

BE-SURVID

Kick-off meeting

28/01/2025

Agenda

1. Introduction to BE-SURVID

- Objectives
- KPIs and action-level indicators
- Timeline
- Stakeholders
- Contract and budget management

2. Workplan

- Introduction to the work packages (WP1-WP6)
- Milestones and deliverables
- Risks and challenges

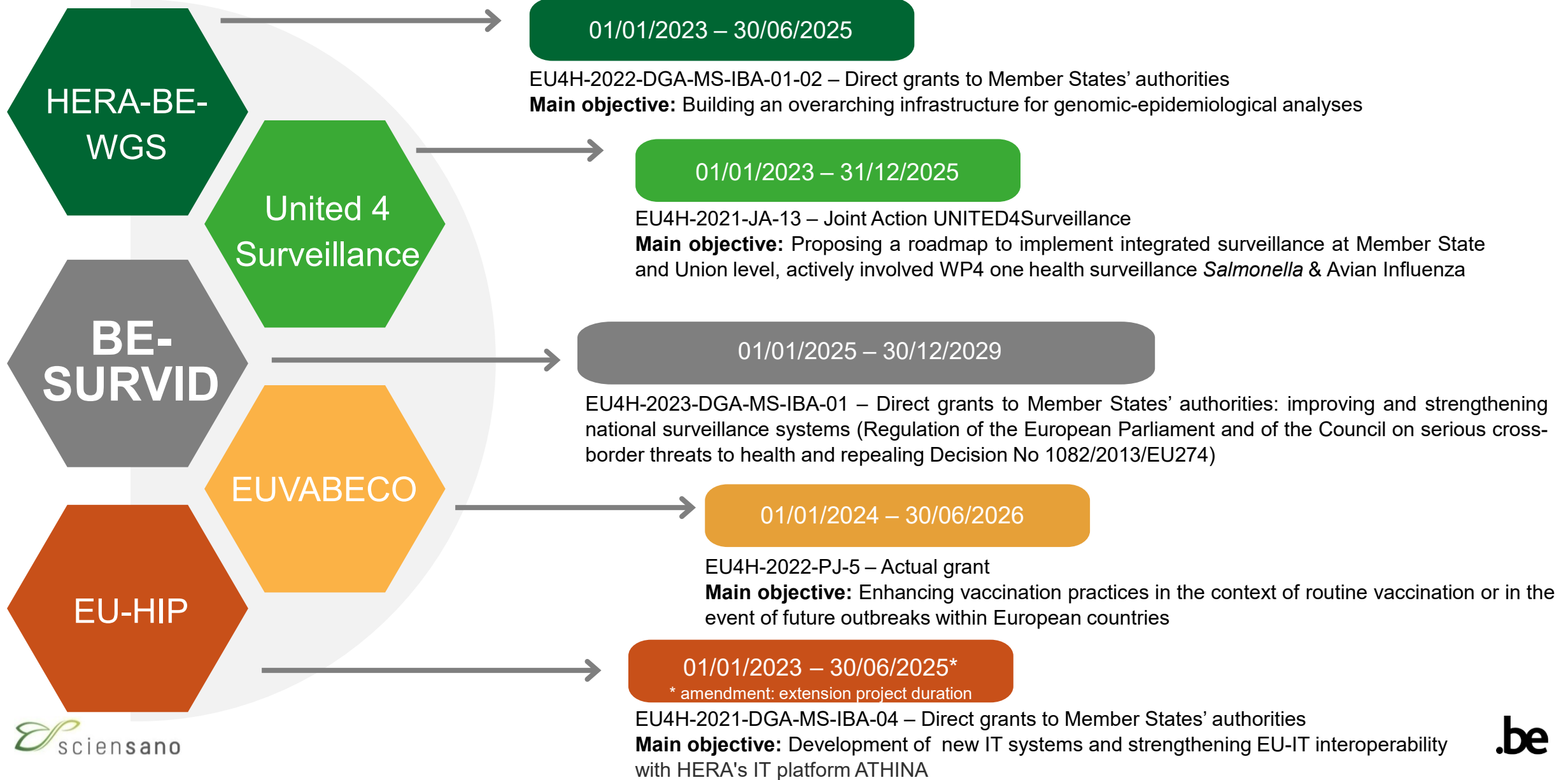
3. Sustainable project engagement

- Sustainability principles
- Communication strategy

4. Closing remarks

INTRODUCTION BE-SURVID

Overview EU projects within service Epidemiology of Infectious Diseases



Objectives of BE-SURVID

The **general objectives** of this project are:

