MOOD

Monitoring Outbreak events or Disease surveillance in a data science context

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Type of action: RIA

D1.1 Report on user's needs

The present report presents an assessment of users' problems, needs and pathways for the prioritization of innovations that could be designed by the MOOD consortium. The co-conception process of MOOD implies a participatory assessment of the users needs. It was based on the crossed socio-technical analysis of interviews and workshops with users working in epidemic intelligence (EI) in Public and Veterinary Health agencies in the five case study countries (Serbia, Italy, Spain, France and Finland) and at the ECDC. Overall the analysis highlights that the users want to review their EI strategy in order to enhance their preparedness for new and emerging disease outbreaks and adapt their routine in order to manage an increasing amount of data. The identified paths of solutions aim to ease risk detection and risk assessment through visualization, web scraping and predefined analytical tools. The developments in monitoring of social medias could enable the early warning and the preparedness of the countries. Users also want to have an easier data acquisition process (timely, validated and standardized) for international epidemic intelligence, and to have better indicator-based surveillance (IBS) dataflows at national level respecting data protection and homogenous information for epidemiological analysis. They expressed the need of harmonization of data processing for risks assessment in order to be able to compare their results. Users also highlighted the preference to have a partial automatization of analysis in order to keep control on the data, inputs and to be able to adapt parameters to versatile objectives.

The paths of work identified are characterized by the wish to have a more holistic and integrated approach for zoonosis and AMR, the need for harmonization between agencies and sectors while keeping the flexibility and the exploration for a

complementary role of event based surveillance to support indicator based surveillance.
The validation and precise definition of the diversity of flexible
tools will continue during the iterative process of co-conception "the learning loops"
(2021-2022), as well as the strategic choices (feasible by MOOD) and concrete
proposals of tools and services