveys
  4. Strengthen laboratory capacity (bacterial infections & resistance)
  5. AMR research agenda for the human health sector
Progress on AMR National Action Plans 1.0 (NAPs)

140 countries (86%) have developed a NAP (C-E):
32 actively implementing & monitoring (20%), but only 7 LMIC

5-years: Clear increase in countries who have developed, implemented and monitored NAPs over the past five years (based on all 194 Member States).

Source: TrACSS 2021 data, N=163
TrACSS ‘21: status AMR multisectoral working groups

### Multisectoral working groups

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>No formal multi-sectoral governance or coordination mechanism on AMR exists.</td>
<td>23% (42)</td>
<td>20% (30)</td>
<td>15% (18)</td>
<td>13% (16)</td>
<td>8% (12)</td>
</tr>
<tr>
<td>B</td>
<td>Multi-sectoral working group(s) or coordination committee on AMR established with Government leadership.</td>
<td>20% (36)</td>
<td>15% (24)</td>
<td>13% (22)</td>
<td>15% (27)</td>
<td>22% (36)</td>
</tr>
<tr>
<td>C</td>
<td>Multi-sectoral working group(s) is (are) functional, with clear terms of reference, regular meetings, and funding for working group(s) with activities and reporting/accountability arrangements defined.</td>
<td>42% (68)</td>
<td>42% (68)</td>
<td>42% (68)</td>
<td>42% (68)</td>
<td>42% (68)</td>
</tr>
<tr>
<td>D</td>
<td>Joint working on issues including agreement on common objectives.</td>
<td>12% (20)</td>
<td>12% (20)</td>
<td>12% (20)</td>
<td>12% (20)</td>
<td>12% (20)</td>
</tr>
<tr>
<td>E</td>
<td>Integrated approaches used to implement the national AMR action plan with relevant data and lessons learned from all sectors used to adapt implementation of the action plan.</td>
<td>42% (68)</td>
<td>42% (68)</td>
<td>42% (68)</td>
<td>42% (68)</td>
<td>42% (68)</td>
</tr>
</tbody>
</table>

**Source:** TrACSS 2021 data, n=163

### TrACSS 5 year responses – AMR multisector working groups (N= all Member States)

**5-years:** Increase in functional multisectoral AMR WG over the past few years, but **50% not yet functional** and only **22%** are at the level of integrated approaches / monitoring. **LMICs represent only one third of countries with functional groups.**
Six interdependent building blocks of an integrated programmatic AMR response in the human health sector:

- Political commitment & governance
- Access to early diagnosis in a quality assured lab network
- Access to appropriate treatment
- Prevention of infection
- Uninterrupted supply chains
- Surveillance & evidence generation

Funding - Awareness – Education – Regulations – Human resources
MS response to the biggest challenge they are facing:

In one word, what is the greatest challenge that you face to sustainable implementation of national action plan activities?

Keywords:
- Coordination
- Funding
- Governance
- Resources
- Mobilization
- Communication
- Budget
- Governance
- Sustainability
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Power
- Team
- Committee
- Primary
- Cooperation
- Financing
- Political
- Microbiology
- Action
- Government
- Manpower
- Leadership
- Le
- Resources
- Funds
- Mob
- Financement
- Lack of
- Professional
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Prioritize
- Understanding
- Governance
- Sustainability
- Collaboration
- Advocacy
- Poor
- Level
- Locality
- Organization
- Budget
- Care
- Monitor
- Evaluation
- Ressource
- Health
- Part
- Ressource
- Institutionalization
- National
- Availability
- Financing
- Support
- Action
- Committee
- Primary
- Power
- Team
- Collaboration
- Advocacy
- Priorize
WHO Global Antimicrobial resistance and use Surveillance System (GLASS)

**Major progress, but important issues:**
- GLASS AMR data is based on routine diagnostic processes
- Representativeness and quality of data
- Most data comes from HICs
- Limited use of data in LMICs
- Surveillance of antimicrobial consumption and use is still limited in LMICs

<table>
<thead>
<tr>
<th>Reported to GLASS - AMR</th>
<th>2017 (22 countries)</th>
<th>2018 (48 countries)</th>
<th>2019 (66 countries)</th>
<th>2020 (70 countries)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients with suspected infection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood stream</td>
<td>81,920</td>
<td>262,265</td>
<td>441,794</td>
<td>502,584</td>
</tr>
<tr>
<td>Urinary tract</td>
<td>415,679</td>
<td>1,424,011</td>
<td>1,888,545</td>
<td>2,577,333</td>
</tr>
<tr>
<td>Gastro-intestinal</td>
<td>7,477</td>
<td>10,735</td>
<td>17,061</td>
<td>17,003</td>
</tr>
<tr>
<td>Sexually transmitted</td>
<td>2,847</td>
<td>9567</td>
<td>18,572</td>
<td>9,682</td>
</tr>
<tr>
<td>Total</td>
<td><strong>507,923</strong></td>
<td><strong>1,706,578</strong></td>
<td><strong>2,365,972</strong></td>
<td><strong>3,106,602</strong></td>
</tr>
</tbody>
</table>
Key challenges to achieving impact at country level