1. Implementation of digitalized surveillance systems at general practitioner, laboratory and hospital level by system to system data transfer and secondary use of electronic health records.
2. Implementation of integrated surveillance systems by linkage of surveillance data with other relevant data sources (clinical and epidemiological metadata, socio-demographic data, health insurance data, vaccination,...).
3. Develop automated signal detection systems and modelling activities.
4. Develop a data governance strategy for infectious disease surveillance in Belgium, taken into account technical and legal (GDPR) elements and initiatives such as the creation of the Belgian health data authority and the European health data space.

Key performance indicators

Key Performance Indicator	Baseline value	Target value	Related Specific Work Packages (WPs)
Development of a syndromic surveillance system using the electronic health records (EHR) of general practitioners (GPs)	Currently this surveillance system does not exist	Operational automated syndromic surveillance system from GPs for respiratory (ARI, ILI) syndromes and acute gastroenteritis syndromes with concrete output in reporting (<i>e.g. weekly for respiratory</i>).	WP 2: Digitalized surveillance
Development of a digitalized surveillance system of laboratory test results from clinical microbiology laboratories (Epilabo)	Currently this surveillance system does only exist for COVID-19. A generic surveillance system is under development	Operational automated Epilabo surveillance system for at least the following pathogens Influenza, RSV and SARS-CoV-2, <i>C. trachomatis</i> , <i>N. gonorrhoea</i>	WP 2: Digitalized surveillance
Implementation of a digitalized surveillance system for Severe Acute Respiratory Illness (SARI)	Under development	Operational SARI surveillance system with an electronic dataflow from hospitals with concrete output in reporting (<i>e.g. weekly for respiratory</i>)	WP 2: Digitalized surveillance
Integrated surveillance using multiple data sources	Limited linkage projects between datasets (mainly COVID-19 and HIV)	Demonstrated data linkage of Epilabo data, SARI data, HIV data with external data sources such as vaccination, health insurance, socio-demographic data	WP 3: Integrated surveillance

Key performance indicators

Key Performance Indicator	Baseline value	Target value	Related Specific Work Packages (WPs)
Development of automated signal detection tools	Under development	Demonstrated results via reports, publication, dashboard using timely automated surveillance data obtained via WP2	WP 4: Automated signal detection and modelling
Modelling activities (Respi, HIV, tick-borne diseases)	Currently this does not exist	Demonstrated results via reports, publication	WP 4: Automated signal detection and modelling
Assessing data sources for pandemic preparedness	Currently this does not exist	Demonstrated results via a protocol to describe the use and linkage possibilities of these data sources in case of a pandemic.	WP 5: Data governance
Data governance strategy	Currently this does not exist	Organized and participated to workshops at regional, national and international level for adoption of data governance strategy Demonstrated data governance strategy via a report, disseminated for awareness among stakeholders	WP 5: Data governance

Action-level indicators

The following specific **action-level indicators** will be monitored by WP 6 Evaluation and a separate deliverable (D6.3) will be submitted:

- Number of national surveillance systems with improved timeliness of surveillance data reporting.
- Number of national surveillance systems with an increased sensitivity (defined as the ability of the surveillance system to detect all events under surveillance).
- Number of national surveillance systems with increased data quality.
- Number of national surveillance systems that comply with the EU surveillance standards.
- Number of national surveillance systems able to monitor their country's health care system capacity.

