Guidelines for implementing syndromic surveillance Proposal for a syndromic surveillance strategy in Europe

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Context – Public health surveillance in Europe

Public-health decision makers face to a changing and complex environment

Emerging health situations and unprecedented level risk

Increase of cross-border mobility accelerating spread of diseases

Need more frequent requests for (near) real-time information and risk assessment

SyS can support cross-border surveillance

2005: WHO's International health regulations

require MS move towards an integrated, all-hazard approach covering a wide range of known and unknown communicable and non-communicable health threats

MS need: « to detect events involving disease or death above expected levels »

« to report all available essential information immediately »

« to assess all reports of urgent events within 48 hours »

SyS can help meet the new public-health surveillance requirements

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Context: Organisations of Syndromic surveillance in MS

1. Different organisations in MS

2. Wide diversity of data sources

ED, ambulance dispatches,

Primary care,

Telephone helpline calls
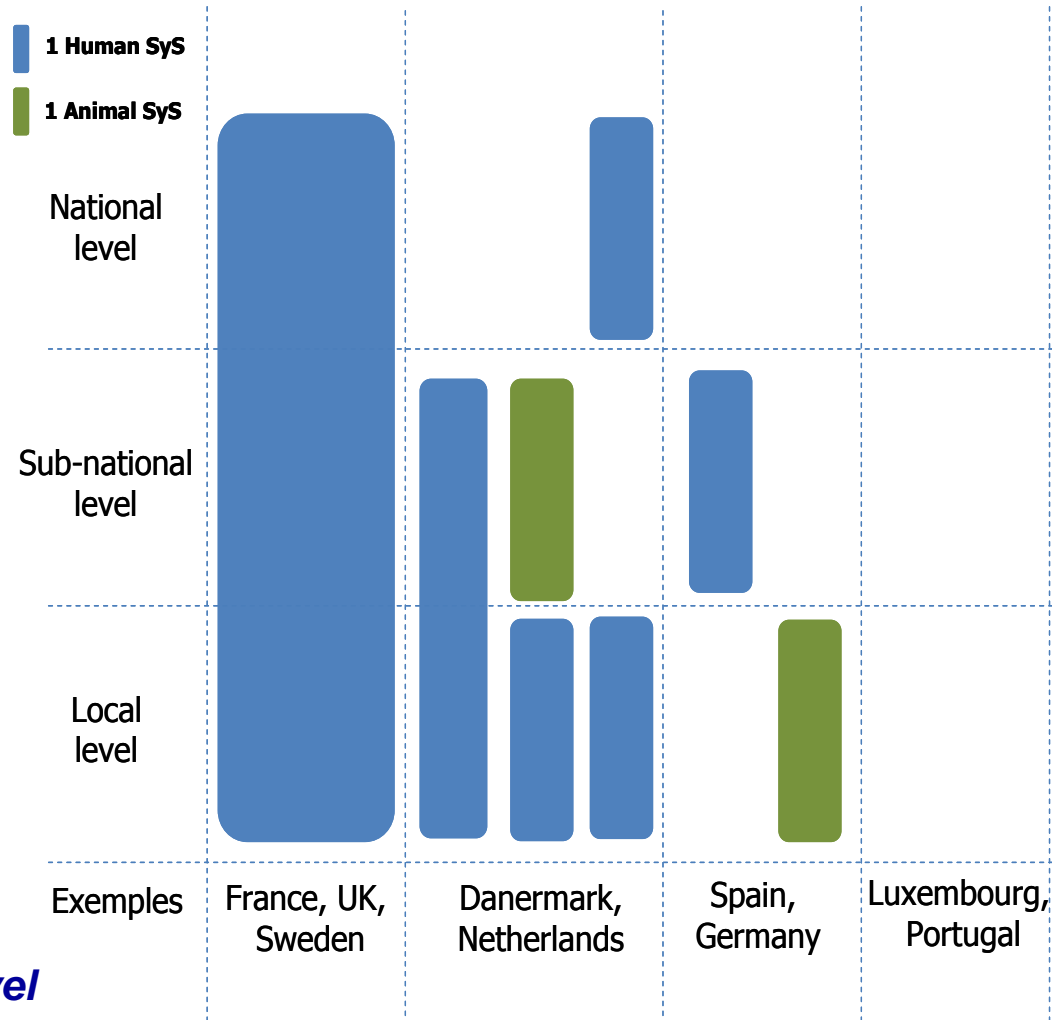
Web requests, …

