

# PHIRI

Population Health Information  
Research Infrastructure

# Foresight capacity building for EU Member States

PHIRI WP9, v April 12th 2021



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## I. Introduction on PHIRI and Foresight capacity

This Introduction course to Foresight Studies is part of the PHIRI project. PHIRI (Population Health Information Research Infrastructure) is the implementation of the research infrastructure on population health information to facilitate and generate the best available evidence for research on health and well-being of populations as impacted by COVID-19. PHIRI will allow for better coordinated European efforts across national and European stakeholders to generate the best COVID-19 population health knowledge. In doing so, PHIRI will lay the foundation to build a Distributed Infrastructure on Population Health (DIPoH) to be used to overcome future crises and ensuring the sustainability of the project. The intent is to support research across Europe in the identification, access, assessment and reuse of population health and non-health data as well as through capacity building, to underpin public health policy decisions. One of the goals of PHIRI is to engage countries in foresight studies, by for example building capacity on foresight and applying this within the Member States. PHIRI is a close collaboration with 41 partners across 30 countries over a period of 36 months starting in November 2020. The project is divided in 9 ambitious work packages with three transversal topics. PHIRI builds on the achievements of the BRIDGE Health and the Joint Action on Health Information (InfAct) projects. Foresight studies are part of WP9, which aims at promoting better preparedness, better planning with proper support of foresight tools, and the use of modelling to support short-term decision-making.

## II. Why do we build foresight capacity?

Public Health Foresight Studies (PHFS) provide methodologically consistent insights into the most important societal challenges for public health and health care in a country or region. Foresight studies try to answer questions like:

- What are the most important future trends and developments regarding health and health care?
- Which scenarios for the future of public health and healthcare are plausible?
- What are expected to be the biggest population health challenges in the future?
- What could we do to target these challenges?

A better understanding of possible future developments and impacts are essential for policy makers to anticipate and possibly influence these trends. The current pandemic makes clear that Public Health Foresight Studies may be more necessary than ever to get a better understanding of possible (health) impacts of the current COVID-19 outbreak, e.g. changes in regular health care services delivery, in lifestyle and in socio-economic developments. This helps to prepare Europe for possible next pandemics.

## III. Overall aim and set-up of the PHIRI Foresight Course

Through the Public Health Foresight Studies course we aim to develop and provide foresight capacity for all European Member States. The goal of capacity building is directed at levelling the knowledge needed for performing foresight, reducing information inequalities and strengthening European data uniformity. A second aim is to improve collaboration within MS on foresight studies.

## IV. Course Objective and Aims

The course entitled “PHIRI Foresight capacity building” has the following objectives:

- To build capacity in Public Health Foresight across EU Member States by providing the necessary knowledge and tools.
- To provide a solid basis for interested participants to plan and carry out their own foresight study in their country.
- At the end of the course, participants should be able to:
  - o Understand the different methods used in foresight studies
  - o Understand what Public Health Foresight entails and how can it be applied
  - o Recognize the data, resources, and other considerations necessary to carry out foresight studies
  - o Have more in-depth understanding of selected facets of doing a foresight study, such involving stakeholders, as knowledge translation and data & analysis.
  - o Prepare and take the first steps towards planning scenarios in their countries.

## V. Course Structure and programme

The course consists of three parts, a general introduction module, a set of advanced modules, and a module supporting participants to start with a foresight study in their own country (see figure below). The sessions for the introduction module will take place in March and April and are meant for various researchers and policy makers from the EU Member States who want to learn about foresight. The advanced modules will take place in May, June, and September and are offered to all participants of the introduction module. This whole course will enable and engage MS to develop scenarios, which is also part of the PHIRI project. The content of the advanced modules is based on a survey that has been done in March and on the feedback received after each session. The final module revises the capacity build in all modules, and will focus on how the acquired foresight capacity can be used to initiate a foresight study.