BE-SURVID timeline



INTERNAL

Healthdata.be

EID

Epidemiology of Infectious Diseases

HSR

Health Services Research

MEET OUR ACTORS

EXTERNAL

REGIONAL HA
DZ, AViQ, VIVALIS, DGOV

FEDERAL HA

HADEA - ECDC - WHO

RIZIV - INAMI

GP - NRC - CL - HOSP

Contract and budget management

Contact persons: **Mathieu Ronval, Mathieu Brabant, Lina Ouberri, Marie-Sophie Croenne**

- Project duration: 60 months (01/01/2025 – 31/12/2029)
- Budget: total of €8.8M
 - Approximately €5.3M funded via HaDEA/EU4Health
 - Approximately €3.5M own contribution
 - Most costs represented by staff efforts and subcontracting (high effort linked to WP2: Digitalized surveillance)
- Three reporting periods: M1-M20, M21-M40, M41-M60
- Monthly timesheets for measuring contributions to the project to be saved on the Sciensano fileshare (\\sciensano.be\fs\1150_EPIVG_EpiInfect\6_Projects\BE-SURVID\Timesheets)
- Regular meetings between department of Finance and project coordination to follow-up financial status

Workplan

Introduction of Work Packages (WPs)

WP1: Coordination, Communication and Dissemination

WP2:
Digitalized
Surveillance

WP3:
Integrated
Surveillance

WP4: Signal
detection &
Modelling

WP5: Data Governance

WP6: Sustainability and Evaluation

Introduction of Work Packages (WPs)