3. Surveillance objectives determined

by the national priorities

→ *A challenge for harmonisation and interpretation of health situations related to cross-border events at EU level*

Actions of the 3-year project Triple-S

Two actions to increase the European capacity to monitor the health burden of the population:

1. **To produce guidelines for designing, implementing and improving SyS system <u>in Member state</u>**

3. **To propose a European strategy for syndromic surveillance towards comparability of findings from MS <u>at a European level</u>**

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1. Guidelines for implementing syndromic surveillance (SyS) systems in member state (MS)

Who are these guidelines for?

Local / regional / national professionals who do public-health <u>human and animal</u> surveillance

Objectives:

- To support the design and to provide *practical* recommendations at each step of the set-up, use and assessment of a SyS system in a <u>country (or region)</u>,

- Illustrated with various examples of initiatives from European countries

- Include minimum requirements for developing SyS systems and reporting surveillance findings

Content of the Guidelines:

• Objectives and reasons for implementing a SyS system in a country or region

• How to collect data ? Which data sources? How to manage the data?

• How to analyse data ?

• How to communicate the results?

• How to evaluate the SyS system?

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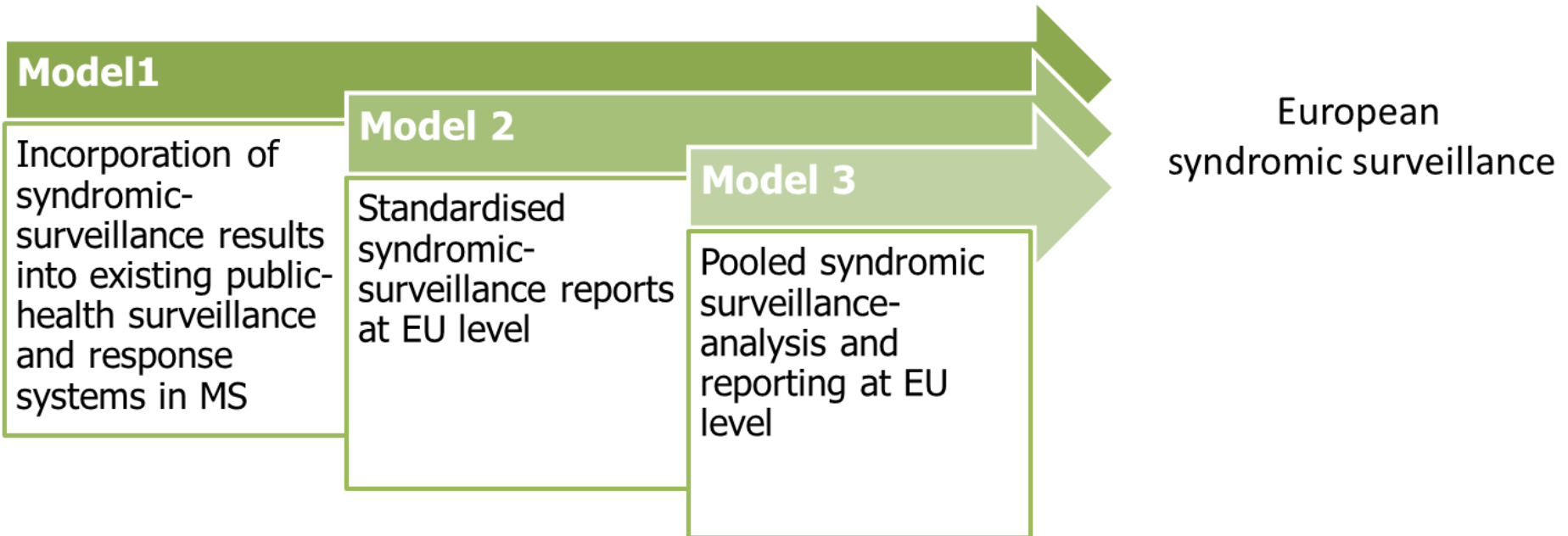Syndromic Surveillance Systems in Europe

