



## Joint Meeting for National Focal Points for Preparedness and Response & National Focal Points for Threat Detection, EWRS and IHR

### Agenda

**22 April 2021, Thursday, 13.00-14.30**

- 13:00-13:05**      **Welcome by chair** 5.1.2e
- 13:05-13:35**      **Session 1:** PANDEM-2, EU-funded project on pandemic preparedness and response -  
5.1.2e *NUIG*, 5.1.2e – *EpiConcept*, and 5.1.2e *RKI*
- 13:35-14:00**      **Session 2:** Behavioural insights and the COVID-19 pandemic
- Behavioural Insights research for the control of COVID-19 in the EU - 5.1.2e  
5.1.2e, *ECDC*
  - Implementing behavioural insights work to inform the COVID-19 response –  
and health security work more generally: the Finnish experience – 5.1.2e  
5.1.2e *THL*
- 14:00-14:20**      **Session 3:** Long-term effects of COVID-19 – maintaining a living approach to  
guidance.  
5.1.2e *National Institute for Health and Care Excellence*
- 14:20- 14:30**      **Discussion**

## Session 1:

### PANDEM-2: EU-funded project on pandemic preparedness and response



#### Overview:

PANDEM-2 is an EU funded project that started in February 2021. It is going to develop IT solutions to support EU-wide pandemic preparedness and response. The goal is to enable EU countries to better prepare for future pandemics and improve response when pandemics occur through innovations in technology, training and cross-border collaboration. It is an ambitious two year project, which is a follow on of the 18 month PANDEM-1 project. It has 19 partners from 13 EU countries. The public health agencies are the main users and core part of the consortium, including: the Robert Koch Institute (RKI) in Germany; the Public Health Agency of Sweden (FoHM); the National Institute for Public Health and the Environment (RIVM) in the Netherlands; the National Institute of Health (INSA) in Portugal; the National Institute of Public Health (NIPH) in Romania; the Finnish Institute for Health and Welfare (THL). First responders from Austria, Italy and Portugal are involved. The budget is close to €10M (€9.75M) in the Disaster Resilient Societies thematic area of the H2020 Security work programme. The project provides an opportunity to use security research funding to learn from the security and crisis management domains and apply to the public health challenge of pandemic response.

#### Core objectives:

- Collate pandemic-related data from multiple sources (global level, WHO, EU, national, regional, local, online) into a coherent pandemic-management database.
- Provide single dashboard using state of the art visual analytics tool where data can be queried, analysed and interpreted to support decision-making by planners and policy makers.
- Develop new modelling tools to better manage pandemic-related resources, e.g. hospital beds, ventilators, PPE and vaccines, nationally and to facilitate cross border response. The COVID-19 pandemic has led to greater investment in modelling capacity in many EU member states, and ECDC is also delivering valuable modelling outputs. The proposal was put together in peace time, before the pandemic but many of the issues identified turned out to be very relevant.
- Develop communication tools and strategies to support real time exchange of information, opinion and advice between public health agencies, health care providers, first responders and communities affected by a pandemic. The changing environment is a big challenge to communications (guidance on vaccines, epidemiology, recommendations are all changing on a regular basis).
- Develop a training and simulation component to be used by public health agencies with first responders and hospitals. This is already being done by ECDC, and the plan is to build on existing initiatives, incorporating lessons from the defence and crisis management sectors on how they organize their table top exercises to bring preparedness training to another level – with regular (6 month) table top exercises in peace time to prepare for a next pandemic.
- Deliver long term value in the areas of pandemic preparedness and response beyond the lifetime of the project.

2/10

The Project is currently incorporating the lessons learned during the current COVID-19 pandemic. In the area of communications 14 months of material is now available – how is trust gained, how it is maintained, how it is lost and recovered.

PANDEM-2 is based on the gaps and research priorities identified by the phase-I PANDEM project. WHO/EURO was a partner on the project and ECDC provided valuable input through membership of the Advisory Board. ECDC and WHO as members of the PANDEM-2 Advisory Board will help ensure that this investment of almost 10 M euro builds on existing solutions. PANDEM-2 will also build upon the key insights and lessons learned in several previous and current EU-funded projects (iMOVE, led by EpiConcept), EuroMOMO (monitoring mortality), SHARP (THL-coordinated), Healthy Gateways, PandHub, MOOD, NO FEAR, VEO and PHIRI).

