Mobile Digital Preparedness and Response Without Borders

DIGIPREW

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SUMMARY

DIGIPREW develops solutions for detection of and response management to any biological threats (DRBT) in four work packages (WP). WP 1 develops a digital mobile information and response management system. WP2 designs elements of a digital mobile laboratory information system. WP3 develops capacity building tools for DRBT and conducts operational research. WP4 conducts a field pilot in Africa. The technical backbone for DIGIPREW will be SORMAS (Surveillance Outbreak Response Management and Analysis System).

CONTEXT

So far the Integrated Disease Surveillance and Response (IDSR) System in Africa[1], is mostly limited to unidirectional weekly reporting on paper or spreadsheets. SORMAS, an open source, mobile eHealth system, allows health facilities (HF), laboratories and public health departments at district, regional and national level to coordinate control measures of communicable diseases and exchange epidemiological information digitally in real-time.

Figure 1: Workflow between SORMAS users   ©SORMAS

Characteristics of SORMAS

- Aims to improve prevention and control of communicable diseases also in resource-poor settings
- Designed by those involved in public health surveillance and disease control
- Indicator-based and event-based surveillance
- Response management
- Open source, GPLv3 license
- Bi-directional data transfer

[1] *World Health Organization. Technical Guidelines for Integrated Disease Surveillance and Response in the African Region: Third edition. WHO | Regional Office for Africa. 2019*

