Collecting surveillance data to inform ACTION

A coordinated approach to country capacity building

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GLASS Stakeholders meeting, April 28, 2021
Proposed agenda

1. Use of more & better data

2. Country capacity building

3. Sharing, coordination, and collaboration under ‘AMR TEAM’
The use of AMR / AMU data at different levels

**Global Level**
- Advocacy
- Inform R&D
- Inform global EML
- Monitor global trends
- Monitor emerging AMR
- Assess effectiveness of & inform actions
- Monitor Sustainable Development Goals AMR indicators

**National Level**
- Identify risk population
- Inform national medicines list
- Assess effectiveness of & inform actions
- Inform estimates of AMR burden of disease
- Identification and containment of emerging AMR
- Inform national essential medicines list/treatment guidelines

**HCF Level**
- Inform empiric patient treatment
- Early detection & control of emerging AMR
- Inform infection prevention and control strategies
- Inform antimicrobial stewardship initiatives and service provision
Countries enrolled in GLASS as of April 2021

N = 108 countries

- Enrolled in both AMR and AMC
- Enrolled in AMR
- Enrolled in AMC
- Not Enrolled
- Not Applicable

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data source: World Health Organization
Map production: Information Evidence and Research (IER)
World Health Organization
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GLASS expansion in the early implementation phase

<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><strong>Number of sites</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitals</td>
<td>466</td>
<td>3,097</td>
<td>5,557</td>
<td>5,942</td>
</tr>
<tr>
<td>Outpatients clinics</td>
<td>139</td>
<td>2,358</td>
<td>56,818</td>
<td>60,239</td>
</tr>
<tr>
<td>In-out patients</td>
<td>N.A.</td>
<td>N.A.</td>
<td>1,998</td>
<td>6,351</td>
</tr>
<tr>
<td>Other institutions</td>
<td>124</td>
<td>560</td>
<td>424</td>
<td>1,089</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>729</td>
<td>6,015</td>
<td>64,797</td>
<td>73,621</td>
</tr>
<tr>
<td><strong>Number of patients with suspected infection</strong></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><strong>Total</strong></td>
<td>507,923</td>
<td>1,706,578</td>
<td>2,365,972</td>
<td>3,106,602</td>
</tr>
</tbody>
</table>

Most reporting countries show an increase in the number of surveillance sites!
The diagnostic process and quality of the lab network determines the representativeness and reliability of GLASS data.
Sustainable Development Goal AMR Indicator

Goal 3: Ensure healthy lives and promote well-being for all at all ages

TARGET 3.d: Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

Proportion of bloodstream infections among patients due to
- methicillin-resistant *Staphylococcus aureus* (MRSA)
- *Escherichia coli* resistant to 3rd generation cephalosporin

Representative surveys with geographic coverage and quality laboratory data
Understanding the ID patient pathway

Need for evidence generation at country level!

No access
Pharmacy
PHC
OPD
Inpatient
Inpatient (HAI)

No lab test
Culture, identification
AST - IQA / EQA?
Test per disease syndrome?
Level of health system?
Cost and supply chain?

No treatment (available)
Over the counter
Doctor’s choice
Guidelines /AWaRe
Lab based Tx
Quality and affordability

Underlying causes: regulations, access, cost, HR capacity, SCM, guidelines, awareness, ... ...
GLASS: An expanding and changing surveillance environment

New initiatives for ‘frontrunners’, but leave no countries behind!

Routine data surveillance
- Antimicrobial Resistance surveillance (GLASS-AMR)
- Antimicrobial Consumption surveillance (GLASS-AMC)

Focused surveillance
- Emerging Antimicrobial Resistance Reporting (GLASS-EAR)
- Enhanced Gonorrhoeae surveillance (GLASS-EGASP)
- Candida spp. AMR surveillance (GLASS-Fungi)

Surveys and studies
- One Health AMR surveillance (GLASS-One Health)
- Point Prevalence Survey on AMU in hospital
- Assessment of AMR attributable mortality

AMR surveys
Urgent need for country-specific technical assistance

- **Programmatic approach** of interdependent interventions
- Surveillance is an integral part of the country AMR response
- Laboratory network design & laboratory capacity
- Optimizing the patient pathway (early diagnosis, Tx and IPC)
- Survey preparation and implementation
- Use of data and operational research and links to HIS
Need for country specific AMR lab network design

IV. NRL Experts

III. Regional specialized Lab Specialists/senior technicians

II. District hospital/Laboratory Technicians and assistants

I. Health care professionals but no equipment and/or trained lab personnel

Culture
Isolation
Identification
AST
Role of new tools?

Training, EQA, SPCM, reporting, accreditation supportive supervision

Insurance schemes
Out of pocket expenditures?
Referral systems
WHO NAP flexible modular costing tool

Help Desk

Case studies

Costing tool and user guide

E-learning videos

Trainings

Dissemination

Coming Soon
WHO corporate Technical Assistance Mechanism (AMR TEAM)

Bundling internal and external capacity for optimal support to countries

- Roster development external partners (general NAP and specialized areas)
- Coordinated high quality and timely response to TA needs in countries
- High level assessment and supportive monitoring missions
- Coordination of research initiatives / evidence generation
- Educational package for different target audiences

**Reality check: no sufficient funding for country technical assistance**
How can we organize ourselves for optimal impact?

Do YOU have an appetite for periodic meetings and participation in AMR TEAM?

- Sharing expertise, experiences and results
- Coordination of / collaboration on
  - Technical assistance, and research at country and global levels
  - Advocacy and resource mobilization
  - Building rosters of qualified consultants
  - Educational tools

Proposal to establish an AMR TEAM Partner Group