#### Project structure

**Surveillance:** collecting data from different sources, and loading them into a database. The key issue here is the indicators needed to monitor the pandemic.

**Situational awareness:** this is a term used by the military emphasising the need to have accurate up-to-date information on the current situation. Building the database and the dashboard that interacts with it are the key components.

**Pandemic planning:** providing tools for modelling, simulation, prediction, workforce capability, biosecurity, resilience.

**Communications:** developing guidelines and resources for pandemic communications (also using lessons from the aviation sector).

**Network and demonstrations:** building network and demonstrating the IT tools in table top exercises.

SURVEILLANCE has the following objectives:

- Identification, description, selection of surveillance systems and analytic tools adapted to monitor pandemics.
- Strengthening participatory surveillance systems (adaptation of influenza net Platform to monitor pandemic among individuals not seeking medical assistance).
- Development of novel text mining to support community/participatory surveillance (developing of software for the analysis of unstructured text data and sentimental and emotional analysis from social media for signals detection and to identify spread of disease; sentimental and emotional analysis to monitor public health measures).
- Identification and mapping of laboratory data including Next Generation Sequencing data.
- Integration of all data sources into a database and adaptation/development of analytic tools to generate indicators for pandemics management.

The software architecture of PANDEM-2 is flexible. It includes a Push and Pull mode. The push mode is needed because a good deal of the information will come from the end users (public health agencies, NGOs, hospitals, etc.), while the pull mode is calling for external sources (mobility, event platforms, etc.). The system includes, among others: data sources, data validation, data management (with data cleaning, standardization, indicators computation), and data storage (where historical data is compiled) and data outputs (contact tracing, time series, etc...)

We have agreed to divide the data sources mainly in two groups, traditional and non-traditional. The traditional ones are those official sources such as public health agencies or data collected in a more standardize way, e.g., TESSY or MOMO. Actually, big part of the data will come from end users (many of them national PH agencies) and will be uploaded in the system in a semi-automatic way. We will use tools and databases mostly developed by our partners (who've been managing the current pandemic) and using the lessons learned to synthesize and generate useful data and tools for

3/10

pandemic-managers. The non-traditional sources include platforms for human and animal surveillance, such as PROMED or EMPRES-I, and social media data. Besides, other data sources providing different kind of data have been identify: laboratory data, different test including NGS, uploaded by end-users or using data repositories, weather, disasters (Reliefweb) and climate, mobility (Eurostat), system capacity (e.g. staff or material resources such ICU beds or PPE), data related with countermeasures and communications, and data from repositories which compile information related with research, training and policies.

The prioritized disease is Covid-19 which will be used as a proof of concept along with influenza, but there are also discussions in the consortium about which other diseases should be included in PANDEM-2 database such could be the case of those diseases listed on the WHO R&D Blueprint or by our colleagues from the H2020 MOOD project.

One of our main goals is to better serve and generate useful databases and tools for public health agencies and international organizations, including ECDC and WHO, and pandemic-managers allowing to enhance surveillance, preparedness and response across Europe. For this purpose, we are strengthening collaborations and synergies at national and international level. With ECDC, we are in contacts with the epidemic intelligence team, the surveillance section, and the emergency preparedness and response section. We are also in contact with EIOS-WHO initiative to joint efforts. Besides, we are collaborating with other H2020 initiatives such PHIRI and the MOOD project. Currently, many health data mining, standardization and sharing initiatives have been accelerated and there is an urgent need for all the actors involved to strengthen collaborations and joint efforts. From PANDEM-2 WP2, we intend to contribute generating pandemic-related metadata and support building a federated infrastructure for data sharing.

SITUATIONAL AWARENESS comprises a database and dashboard – a decision support tool for pandemic preparedness, response and recovery with a focus on public health agencies in member states as the core users. The plan is to provide a tool for member states to complement existing IT tools at national level and provide an EU wide perspective to support cross border collaboration on responding to future pandemics. The tool has flexible architecture and focuses on situational awareness (surveillance, contact tracing), scenarios modelling (resource planning, surge capacity), public health interventions and medical countermeasures. The dashboard will include data related to pandemic events, with name of the pathogen, date of first case, projected spread, resource plan etc., using state of the art visual analytics.