WP1: Coordination, Communication and Dissemination

WP5: Data Governance

WP6: Sustainability and Evaluation

WP2: Digitalized Surveillance

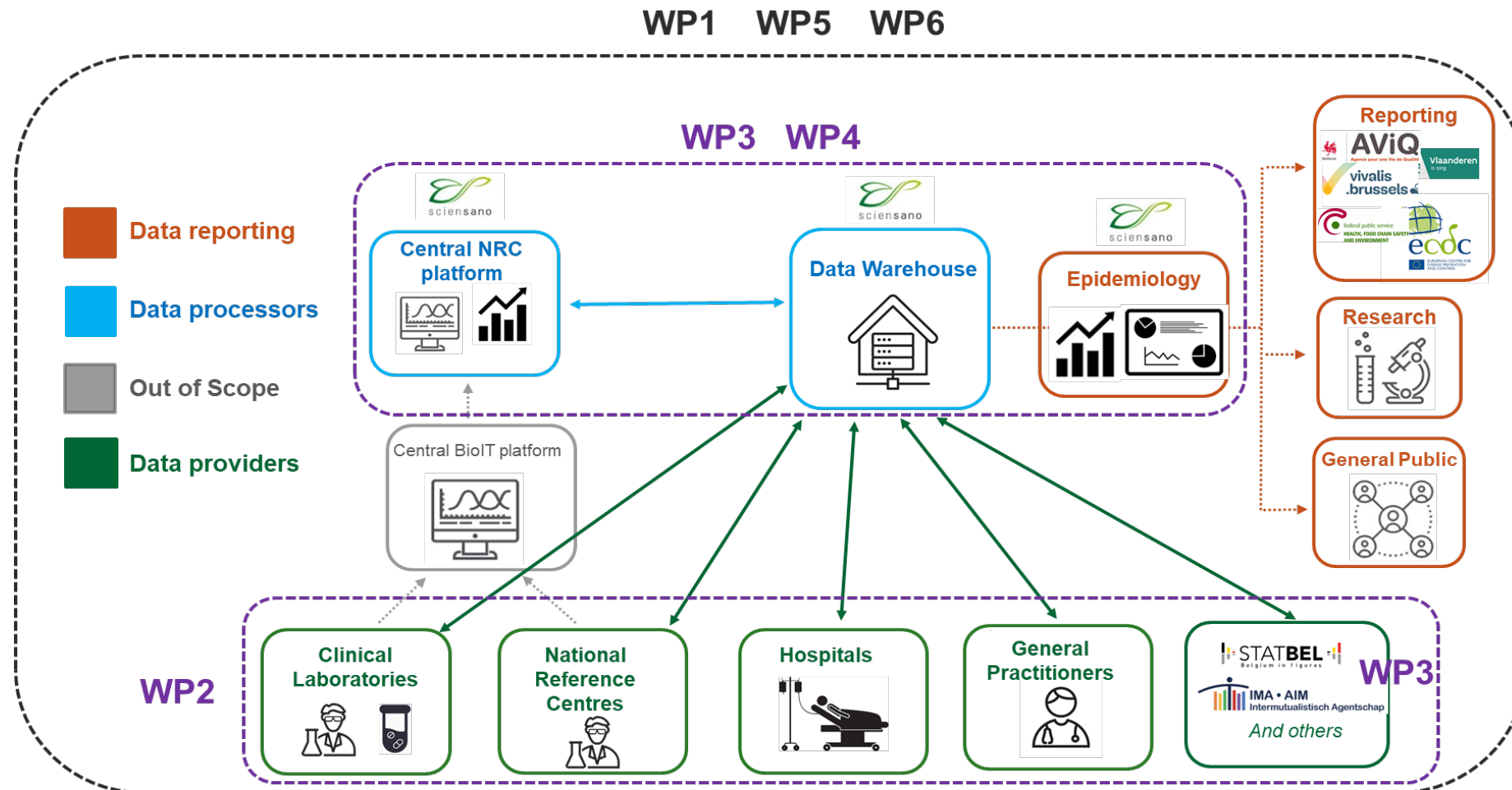
WP3: Integrated Surveillance

WP4: Signal detection & Modelling

Horizontal WPs: tasks or activities that span across multiple areas or departments of a project

Vertical WPs: refers to a specific, focused segment of work within a project that is typically confined to a particular department, discipline, or functional area

Introduction of Work Packages (WPs)



WP1: Project coordination

Work Package Lead

Heleen Masset, service Epidemiology of Infectious Diseases

Dieter Van Cauteren, service Epidemiology of Infectious Diseases



Key tasks

- Drafting project management plan, detailed action plan + Gantt chart
- Chairing and preparation of meetings (*see Communication Strategy*)
- Follow-up project implementation
- Reporting the mandatory deliverables/reports and data reporting to HaDEA/ECDC
- Team and stakeholder engagement



WP1: Communication and dissemination

Work Package Lead

Amber Van Laer, service Epidemiology of Infectious Diseases



Key tasks

- Define a comprehensive communication strategy (*see later*)
- Create and execute a communication plan
- Publicity via social media, website, flyers, information meetings, hands-on trainings/workshops
- Prepare a detailed dissemination report
- Stakeholder engagement

WP2: Digitalized surveillance

Work Package Lead

Heleen Masset, service Epidemiology of Infectious Diseases



Key tasks

- Implementation of a General Practitioners (GP) syndromic surveillance system
- Implementation of Epilabo surveillance
- Implementation of SARI surveillance
- Evaluation of surveillance representativeness and coverage

WP2: Digitalized surveillance

1. Implementation of a GP syndromic surveillance system

- Development of a real-time (daily) syndromic surveillance system using the electronic health records of general practitioners – *aggregated data*
- Implementation ongoing, validation foreseen 2025
- Outcome: operational surveillance for respiratory (ARI, ILI) syndromes and acute gastroenteritis syndromes with concrete output in reporting (e.g. weekly for respiratory) for winter season 2025-2026

2. Implementation of Epilabo 2.0 surveillance

- Development of a real-time surveillance system using the test results of clinical microbiology laboratories – *pseudonymized case based data using the national registry number*
- Build further on the outcomes of EU-HIP (conceptualisation, ISC)
- Outcome: technical roll-out of Epilabo 2.0 with onboarding laboratories and concrete use for surveillance in 2026 (*link WP3*)