2. Proposal of a European strategy for SyS

– **Target audiences:** European, Local/national public-health authorities and public-health professionals (both human and veterinary)

– **Objective:** propose a strategy for enabling comparability <u>at the European level</u> of reporting from national/regional SyS systems

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Three progressive models for a European Syndromic surveillance

Model1

Incorporation of syndromic-surveillance results into existing public-health surveillance and response systems in MS

Model 2

Standardised syndromic-surveillance reports at EU level

Model 3

Pooled syndromic surveillance-analysis and reporting at EU level

European syndromic surveillance

Parallel implementation of the three models is proposed, depending on the objective of surveillance and on data comparability.

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A necessary « Syndromic coordination group »

Aim: to coordinate actions and to act as a focal point for both Member States and European authorities

Composition: SyS experts in Human and Animal health

- an advisory group

- an operational group: centralisation and interpretation of findings from MS

Main tasks depending on the models:

- advice member states and EU institutions on using and improving syndromic surveillance according to the Triple-S guidelines for implementing SyS

- Promotion of comparability of findings by providing central interpretation and dissemination of member states' SyS outputs

- analysis centrally collected data from MS on certain specific syndromes for comparable and timely cross-border surveillance

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Role and actions of SyS coordination group

Model 1:

- Support setup and improvement of SyS systems in MS,

- Provide advice on SyS to EU institutions

> → *No data or report on SyS is compiled at the EU level*

Model 2:

- Develop standards for reporting findings from MS

- Centralise and compile the reports provided by MS to fed into existing EU-level information systems

> → *No data but findings sent to the EU level*

Model 3:

- Develop standards for centralising standardised data from MS

- Analyse, interpret and report standardised SyS results from MS at the EU level

> → *Model used by EuroMomo for surveillance of mortality*

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Synergies with the other players