PANDEMIC PLANNING includes 3 key areas: developing an integrated library of disease transmission prediction models with spatial and age cohort dimensions to model the progression of an epidemic or pandemic in different locations and under different conditions. This will be used by countries to see where the pandemic is going; Resource Planning System (simulation tool that can be used for capacity analysis and identification of resource coverage deficiencies in the context of a pandemic); Toolkit with guidelines, protocols and resources on biosafety and biosecurity for first responders, clinical staff and laboratory personnel particularly during cross-border responses will also be developed.

COMMUNICATIONS is critical - getting accurate real time information and advice to the right people at the right time during a pandemic is a challenge. Skilled communication is essential to maintain public support and trust especially when policy changes are necessary. Current practice for measuring public acceptance of control measures relies on surveys of representative samples of the population. PANDEM-2 is developing communication tools and strategies to support real time exchange of information, opinion and advice between public health agencies, health care providers, first responders and communities affected by a pandemic, while adapting solutions from other

sectors (crisis management, aviation), developing novel concepts and technologies for two-way communications with the public and developing training material for stakeholders. With the developments in IT, social media and use of smart phones, there is a real opportunity to assess the use case of COVID-19 for pandemic communications by analysing social media and other data to build and maintain public support in future pandemics..

TRAINING AND SIMULATION is led by the RKI who joined the consortium in 2019 during the proposal development phase. This was prior to the COVID-19 pandemic. RKI did not have a risk assessment unit at the time, but it was decided that involvement in this project would be very useful. The pandemic has changed the reality and now all are focused on solutions for pandemic response. In PANDEM-2, RKI is responsible for providing the end users perspective, test what has been developed, conduct simulations and provide feedback. Input from NFPs for preparedness and response to this process will be very valuable and RKI will keep the network informed of developments with the project.

#### **Q&A:**

**Q:** How does collaboration with the joint action Sharp (TLH, Finland) develop?

**A:** We are working very closely with the THL team coordinating Sharp, building on the extensive work done already in preparedness and response, and through Sharp we are also working with Healthy Gateways. These are very valuable connections.

**Q:** Do you have any concrete plans for linking with this network as the project unfolds?

**A:** The network is very important. The work on the database and dashboard must reflect the end users' needs. We have 6 public health agencies on the consortium and all agencies are in the phase of learning from the response. Pandem-2 is incorporating the lessons learnt in Europe from the COVID-19 response. Input to the evolution of the solutions is important. It is about networking and public health agencies working together and learning. There is visibility and investment in IT systems for pandemic management we did not have years ago. This takes the available information technology to another level. There will be a demonstration workshop led by RFI to test the IT tools developed at month 18. We want to make sure that in two years' time our work will be responding to a pandemic easier for member states. It is about public health agencies working together across borders. It is about not just going back to normal but ensuring the visibility and investment in pandemic management continues to make Europe a safer place. As public health professionals we need to bring information and data management tools to a new level to strengthen capacity for pandemic preparedness and response at national and EU levels.

## **Session 2: Behavioural Insights and the COVID-19 pandemic**

### **Behavioural insights research for the control of COVID-19 in the EU**

5.1.2a

, ECDC

Behavioural Insights (BI) research is needed to help us understand behavioural choices, barriers and drivers within a population. It is highly relevant for addressing pandemic fatigue and for promoting vaccination. Behaviour and attitudes are dynamic. What we experience now is not the same to what we experienced in November 2020. And similarly, what is happening now in Sweden may not be the same to what is happening in Poland or Italy. Each country has to conduct its own work and it is specific to each specific setting.

BI research has played a major role in the past – in the HIV/AIDS pandemic, SARS (2002–2003), Ebola (2014–2016) in West Africa, Zika (2016–17). In all these cases behaviour was recognized to

5/10

be a very important part of it. But at least in the beginning of the COVID-19 pandemic BI was not fully integrated into the preparedness and response systems in many countries.