WP2: Digitalized surveillance

3. Implementation of SARI surveillance

- Development of a digitalized SARI surveillance system covering test data from National Reference Centres (NRC) /clinical laboratories (CL) and epidemiological data of SARI cases – *pseudonymized case based data using the national registry number*
- Build further on the outcomes of EU-HIP and be.Prepared (conceptualisation, ISC)
- Outcome: implementation by NRC & SARI hospitals and concrete use for surveillance in 2026 (*link WP3*)

4. Evaluation of surveillance representativeness and coverage

- Follow-up and evaluate the representativeness and coverage of the GP/Epilabo/SARI surveillance systems
- 2nd phase of the project (2027-2029) once these surveillance systems implemented

WP3: Integrated surveillance

Work Package Lead

Joris Van Loenhout, service Epidemiology of Infectious Diseases



Key tasks

- Linkage of laboratory data
- Linkage of HIV data
- Cause-specific mortality data

WP3: Integrated surveillance

1. Linkage of laboratory data and beyond (e.g. socio-economic difference in vaccine uptake), in **routine** and **public health emergency** situations

- Conceptualization of data flows to link relevant data sources
- Discussions with stakeholders (e.g. Regional Health Authorities) and data providers (e.g. IMA/CoBRHA and Statbel) ongoing
- Outcome: Linkage of Epilabo data with relevant other datasets (e.g. IMA, STATBEL, vaccination) available (ISC approval and technical implementations)

2. Protocol to collect **cause-specific mortality** data using the National Registry Number (NRN)

- Anticipate collection of cause-specific mortality data from hospitals, long-term care facilities and general practitioners, as well as linkage with relevant other datasets (cfr. Linkage laboratory data)
 1. **Routine** → Monitor cause-specific mortality of specific pathogens, using a proxy;
 2. **Public Health Emergency** → Assess mortality from week to week, including risk factors

WP3: Integrated surveillance

3. Linkage of the different existing HIV surveillance data sources with HIV sequence data and health insurance data:

- Sequencing data
 - HIV reference centre + AIDS reference lab
 - Viral genome of HIV, analyse for drug resistance and identifying infection chains
 - First data collection foreseen in 2025
- IMA exchange
 - Data on HIV treatment + Pre-Exposure-Prophylaxis (PrEP) + babies of HIV-infected mothers
 - Setting up a PrEP register
 - First data collection foreseen in 2025

WP4: Automated signal detection and modelling

Work Package Lead

Ruben Brondeel, service Epidemiology of Infectious Diseases



Key tasks

- Development of automated signal detection tools
- Development of modelling activities

WP4: Automated signal detection and modelling

1. Develop automated signal detection tools

- Tools under development:
 - E-mail based signaling system
 - Dashboard to evaluate signals
- Current situation vs goal:

Current situation	Goal
Departement Zorg	All regions
13 pathogens (mandatory notifications)	Revision of list
Epilabo	Epilabo 2.0 and extra sources
Threshold by Farrington and manual correction	Revisiting threshold determinations (algorithms + corrections to data given source)
Email and dashboard	Email and dashboard

WP4: Automated signal detection and modelling

2. Develop a modelling framework for respiratory infections

- incidence estimation from sentinel data (based on data WP2)
- more accurate and timely trend estimation

3. Develop an individual-based model of the HIV epidemic

- Using the results of the data linkage (WP3)
- To simulate the transmission dynamics of HIV
- To understand the impact of the interventions and to allow predictions about future trends

4. Develop a model of tick-borne diseases

- Impact of climate and the risk of tick bites
- To improve preventive measures

WP5: Data Governance

Work Package Lead

Pierre Hubin, service Epidemiology of Infectious Diseases



Key tasks

- Pandemic preparedness data source assessment
- Data governance for infectious diseases surveillance in Belgium
- Alignment with the Belgian Health Data Agency (HDA) and EU initiatives

WP5: Data Governance

1. Pandemic preparedness data source assessment

- Identify needs and gaps within specific pandemic scenarios
- Describe existing and future mechanisms for sharing and accessing data
- Contribute to the setup of a pandemic intelligence network at the national level

