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## Abstract Book

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## Towards a matrix to assess the impacts of integrated surveillance of antimicrobial resistance and antimicrobial use.

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### Introduction

Tackling the challenge of antimicrobial resistance (AMR) requires changes in antimicrobial use (AMU) across human, animal and agricultural sectors. To trigger adequate changes, both at individual as at policy level, all actors in the system must be informed by integrated surveillance. Consequently, it is crucial to assess the impacts of the information produced by such integrated systems to provide evidence of their added value. In this context, we aimed at developing a matrix to assess the impacts of integrated surveillance of AMR and AMU.

### Materials and Methods

A preliminary evaluation tool was developed using impact pathway analysis. Using evidence from previous research, evaluation attributes and their indicators were identified for each of the immediate, intermediate and ultimate outcomes. The preliminary tool will be then submitted to a panel of international experts for validation and prioritization according to the surveillance context.

### Results

The evaluation matrix includes outcomes' attributes to assess changes in surveillance performance, stakeholder awareness, knowledge and practices, cross-sectoral collaboration, systems knowledge, AMR risk management, surveillance costs, as well as health and economic impacts. Indicators are either observed or stated, and measured using both qualitative (eg. document analysis, key informant interviews) and quantitative methods (eg. epidemiological, economic analysis). The expert opinion elicitation will allow us to identify the adequate evaluation timeline, as well as the appropriateness of the attributes and indicators depending on the maturity of the evaluated system.

### Conclusion

The developed evaluation matrix provides guidance to assess the impacts of integrated surveillance systems of AMR and AMU conducted in a One Health context. It can be used as a stand-alone tool to specifically assess the outcomes of the surveillance system, or in conjunction with existing surveillance tools to provide a comprehensive evaluation of the system.

### Keywords

AMR, evaluation, impacts, One Health, integrated surveillance