

## One Health Preparedness: how to evaluate Simulation Exercises to enhance multi-sectorial national preparedness plans and capacitate the One Health workforce

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**Background:** One Health (OH) preparedness intends to adopt multisectoral and multidisciplinary approaches to contrast potential threats that emerge at human-animal-environment interface.

OH operationalization in preparedness strategies requires building a OH workforce able to integrate OH in national plans and to implement them, which is a challenging task. Simulation Exercises (SIMEXs) are meant to reinforce preparedness capacities. In Italy SIMEXs were carried out as part of the “National strategic and operational plan for preparedness and response to pandemic flu 2021-2023 (PanFlu)”. These Exercises were evaluated by adapting guidance from international organizations, <sup>1,2</sup> and the results emerging from the evaluation, provided suggestions for the evaluation of SIMEX for preparedness plans adopting OH approaches.

[1-Handbook on simulation exercises in EU public health settings – How to develop simulation exercises for supporting preparedness and response to communicable diseases \(europa.eu\)](#)

[2-WHO-WHE-CPI-2017.10-eng.pdf](#)

**Methods:** The evaluation methodology adopted in the SIMEXs of the Italian PanFlu suggested that specific ad hoc surveys run during the exercises can help to characterize the stakeholders involved in the preparedness exercises in terms of sectors, disciplines, roles in their own institutions and in the framework of the preparedness plan. Through the analysis of the workforce involved in these exercises, including its role in national preparedness, its knowledge about OH preparedness, and its readiness to adopt OH approaches, it is possible to describe some aspects of the OH preparedness in Italy (fig 1.). The analysis can provide some suggestions on the sectors and disciplines non yet involved in the preparedness, targets and topics for training , constraints due to governance barriers.