A project was needed to answer in a very rapid way what is the status of BI in the EU/EEA during the COVID-19 pandemic. In October 2020 an invitation was sent to all 31 EU/EEA countries to nominate one person as a contact for BI on a national level. 10 countries responded to the call for interviews with national level experts, after several reminders (Cyprus, Denmark, Finland, France, Germany, the Netherlands, Norway, Slovenia, Spain and Sweden). People were obviously very busy, but also some countries probably just did not have such kind of experts. The project sought to find out how BI findings are integrated into risk communication activities and decision-making processes. Most of the research was quantitative, with a focus on nationally representative samples of the general population. Four countries had used WHO-EURO's COSMO tool, developed in Germany – a standardised survey instrument, covering 21 broad topics. However, most countries have conducted serial cross-sectional surveys, allowing for comparisons over time. The prime focus was what people were thinking, accepting and complying with non-pharmaceutical interventions (NPIs).

### Challenges

In terms of challenges, there is a spectrum in the ease with which BI findings contribute to the decision-making process. In some cases there was a good connection with decision makers, in others this is not the case. It would be fair to say that BI is not particularly integrated into the national COVID-19 management teams in many countries. This reflects the hierarchy of social and behavioural sciences in certain countries, as compared to, for example, biomedical expertise.

In some countries, quite a lot of money was given to universities to do research on COVID-19 related issues, but coordination was not always good and the findings were not always well linked to decision-making processes. This has not been the most efficient way of using the money. Research has been done but the findings have not been utilised.

In the beginning of the pandemic in many countries, there was a clear sense that the links were weak, the structures were not good, but over the course of the pandemic, things have improved. Had this happened 10 years ago we would have been in a much weaker position than the one we are in today. Things are, in general, improving and so is the capacity of these structures.

With respect to the impact of BI on communications, what was found was that a lot of the earlier communications were quite didactic and instructive. People got tired of being told what to do. In some countries research showed that more engagement with people's emotions was needed. An example from one country was also given about the use of theories of BI and their different components so as to increase the uptake of testing, which contributed to a 60% increase in the uptake of COVID-19 testing. There is a big potential if this is done well.

BI rarely leads to development of a specific policy or strategy decision, but:

- BI can provide a nuanced understanding of a given situation and thereby inform the development of implementation plans
- BI has acted as an evaluation tool for policies (rather than as formative research intended to shape the response)
- There is a good foundation for further enhancing of national capacities for BI research, and for integrating them more fully into wider preparedness and response structures
- Responses from different regions of the EU/EEA were not evenly spread. Eastern and Central Europe are much less represented than other parts of the EU/EEA. Most of the respondents came from Western, Northern and part of Southern Europe. This suggests the capacity in the former countries may be not so strong.

6/10

Future work should focus on the countries not responding to the survey. Immediate steps can be taken to facilitate networking opportunities of BI experts in Member States via webinars; map the BI research being conducted in universities and in other social science research institutions across the EU; and synthesise published data on aspects of behaviour that may have direct policy and programmatic value.

#### LINKS:

Behavioural Insights research to support the response to COVID-19: a survey of implementation in the EU/EEA

<https://www.ecdc.europa.eu/en/publications-data/behavioural-insights-research-support-response-covid-19>

WHO tool for behavioural insights on COVID-19

<https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/publications-and-technical-guidance/risk-communication-and-community-engagement/who-tool-for-behavioural-insights-on-covid-19>

### Implementing behavioural insights work to inform the COVID-19 response and health security work more generally: the Finnish experience

5.1.2e

THL

#### Background

THL started work 5 years ago, with focus on behavioural, cultural and communications research in the frame of different projects. WE have been involved in different projects. Vaccine hesitancy / acceptance is a current focus, along with other health security issues.

The project team includes various experts – behavioural scientists, public health experts and researchers, communication experts, cultural anthropologists, EPIET fellows, etc. All the activities related to BI have been done to support the communications aspects but also the work on the national immunisation programme and health security work in general. In retrospective – how things evolved in Finland since March 2020 when the first cases were reported and how we reacted. The first survey was launched in the beginning of April 2020, and then other followed in late April and early May. The purpose has been to monitor people’s perceptions, attitudes, fears, behaviour and compliance with recommendations.

The National serial cross-sectional study included a Survey with more than 100 questions or statements and covered around 1,000 respondents/round representing the Finnish population. The data was gathered in waves: three in April and May 2020, then in November-December 2020 and the last one now – just before this webinar fresh data was received. The Results were shared with a broad range of actors – inside different government bodies and organisations, and also outside – with as many actors as interested. It is based on a survey tool developed by WHO Europe in collaboration with the University of Erfurt in Germany and the people involved are the same who have been working for many years on vaccines acceptance so it was a swift transfer from vaccine acceptance mode to pandemic mode.