OBJECTIVES

DIGIPREW aims to provide solutions to enhance the detection of and response management to biological threats building on the technology of SORMAS.
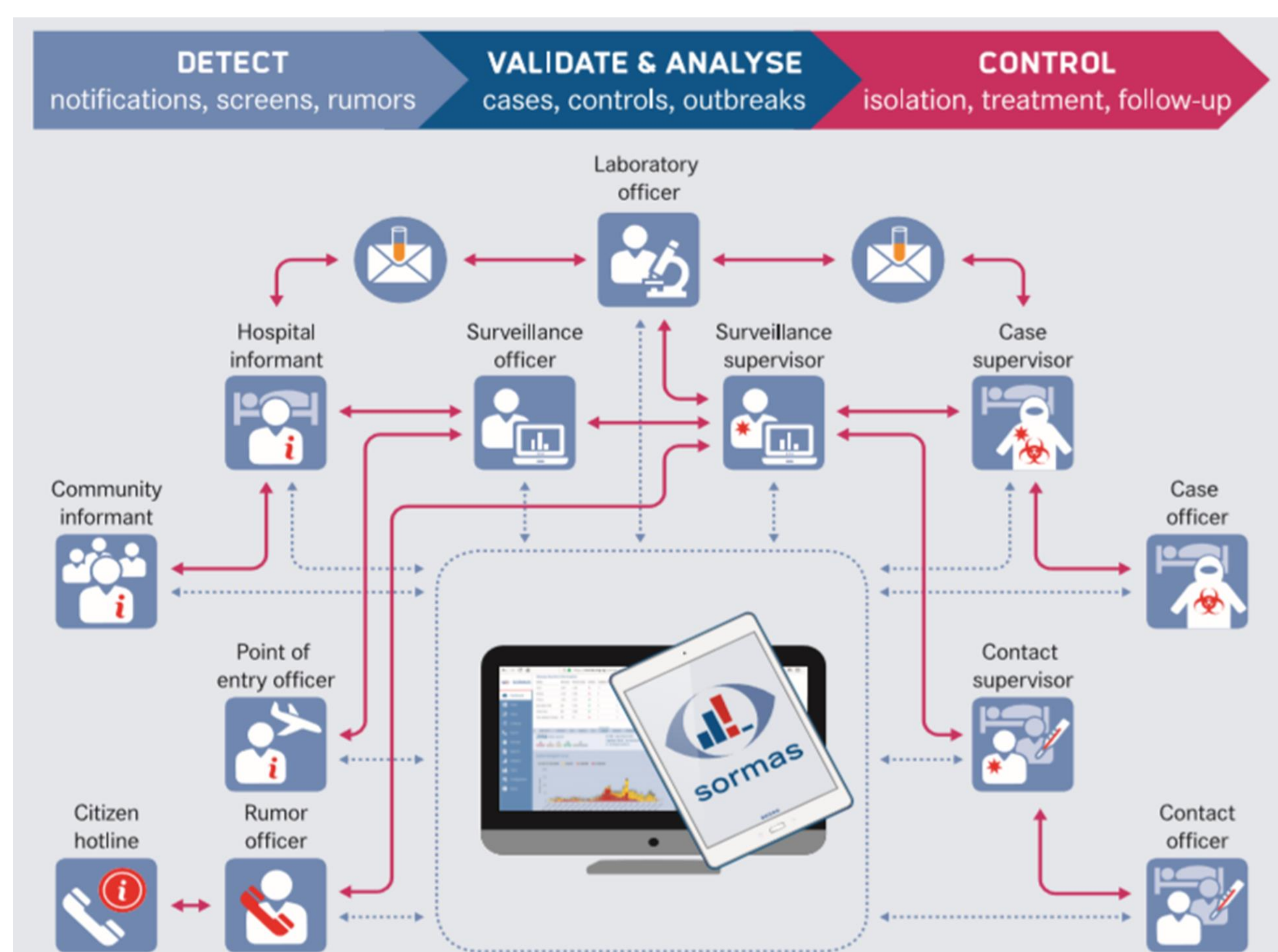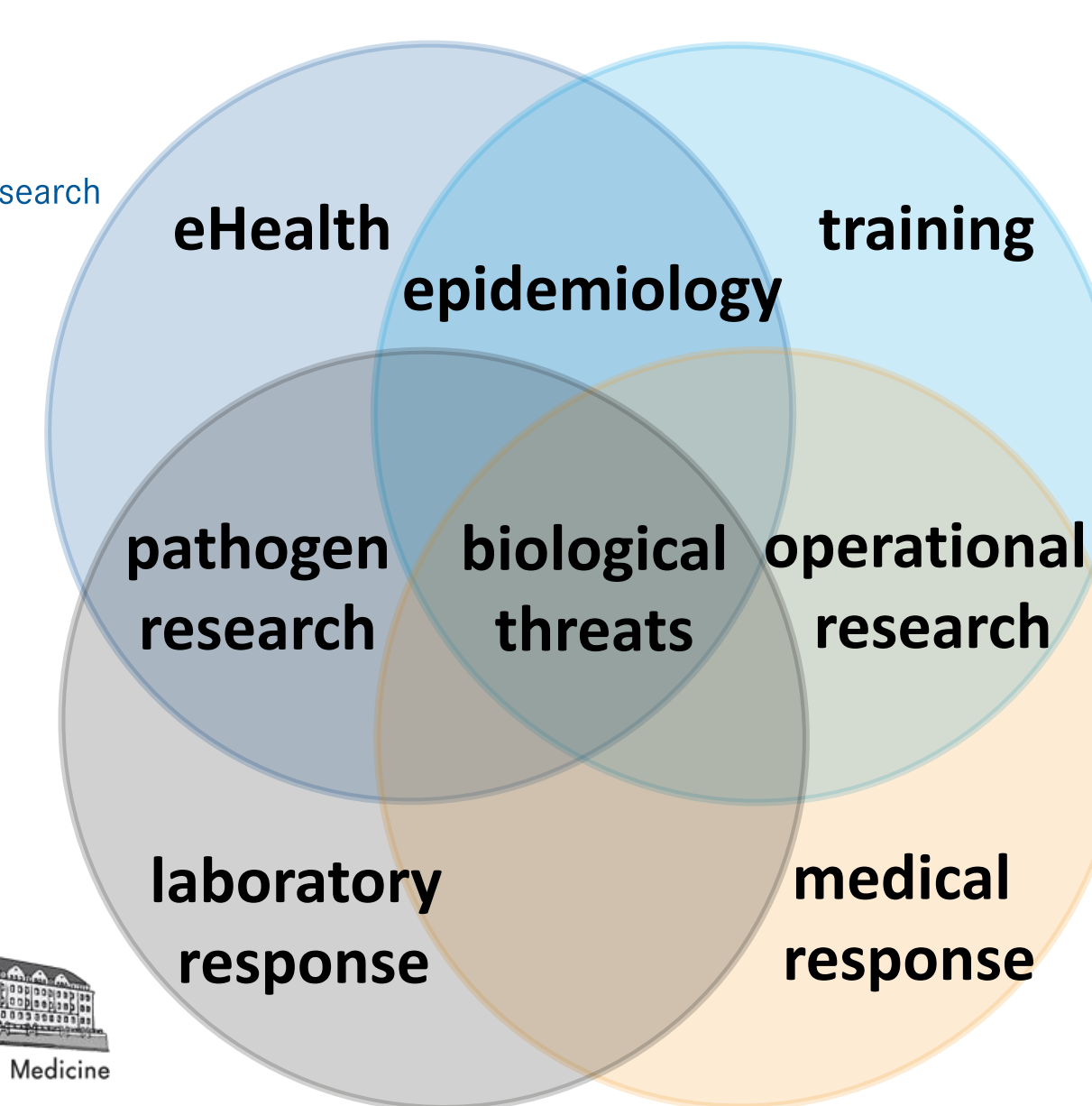

Figure 2: Synergy and complementarity of tasks and competency between work packages and partners.