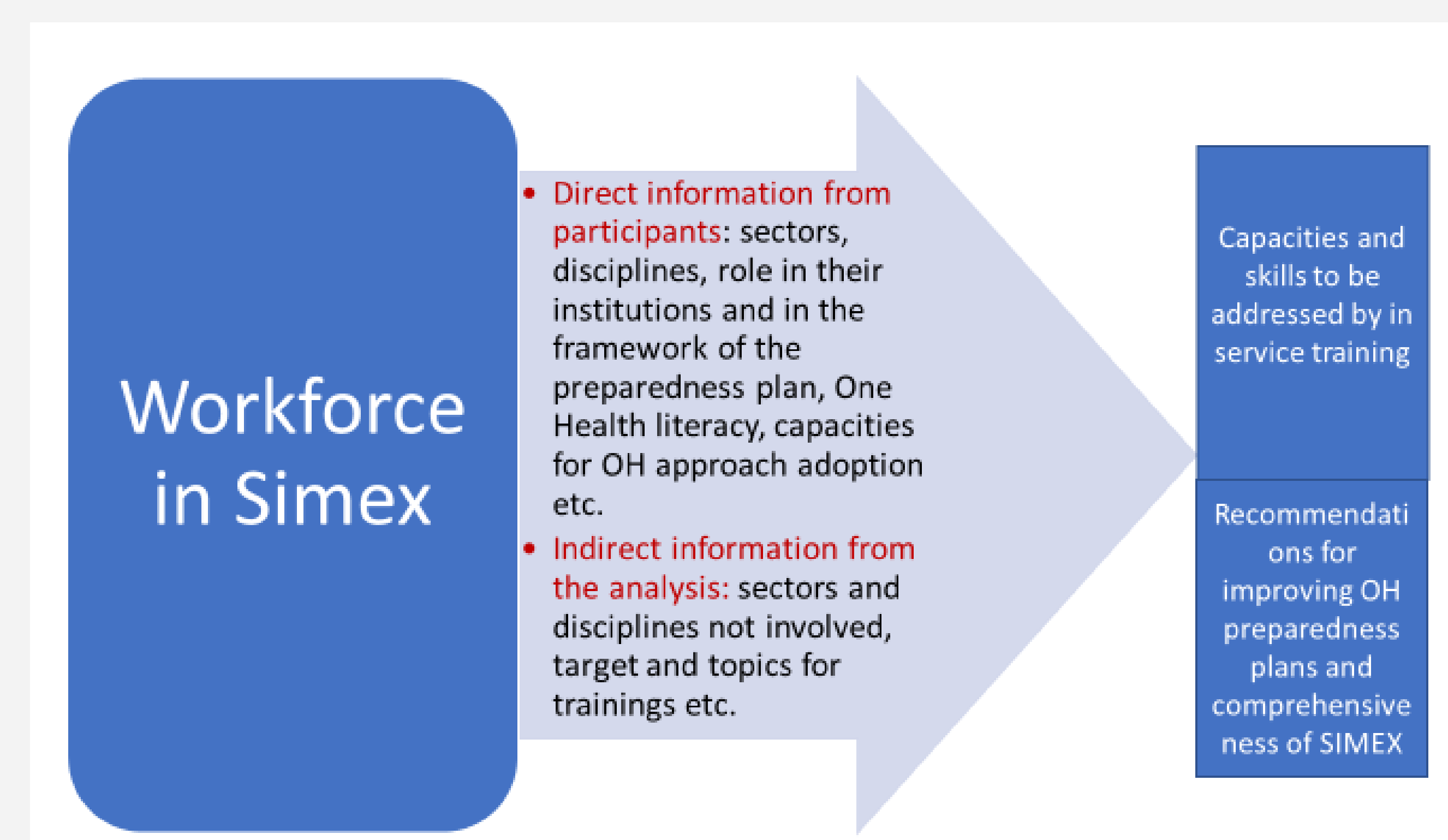


Fig. 1: DIRECT AND INDIRECT INFORMATION COLLECTED WITH SIMEX EVALUATION SURVEY

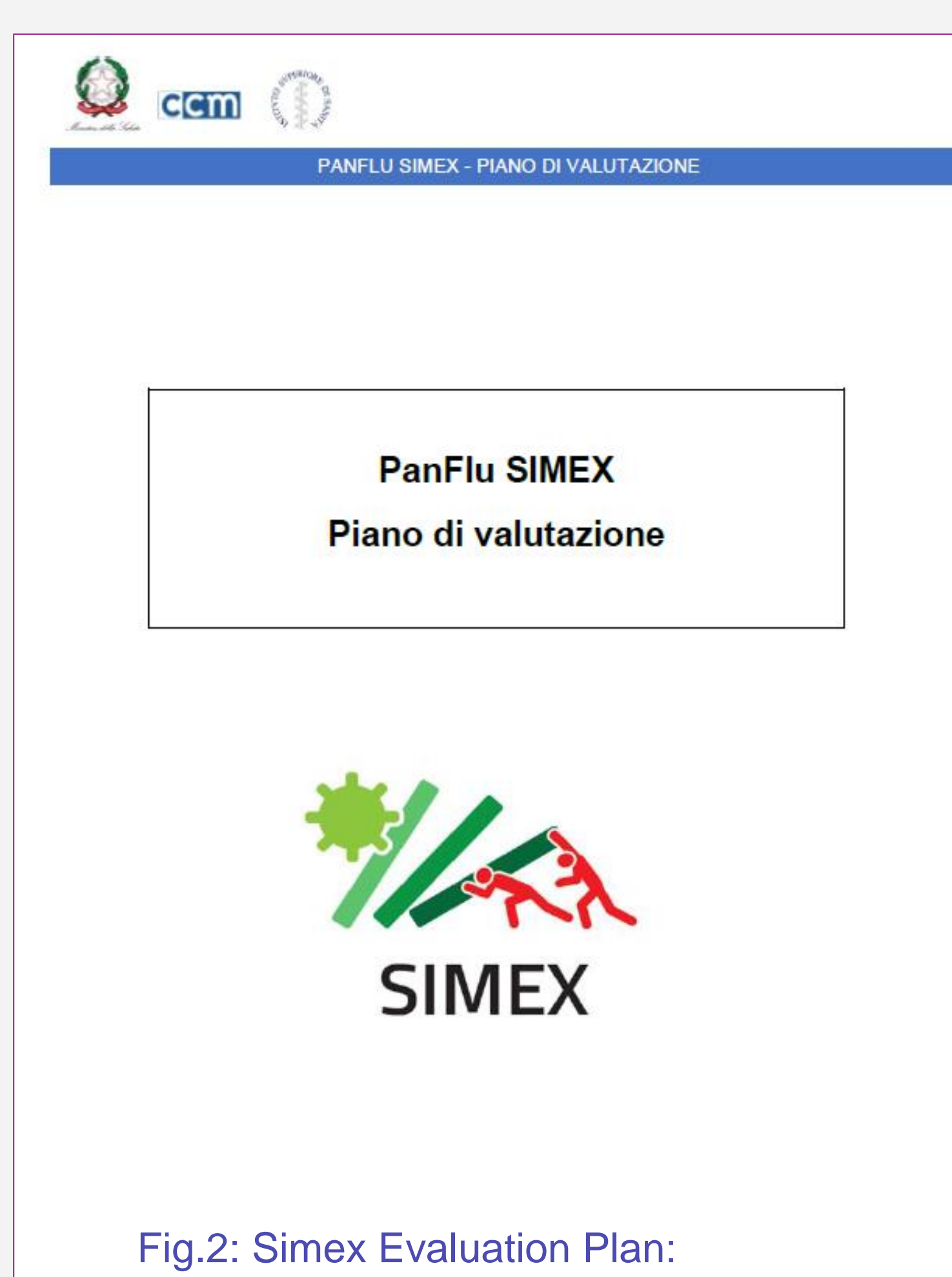


Fig.2: Simex Evaluation Plan:

**Results:** We developed an evaluation plan (including tools), fig 2, aimed at describing the OH workforce involved in SIMEXs for pandemic preparedness with a OH approach in Italy and to identify capacities and skills that should be addressed particularly by in-service training courses.

**Conclusions:** To identify the workforce for OH preparedness is challenging. To describe participants in SIMEXs of preparedness plans for threats which require an OH approach can help to characterise the workforce and provide recommendations for consolidation and improvement of capacities and enhancement of OH preparedness plans.

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