This survey provides knowledge: how people behave during a pandemic; how people comply with recommendations and restrictions; what the risk perceptions are; how much the Government and different actors are trusted; what people worry about and fear; how often and what kind of

7/10

information sources are used; what kind of information people would like to have; the level of knowledge; vaccine acceptance; trust in authorities.

There are some initial results. For example, as regards perceived susceptibility and likelihood of infection, they have dropped quite a lot, even more during this winter and spring. As regards avoiding social contacts it is seen that people do comply with the recommendations to avoid social contacts. Opinions on different statements related to the pandemic have also been checked. It is interesting from a strategy and policy perspective to see how opinions change over time and what could have possibly affected the changes. This is extremely useful for the communications component. It is also seen that a high percentage (more than 40 %) of people are looking for COVID-19 information on a daily basis. Information on vaccine progress seems to be of highest interest, but also information regarding treatment, protection, symptoms, taking care of others, etc.

An interesting question is on vaccine acceptance and if one is ready to take the vaccine. We did a vaccine barometer. The question was formulated *“If a vaccine becomes available and it is recommended for me, would I get it?”* The number of respondents with the most positive answer has almost doubled during the last survey. There is a difference according to age group. The older people are much more ready to take the vaccine, compared to the younger ones, but even in the youngest group more than half are willing to take the vaccine if offered. With respect to the motivation, even though there was a lot of talk about Astra Zeneka side effects, this does not seem to have had a big effect on people’s decision whether to have the vaccine or not.

There are also other studies. An article is to be published in Preprint, and we are also working on risk perceptions, and the stigma of being infected, compliance with infection prevention, and understanding vaccine hesitancy in long term care facilities.

Lessons have been learned: BI provided the possibility to monitor perceptions, attitudes, worries, behaviour; provided support for developing and targeting measures, policies, strategies and communication activities. Results have been considered relevant by many; numerous consultations have been asked for and given to government bodies, authorities + affiliated partners. In order to be able to react rapidly and to do meaningful and good quality work in a rapidly evolving situation, BI activities need resources, and preferably build upon existing structures and activities. More competence and ability to digest behavioural insights is needed

The big question is:

*“How much is the development of an epidemic dependant of and related to human behaviour?  
versus ‘How much do we have and use research-based knowledge about behaviour in outbreak  
control/preparedness/response work?’”*

A lot of research is done but what happens is also based on how people behave and how we use the knowledge on human behaviour.

#### **Links:**

<https://www.medrxiv.org/content/10.1101/2020.10.11.20210724v1>

### **Session 3: Long-term effects of COVID-19 – Maintaining a living approach to guidance**

5.1.2e

**National Institute for Health and Care Excellence (NICE)**

Guideline development usually takes 12-24 months. The process on COVID-19 Guideline development started already in March 2020 and rapidly demand grew. This necessitated a much more rapid process and rather than developing these guidelines for years the timescale had to be

8/10

compressed to days and weeks. The pandemic temporarily disrupted our business as usual and work processes, but this was not fully negative as opportunities emerged to learn some lessons from the pandemic context. This has also prompted the development of the new strategy (launched this week) that is building on our learning from COVID-19 with focussed, rapid and living guidelines.

There have been around 20-25 COVID-19 guidelines, and the work at the moment is to consolidate those into a broad Guideline on managing COVID-19 and also a guideline on managing the long terms effects of COVID-19.

In the new Strategy Pillar Two is particularly important. It reflects our ambition to develop living COVID-19 Guideline recommendations.

The development process follows the usual stages of scope definition, consultations, quality assurance, but certain approaches were adapted. As regards the long term effects of COVID-19 we started with a great deal of uncertainty. Although one does not normally start with a case definition, this definition was developed and consulted upon, and then codes were developed to be used in the health care system in the UK in order to gather data on case definition and review it on going.

Now we are starting to get data back from the coding. Some modifications have had to be made to the usual processes. We had to ask what advice do people need in these conditions. There was a lot of uncertainty. An expert panel was set of people with lived experience and this was really important given the lack of evidence. Much of the evidence came from people with lived experience and their expertise, and they were involved in the Expert Panel that developed the guideline and recommendations.

