

Choosing the appropriate evaluation framework for integrated surveillance of antimicrobial use and resistance – an online guidance

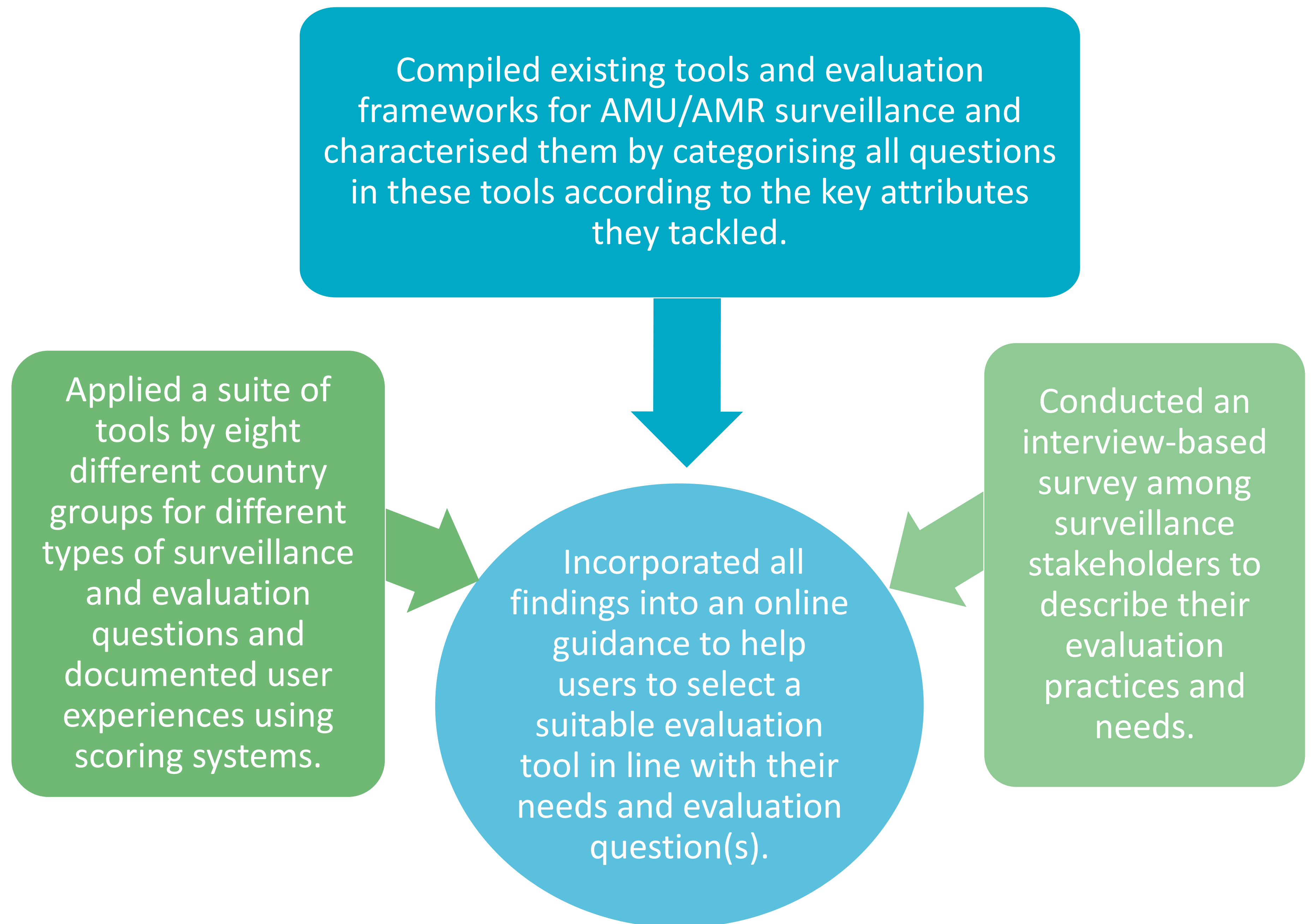
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Background

- Integrated surveillance programmes for antimicrobial use (AMU) and antimicrobial resistance (AMR) require regular evaluation to ensure that they are fit for purpose.
- Several evaluation tools addressing different surveillance aspects are available, but recommendations are disjointed and evaluations therefore rare and non comparable.
- A consortium of more than 30 international researchers and stakeholders from 15 countries applied existing tools for the evaluation of AMR and AMU surveillance and elaborated an evaluation guidance.
- This work was conducted as a part of the CoEvalAMR project “Convergence in evaluation frameworks for integrated surveillance of AMU and AMR” <https://coevalamr.fp7-risksur.eu/>, funded by the EU Joint Programming Initiative on AMR (JPIAMR) <https://www.jpiamr.eu/>.

Methods



Results

Evaluation guidance

Choosing an evaluation framework for surveillance of AMU and AMR

This evaluation guidance aims to provide support towards the evaluation of surveillance systems for AMU and/or AMR, to personnel working in public, private and non-governmental organizations, from public health, animal health, plant health, environmental health, at local, national and international levels. Selecting an appropriate tool for evaluation is part of the evaluation process. It will support the evaluation planning and help define data and information needs.



The guidance helps users interested in conducting an evaluation of AMR and/or AMU surveillance to:

- Gain an overview of evaluation frameworks and tools available
- Understand what distinct frameworks and tools have to offer
- Identify the most suitable evaluation framework or tool taking into account evaluation goals and objectives

1. Introduction to surveillance evaluation
2. Evaluation of surveillance for AMU and AMR
3. Evaluation tools
4. Decision-support tool for choosing an evaluation tool
5. Case Studies
6. Directory of tools

Figure 1: Extract from the online guidance showing the introduction and different chapters of the guidance

- Interviews with AMU/AMR surveillance stakeholders showed that there was a need for easy-to-use, accessible tools with adequate descriptions and guidance on their specificities and complementarities.
- 17 evaluation tools were ranked based on the following attributes: collaboration, financing, impact/output, integration, adaptability, surveillance technique and data on AMU/AMR.
- Applications of the tools to case studies illustrated their diversity, identified strengths, weaknesses, opportunities and threats and provided personal value-based scorings based on ten defined categories such as resource requirements, user-friendliness, or overall appearance.
- The results were used to generate an online guidance for users with a section on evaluation in general, an overview of existing tools in relation to a theory of change of AMU/AMR surveillance, decision support to identify a suitable evaluation tool based on evaluation needs, and a section on user experiences (Figure 1).

For more information about the evaluation guidance, please visit the project webpage <https://guidance.fp7-risksur.eu/>



Conclusions

- The evaluation guidance provides support to personnel working in public, private and non-governmental organisations working to protect the health of humans, animals, plants and the environment at local, national and international levels through AMU/AMR surveillance.
- It helps users to conduct evaluations of their AMU/AMR surveillance systems which will provide information on the functionality, effectiveness and efficiency of these systems and allow identifying potential areas for improvement.
- The results of this study contribute to the dynamic field of research on One Health evaluation and metrics.

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