METHODS

- **Mobile Digital Threat Response (WP1)**: Develop a mobile digital threat response tool
- **Mobile Digital LIMS (WP 2)**: Develop elements of a mobile digital Laboratory Information Management System (LIMS) for the European Mobile Laboratory Network
- **Training and Evaluation (WP 3)**: Develop a comprehensive training and capacity building package for mobile digital threat response and evaluation of its pilot
- **Field Pilot (WP 4)**: Assess real life feasibility of the research solution (Digital Mobile Threat Response tool)
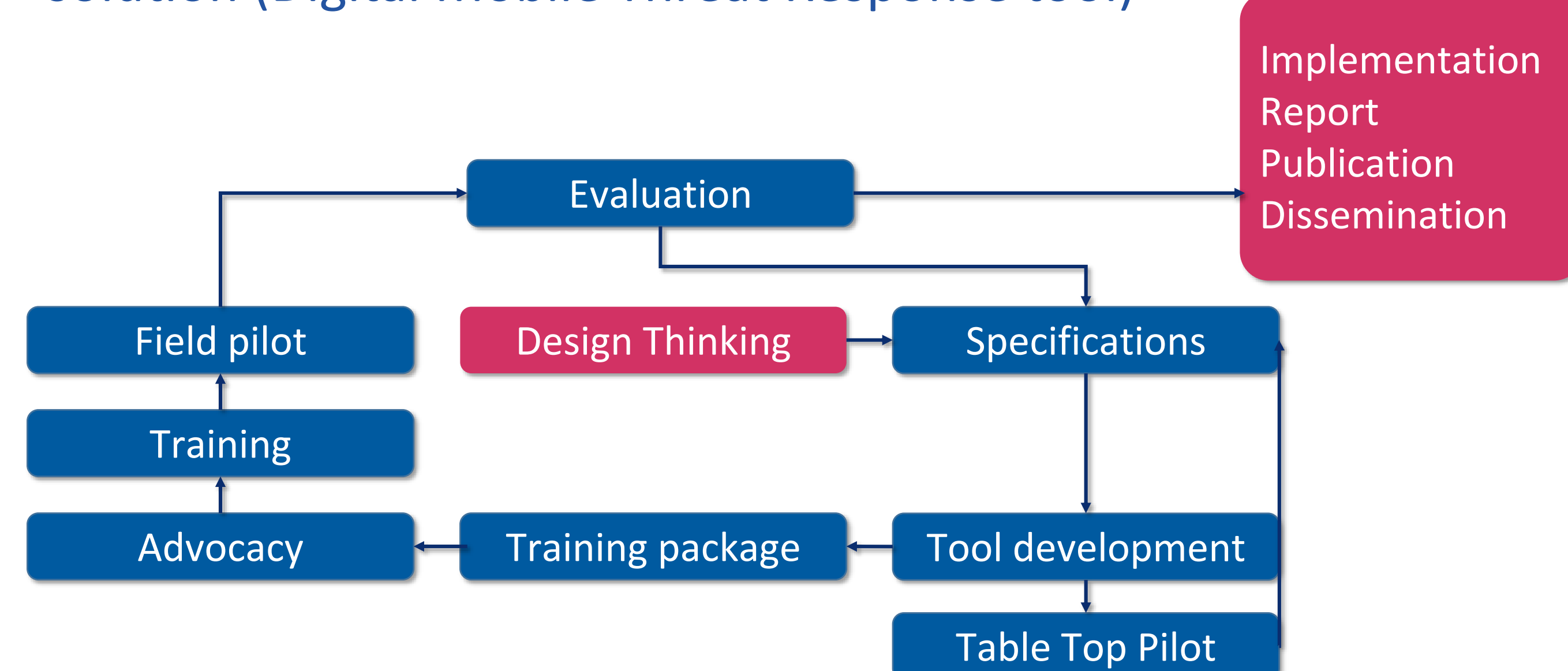

Figure 3 Workflow of different steps of the work packages.

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