• Lack of political commitment
  - No coherent programmatic approach with adequate leadership, governance structures and accountability; > 75% NAPS not costed and budgeted;
  - Suboptimal integration with UHC, PHC, pandemic prep /response
  - The patient perspective is missing; AMR has no face and voice

• Limited access to early & quality lab diagnosis

• Lack of representative & reliable AMR and AMC surveillance data

• Limited AMR evidence base in LMICs

• Weak and uncoordinated TA capacity
Response 1: WHO NAP Implementation handbook (March 2022)

- Describes a practical 6 step process at country level:
  1. Strengthen governance / coordination
  2. Prioritize activities
  3. Cost the operational plan
  4. Mobilize resources
  5. Implement prioritized activities
  6. Monitor and evaluate

- Collation of new and existing WHO tools and guidance to support each step (a living document)

- Many tools during pilots also used by other sectors

- Huge country demand for related trainings since launch
WHO costing and budgeting tool Less than 25% of NAPs are properly costed

WHO costing and budgeting tool for AMR NAPs
• Tool to support countries in costing and budgeting AMR
• Tested in Indonesia, Turkey, Somalia, Jamaica, Sierra Leone, Paraguay
• Launched in 2021 – ToT in PAHO, AFRO

Value of the Tool
• Encourages multisectoral collaboration
• Prioritization for development of operational plans
• Modular approach – can be used separately by departments/ sectors and then consolidated
• Maps funding gaps and existing funding sources
• Supports resource mobilization – domestic/ external

Link to Tool and Guidance: https://www.who.int/teams/surveillance-prevention-control-AMR/who-amr-costing-and-budgeting-tool
Training package ‘leadership skills for multisectoral NAPs’

Purpose "How to" collaborate and coordinate

• **To build skills**: building trust, understanding interests, managing conflicts, influence mapping, consensus building, joint planning
• **Target**: member of various Ministries, multisector coordination group members, WHO, FAO, OIE staff

Training package

• 10 modules, 2.5 days; simulations and case studies
• Coaching: 3 and 6 months after training

Next steps

• Pilots completed in **Botswana, Serbia, Morocco**
  ‘What is AMR’?
• Roll out to countries in 2022
Response 2: a people centred framework to inform programmatic AMR response
The **USE** of the People Centred AMR Framework at country level

- **A face and voice for AMR:** access, quality, affordability, acceptability, risk groups: migrants, newborns, elderly
- **Identifies systems challenges and priority solutions**
- **Integration in UHC, PHC, health plans ...:** technical, staffing, supply chains, training, funding, insurance, advocacy
- **Identifies evidence gaps and informs evidence generation efforts**
- **Informs country specific assessment and monitoring**
- **Review of challenges, root cause analysis**
  - Evidence generation
  - Identification of priority interventions
  - Setting targets and monitoring results

**Prevention ➔ Access ➔ Diagnosis ➔ Treatment**
WHO Technical Assistance Mechanism: “AMR TEAM”

Key proposed functions

- Identification and information sharing on country-level technical assistance;
- Strengthening of technical consultant capacity through roster development;
- Development, sharing & dissemination of practical guidance and tools;
- Coordination of delivery of technical assistance;
- Mobilization of resources for technical assistance; Evaluation of impact;
- Collation of best practices, country impact stories, and promote peer learning
Response 3: generate and use representative and accurate surveillance data for policy development

- **National AMR surveys**
  - Periodic representative national AMR surveys
  - Focus on SDG indicators first (blood stream infections)

- **Strengthen routine surveillance**
  - Diagnostic stewardship
  - Bacteriology network strengthening
  - Increase coverage of AMR and AMC surveillance

- **Guidance on use of data**
  - Guidance on use of AMR and consumption data at all levels
  - Translate into guidelines, advocacy, evidence generation

December 2021: crosscutting laboratory consultation (all HQ departments & Lyon)
National AMR surveys: roadmap to global impact

Nationally representative data for ID / AMR burden measurement, trend analysis, country comparison and as platform for research

1. Develop technical guidance and pilot surveys globally (LIMC)
2. Build country capacity and coordinate technical assistance
3. Scale-up periodic surveys worldwide with focus on LMICs
4. Inform action, policies, interventions, and advocacy at country-level, and globally
Response 4: increase laboratory capacity to inform patient management, IPC measures and expand routine surveillance

Current challenges:
- Outdated WHO guidance
- Country capacity
- Supply chains & EQA
- Introduction of new tools

WHO response:
- Global capacity assessment
- Global bacteriology lab network
- Global EQA programme

WHO response:
- Innovation (TPP & guidance)
- Fill policy guidance gaps
- Internal consultation December 2021
Response 5: Global AMR Research Agenda (human health)

- Knowledge gaps related to the burden and factors associated with AMR?
- New / improved interventions for AMR prevention, diagnosis, care and treatment?
- Best way to deliver these interventions?
- Coordination with simultaneous One Health Research Agenda development

Objectives

1. **Identify** and **prioritize** research questions
2. **Catalyse investment** and **scientific interest** among researchers, donors, health professionals and private sector
3. Guide the **translation of research into action**
Thank you and looking forward to join forces to combat AMR!