2. Data governance for infectious diseases surveillance in Belgium

- Setup of a data governance board
- Map the data landscape in terms of data collection, accessibility, and legal framework

3. Alignment with the Belgian Health Data Agency (HDA) and EU initiatives

- Enrich metadata catalog (FAIRification initiative of the HDA)
- Contribute to data request processes and working groups
- Participate in the implementation of the European Health Data Space (EHDS)

WP6: Sustainability and Evaluation

Work Package Lead

Heleen Masset, service Epidemiology of Infectious Diseases

Amber Van Laer, service Epidemiology of Infectious Diseases



Key tasks

- Design Sustainability plan (working towards financial sustainability)
- Risk management
- Monitor overall progress
- Define Evaluation Criteria and create Evaluation Plan



Milestones and deliverables

Milestones BE-SURVID

Milestone name	Related work package
Kick-off meeting conclusions	1: Project coordination, communication and dissemination
Advisory Committee established	1: Project coordination, communication and dissemination
Advisory Committee closed	1: Project coordination, communication and dissemination
Closing conference	1: Project coordination, communication and dissemination
Workshop syndromic surveillance system	2: Digitalized surveillance
Coordination Epilabo surveillance system	2: Digitalized surveillance
Coordination SARI surveillance system	2: Digitalized surveillance
Operational syndromic surveillance system	2: Digitalized surveillance
Operational SARI surveillance system	2: Digitalized surveillance
Operational Epilabo surveillance system	2: Digitalized surveillance
Kick-off workshop on data linkage	3: Integrated surveillance
HIV linkage	3: Integrated surveillance
Cause-specific mortality data protocol	3: Integrated surveillance
Final workshop on data linkage	3: Integrated surveillance
Linkage of Epilabo data	3: Integrated surveillance

Milestones BE-SURVID (2)

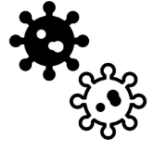
Milestone name	Related work package
Kick-off workshop on signal detection	4: Automated signal detection and modelling
Final workshop on signal detection tools	4: Automated signal detection and modelling
Modelling framework respiratory infections	4: Automated signal detection and modelling
Modelling framework respiratory infections (publication)	4: Automated signal detection and modelling
Kick-off workshop on data governance	5: Data governance
Governance board final meeting	5: Data governance
FAIR data	5: Data governance
Workshop 1 with legal/DPO stakeholders	5: Data governance
Workshop 2 with legal/DPO stakeholders	5: Data governance
Meeting advisory committee on sustainability	6: Sustainability and evaluation
Intermediate evaluation workshop	6: Sustainability and evaluation
Final evaluation workshop	6: Sustainability and evaluation

Deliverables BE-SURVID

Deliverable number	Deliverable name	Related work package	Due date
D1.1	Website/social media	WP1	M4
D1.2	Communication and dissemination plan	WP1	M4
D1.3	Work plan	WP1	M4
D1.4	Communication and dissemination report	WP1	M60
D2.1	Progress report on WP2 on the implementation of the data collections	WP2	M20
D2.2	Report on WP2 on the implementation of the data collections	WP2	M50
D3.1	Legal framework for HIV data linkage	WP3	M12
D3.2	Legal framework for Epilabo data linkage	WP3	M24
D3.3	Report on the linkage of surveillance and other relevant data sets for ID surveillance	WP3	M60
D4.1	Automated signal detection report	WP4	M36
D4.2	Scientific, peer-reviewed publication on the modeling activities	WP4	M60
D5.1	Inventory data sources for pandemic preparedness	WP5	M24
D5.2	Data governance report	WP5	M60
D6.1	Sustainability report	WP6	M60
D6.2	Evaluation report	WP6	M60
D6.3	Action-level indicators	WP6	M60