Member states

- Operate their own SyS systems: data collection, analysis and interpretation

- Report findings and provide local context for interpretation

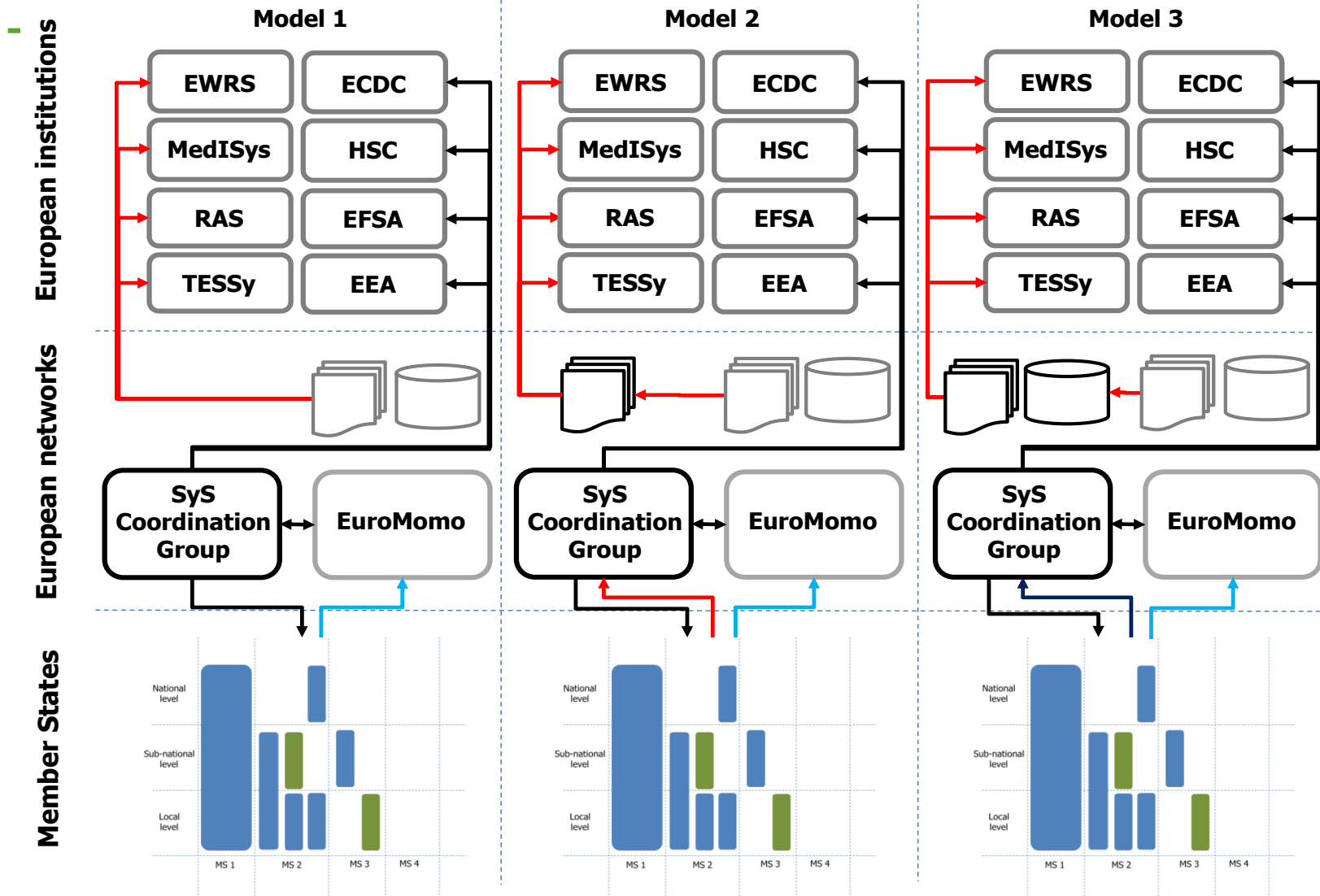**European Union Institutions:**

- Support incorporation of SyS-based findings into existing EU level information systems

- Enable direct connection with EU decision-makers on surveillance and alerts

- Support knowledge transfer on SyS

- Support the setting-up and sustainability of the SyS coordination group

European public-health surveillance networks and health-information systems

Integrate SyS information from MS and SyS coordination group into existing health information systems

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Which integration in the landscape of European public-health surveillance?

	Model 1	Model 2	Model 3

European institutions: EWRS, ECDC, MedISys, HSC, RAS, EFSA, TESSy, EEA

European networks: SyS Coordination Group, EuroMomo

Member States: National level, Sub-national level, Local level — MS 1, MS 2, MS 3, MS 4

Legend:
- → Future communication
- → Future information submission
- → Existing data submission
- → Future data submission
- Existing database
- Future database
- Existing documentation
- Future documentation
- Future network
- Existing network

Conclusion

- **Guidelines: a tool to help MS**
    - to implement their own SyS
    - Meet the requirements of the WHO's Internal health regulations
- **A proposal for a European syndromic surveillance strategy will aim at improving surveillance to reinforce public health action across Europe**
- **Based on a collaborative approach to achieve the best possible integration and cooperation with relevant stakeholders at the EU level**
- **An proposal to make the strategy as actionable, useful and cost-effective as possible**

→ *Role, shape and functioning of a SyS coordination group need to be defined.*

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