Real world data from applications was also used not supplement published evidence, but there was still very little data from the healthcare system. We used application data to provide some experiential evidence. To gain feedback on the draft guidance, targeted peer review was used to ensure we could produce guidance promptly for the system. Key organisations were targeted and steps taken to ensure the quality of the product.

As regards the scope of the guideline, this was a collaborative effort with the Royal College of General Practitioners in England and colleagues from SIGN in Scotland.

The case definition was developed which included three aspects, to delineate particular stages in order to inform treatment and management.

- Acute COVID-19 infection (up to 4 weeks)
- On-going symptomatic COVID-19 (from 4 weeks up to 12 weeks)
- Post COVID-19 syndrome (Long COVID) (beyond 12 weeks)

We also acknowledged the term long COVID, recognizing its use as a helpful umbrella term. On the population aspect, people with and without positive tests were included, as experiential data and panel members' experience indicated that people felt their symptoms and signs had been dismissed. This is a good example of the importance of including people with lived experience on the panel.

The areas of the Guideline include:

- Identification
- Assessment
- Investigations and referral
- Planning care
- Management
- Follow-up and monitoring
- Sharing information and continuity of care
- Service organisation

It should be stressed there was little evidence when the development of the Guideline started. Much of what was used was published patient experience, some intervention evidence, data from social media and applications and expertise of both people with lived experience and clinicians who had started to treat people.

The advisory panel produced research recommendations (Risk factors, Interventions, Prevalence) and these were used to inform funding calls for research projects. The NIHR have since issued a couple of calls for research around Long COVID, informed by the gaps and evidence that were found.

#### Impact

The Guideline has informed the development of NHSE commissioning guidance. This was one of the first pieces of guidance on long-term effects of COVID-19 globally. NICE also shared its evidence reviews with other guideline producers like WHO and Australia. A global evidence sharing system is now emerging. SNOMED codes in primary care systems in England were developed and there are already 20 000 uses of the codes already. There was extensive coverage by mainstream media, peer reviews, papers, and life style magazines.

A model guideline with living approaches is now present. It includes active surveillance, weekly search and sift of the evidence, with associated codes to pull out the evidence and review different areas, to identify 'hot topics'. We then look on the impact of the evidence on the recommendations and determine if a change or update is needed.

When the development of the Guideline started there was a lot of uncertainty. There were gaps that were not identified. Now there is an Expert panel and rapid update is already possible. One of the gaps is therapeutics. There is still little evidence. NICE hosts a mechanism – Research to access pathway for investigational drugs for COVID-19 (RAPID-C19). This is a multi-agency initiative to enable safe and timely patient access to medicines showing evidence of benefit and this includes treating symptomatic COVID-19 patients and therapeutics for long term effects. What is promising is rapidly targeted and included in the system.

#### Next steps

Weekly surveillance continues; there is a threshold for updating the guidelines – not just changing the recommendations but also strengthening the evidence and recommendations; addressing gaps – especially young people and paediatric inflammatory multisystem syndrome (PIMS). We are also a partner in a bid looking at the case definition and the coding system and how people are using the guidance and what effect it has. The international collaboration round developing evidence based Guidance in the conditions where uncertainty continues is important.

#### LINK to the Guidance:

<https://www.nice.org.uk/guidance/ng188/resources/covid19-rapid-guideline-managing-the-longterm-effects-of-covid19-pdf-66142028400325>

#### Q&A:

**Q:** As the evidence accumulates this may lead to changes in the definition. Since it was set up in an early stage how will you handle this?

**A:** There is a living approach to the Guidance. For the case definition a period of time should pass to get enough data out of the coding to do work systematically before the case definition is reviewed. We are actually starting such work in May, including a more formal piece of work to look at the case definition separately. But it was known in advance this approach had to be taken, when there was so much uncertainty. So, this can change everything and trigger new questions, but this is the right approach.

**Q:** As regards the monitoring of the long term adverse effects of the vaccines, are you planning to set this up as well?

**A:** It does not fall into the scope of the Guideline, as the Guideline is on treatment of acute infection rather than vaccination but our colleagues from the Joint Committee for Vaccinations and Infections are conducting such work.