Risks and challenges

Risk management



Health Crises impacting priorities

e.g. COVID-19



Limited participation from Data Providers

e.g. GPs, CL, NRC



Lack of Legal Framework for Data Linkage



Sustainability challenges

e.g. Long-term/structural funding needed



Loss of Key Personnel



Inefficient Data Transfer

e.g. GDPR, National Regulations



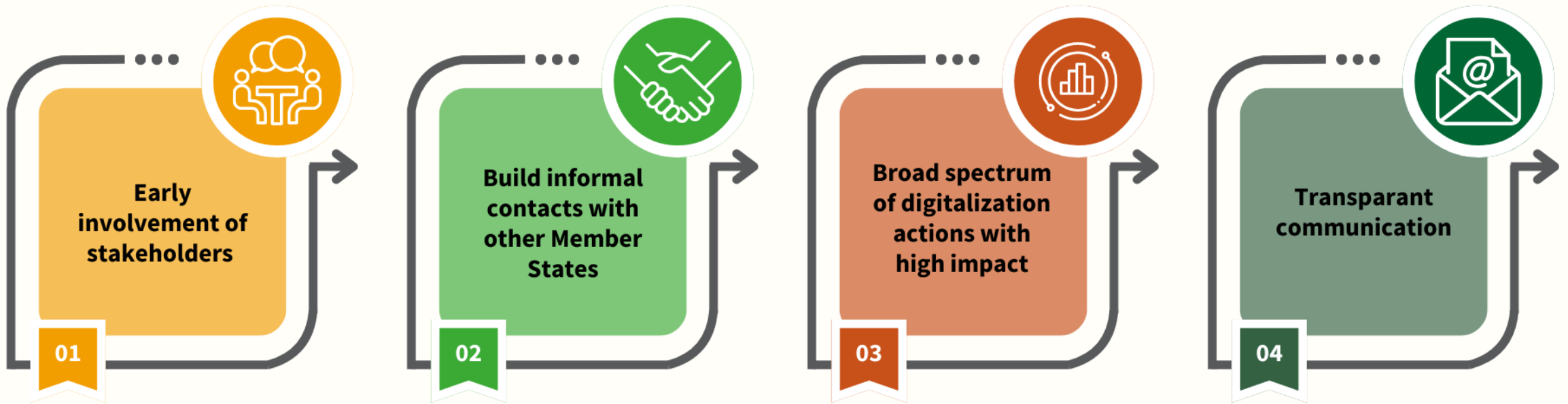
Compliance & Security Risks



Limited Data Availability for Modeling

Sustainable project engagement

Sustainability principles



Objectives of the Communication Strategy



Inform

Keep stakeholders up-to-date with regular updates



Engage

Foster active participation and feedback from all parties



Promote






Raise awareness and showcase project outcomes



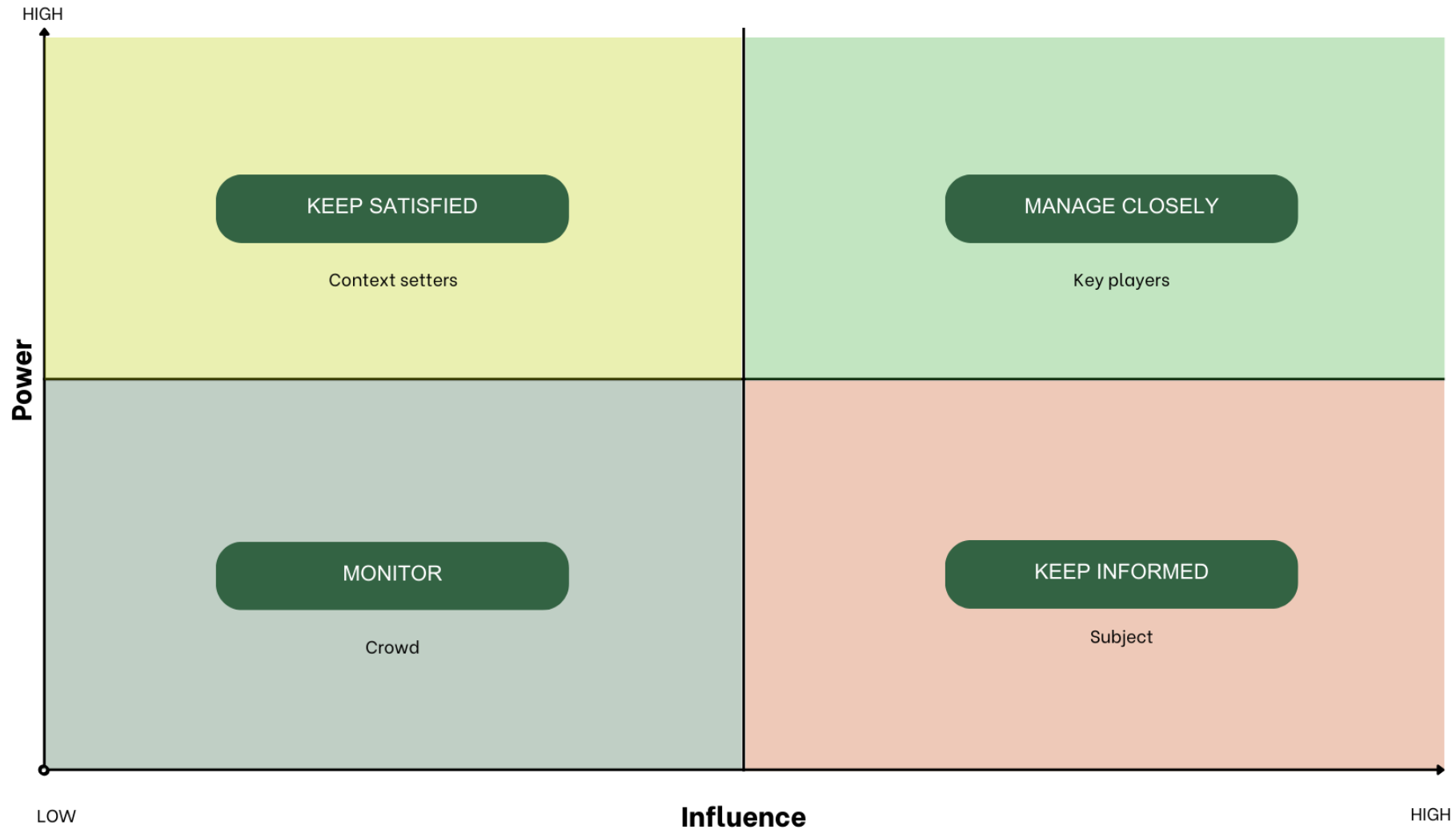
Collaborate

Facilitate clear and transparent communication across partners

Key communication channels

 Email	 Website	 Social Media	 Meetings	 Workshops
<p>Purpose: Regular updates sent directly to stakeholders</p>	<p>Purpose: Central hub for project information and resources</p>	<p>Purpose: Public-facing updates and engagement</p>	<p>Purpose: Routine check-ins, decision-making and quick progress updates</p>	<p>Purpose: Interactive sessions focused on demonstrating a (new) concept to stakeholders</p>
<p>Frequency: As frequent as needed</p>	<p>Frequency: As needed</p>	<p>Frequency: When milestones occur</p>	<p>Frequency: Dependent on the type of stakeholders involved it can be bi-weekly, monthly or bi-annual</p>	<p>Frequency: At key stages within the project</p>

Stakeholder analysis



Planned activities



Webpage BE-SURVID will be available soon



Posts will be scheduled on the social media accounts of Sciensano (LinkedIn & BlueSky Social)

#BESURVID



Information meetings with internal and external stakeholders

cfr. sustainability principles and communication strategy

Closing remarks

The digitalization of infectious disease surveillance is not just a technological advancement but a transformative opportunity to improve public health outcomes, respond faster to emerging threats, and ultimately save lives.

In collaboration with Sciensano services:

Epidemiology of Infectious Diseases, Healthdata.be, Health Service Research

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