Approach to integrated AMR surveillance framework

Pan-Africa Workshop on Effective Implementation of National Action Plan on Antimicrobial Resistance

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Why there is a need for integrated antimicrobial resistance surveillance

- **Resistance has no boundaries**
  - Seamless flow of AMR determinants across humans, animals, food and environment
  - Surveillance in any one sector will not give a true picture of AMR
  - Understanding on source and sink, where it is amplified, where suppressed, what are the pathways

- **Different aspects of integration**
  - Across sectors: human, animal, food (plants and animals), environment
  - Across AMR determinants (resistant bacteria, resistance genes, antimicrobial residues)
  - Across AMR and antibiotic use

- **Generation of harmonized set of information out of surveillance efforts**

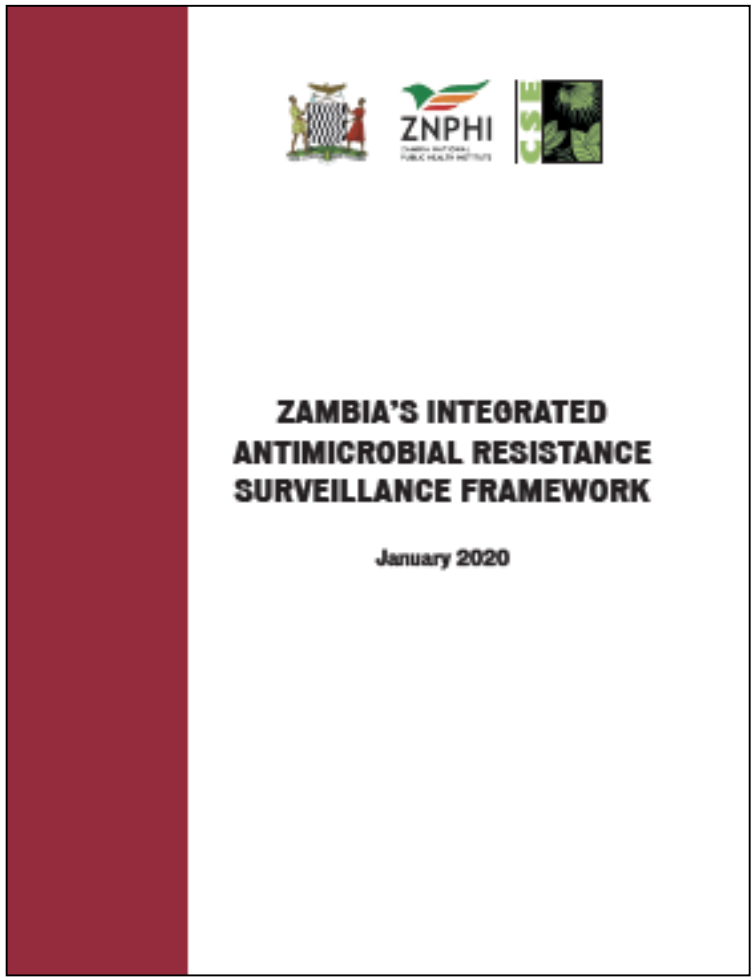
Integrated AMR surveillance in global guidance

- **Global understanding on the need for integrated AMR surveillance emerging**
  - Country level examples
  - WHO-**AGISAR**, FAO, Codex

- **Limited reflection through one guiding report on surveillance across all relevant sectors, including the environment**

- Opportunities of cross learning and knowledge transfer between nations are growing

Zambia's integrated AMR surveillance framework



- **Objectives**
  - To take Zambia's National Integrated AMR Surveillance Strategy a step forward and move from 'what to do' to 'how to do'?
  - Put necessary focus sectors which are otherwise neglected – environment, plant
  - **Phased and progressive plan**
- **Based on ground realities, current status , available skills, resources, and infrastructure**
- **Integration across**
  - human-health, food-animal, environment sectors
  - resistant bacteria, antibiotic residues, antibiotic resistance genes

Zambia's integrated AMR surveillance framework (examples)

	Human-health	Food animals	Environment
Bacteria for AST	Select bacteria	Select bacteria	Indicator + sector specific bacteria
Antibiotics for AST			
Genetic markers			
Sample types	Blood, urine, faces	Swabs: air-sac, carcass, faecal	Sewage, effluent
Sampling sites	Hospitals, clinics	Farms, retail, abattoirs	Hospitals, farms, factories, community
No. of sampling sites per province			
Total no. of samples per province per year		300 250 for a new province	
Frequency of sampling			
AST interpretation method	CLSI	CLSI	CLSI
No. of labs/ networks	Expands across phases	Expands across phases	Third party support
Training required			

Learnings

- Integrated surveillance design is not as difficult as it looks to be
- Possibilities of convergence makes the implementation realistic; leads to greater buy-in
- A good understanding of baseline scenario is very useful
- Sitting together with multi-sectoral colleagues helps in an optimised design – which is not only integrated but is also well informed, effective

Thank you

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