

Tools for surveillance system evaluation: Reviewing the need for participatory approaches

Work Package 5: Evaluation of epidemiological and economic effectiveness of surveillance systems

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While the need for effective animal health surveillance is widely recognised for diseases management, most veterinary services are facing significant budget constraints. There is a real need to develop cost-effective surveillance systems. To ensure quality of these systems, there is a further need to design comprehensive, timely, effective and affordable evaluation frameworks. Depending on epidemiological, sociological and economic factors, animal diseases surveillance systems can be complex, likewise the choice of attributes to describe them and therefore the choice of methods and tools to evaluate them. Participatory approaches could provide the framework needed to tackle that complexity with sufficient flexibility.

OBJECTIVES

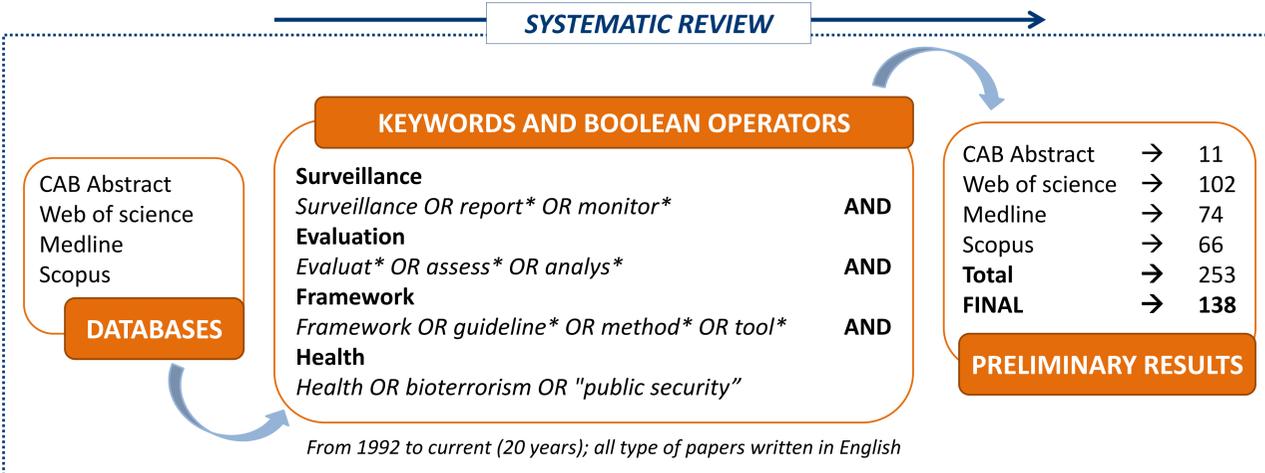
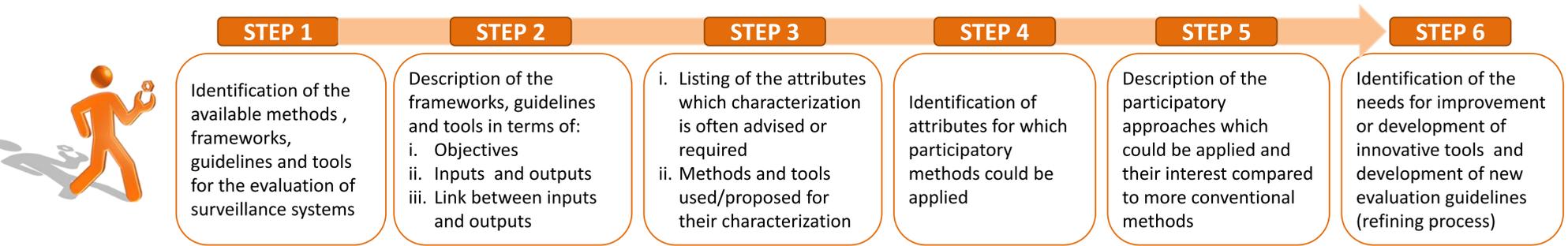
MAIN OBJECTIVE

Identifying important attributes of surveillance systems for which the use of participatory methods could be an efficient complement or substitute to conventional approaches.

OTHER OBJECTIVES

- Describing evaluation frameworks used in animal and public health
- Describing the rationale behind the attributes and the tools selected
- Assessing the adequacy between evaluation goals and conventional methods
- Identifying gaps or strengths in evaluation methods and tools
- Assessing the needs for improvement or development of innovative frameworks/tools

METHOD



Participatory mapping
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PRELIMINARY RESULTS (example of attributes)

	ATTRIBUTES	
	COSTS	ACCEPTABILITY
Frameworks / guidelines / tools	SERVAL ¹ ; HSCC ² ; OASIS ³	SERVAL ¹ ; HSCC ² ; OASIS ³ ; WHO ⁴ ; CDC ⁵
Relative importance in the evaluation	Needed to assess the economic attributes (e.g. the cost-benefits)	One of the most important attribute (CDC): efficacy of surveillance systems greatly dependant on stakeholders' engagement and participation
Tools / methods proposed for the assessment	<ul style="list-style-type: none"> ▪ List of fixed/variable costs ▪ Estimation of the costs ▪ Distribution among stakeholders → Closed ended questionnaires 	<ul style="list-style-type: none"> ▪ Factors likely to influence participation ▪ Points of interaction between network and participants → Closed ended questionnaires ▪ Review of surveillance reports forms
Limits	Difficulty to collect valuable information when asking directly to stakeholders about costs	<ul style="list-style-type: none"> ▪ Limited information collected ▪ Qualitative approaches ▪ Possible negative approach to stakeholders
Interest of participatory approaches	Use of direct methods and triangulation to assess economic reality of stakeholders	<ul style="list-style-type: none"> ▪ Collection of social/cultural information to assess stakeholders constraints/beliefs ▪ Direct involvement of stakeholders in the system and in the evaluation process ▪ Semi-quantitative approaches

1. SuRveillance EVALuation framework (RVC, AHVLA, SAC): A new generic framework for the evaluation of animal health surveillance, 2013.
 2. Health Surveillance Coordinating Committee (Health Canada): Framework and Tools for Evaluating Health Surveillance Systems, 2004.
 3. Outil d'Analyse de Système d'Information en Santé (ANSES): an assessment tool of epidemiological surveillance systems in animal health and food safety, 2011.
 4. World Health Organisation: Communicable disease surveillance and response systems, guide to monitoring and evaluating, 2006.
 5. Center for Disease Control and Prevention: Updated guidelines for evaluating public health surveillance systems, 2001.

POTENTIAL INTEREST OF PARTICIPATORY APPROACHES

- Take into consideration the **sociological aspects** which are essential components for surveillance systems.
- Provide **relevant information** for the assessment of sensitive attributes, especially those concerning the economic evaluation (area of expenditures, distribution of benefits among stakeholders, etc.).
- Could help to **improve acceptability** of stakeholders concerning the system itself and the evaluation process.



Matrix scoring
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Participatory approaches could lead to a better structuring of the system and to the improvement of stakeholders' adhesion to the surveillance network. Moreover, some essential information are not always easy to collect and/or quantify (e.g. benefits quantification, target population, time between detection and reporting, etc.). The comparison of information obtained from multiple informants using a variety of participatory techniques could facilitate the assessment of some attributes.