### *Timetable with overview of the modules:*

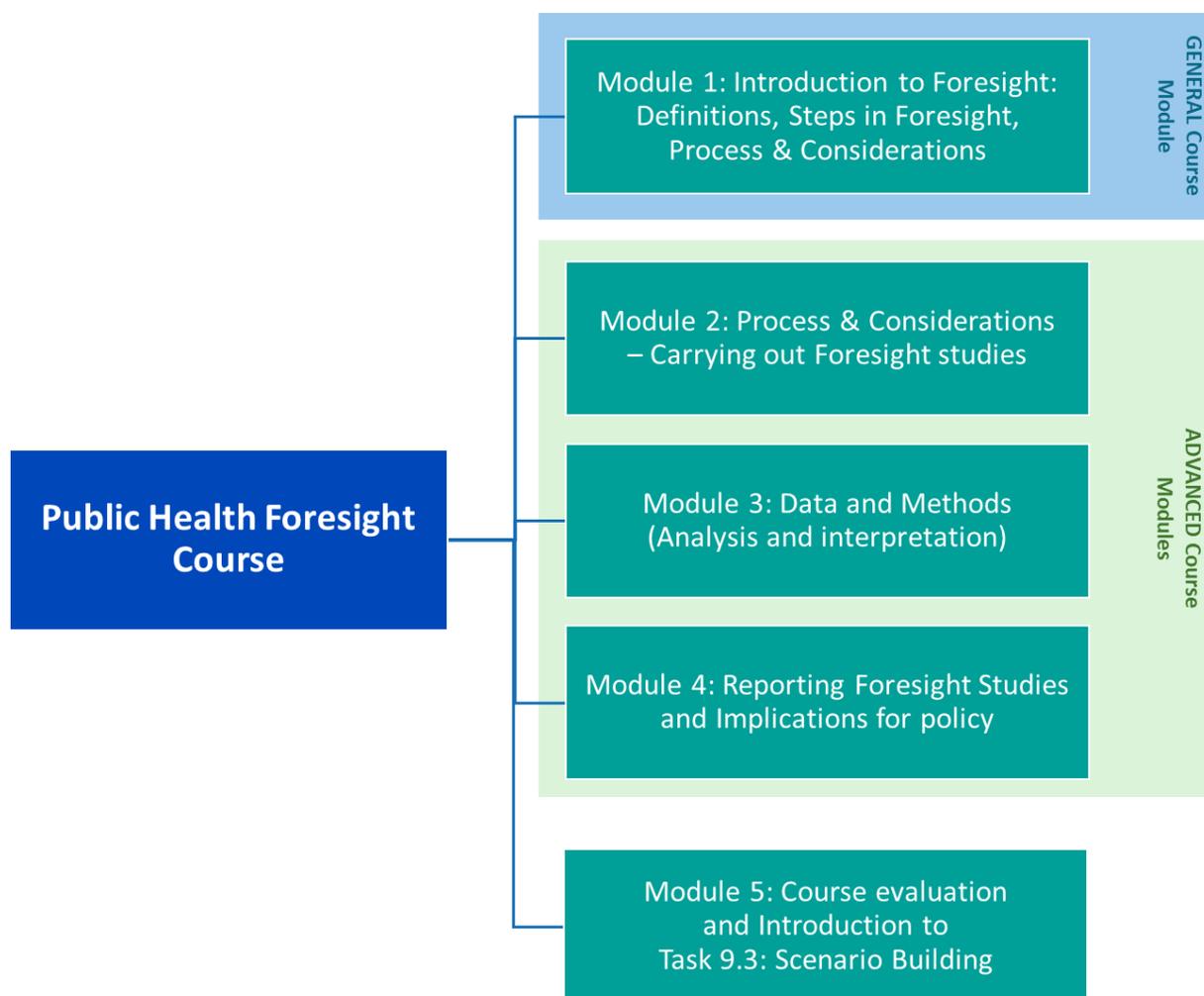
General module	Advanced modules			
Module 1: General module	Module 2 (Advanced)	Module 3 (Advanced)	Module 4 (Advanced)	Module 5: Closing module
<ul style="list-style-type: none"><li>• March 25<sup>th</sup></li><li>• April 15<sup>th</sup></li><li>• April 22<sup>nd</sup></li></ul>	May (date tbd)	June (date tbd)	September (date tbd)	October (date tbd)

The course will take place online. We apply a minimum attendance of around 5-10 persons, for pedagogic reasons the maximum is between 30 and 40. The general course might have a higher attendance than the advanced courses, which are more in-depth, and where we also aim at somewhat smaller groups to work with.

The course has a self-learning character. We will record all sessions and the videos and background materials will be made available through the PHIRI website.

Participants of all sessions will be asked to fill out an evaluation form to provide their feedback in order to fine-tune the content of the next modules.

The below figure shows the general course structure.



## VI. Course lecturers and moderators

For the general module we have lectures from three different countries, the Netherlands, Portugal and Belgium. The lecturers have a long experience in foresight and are capable to explain all aspects of doing a foresight study. See section ‘biographies of lecturers’ for detailed information on the lecturers.

For the advanced module, we aim to have contributions from other organizations as well (for example, from policy makers who have used or are planning to use foresight studies). Details about the lecturers for the advanced module will be provided through the PHIRI website.

## VII. Detailed description of the modules

### A. General module: Introduction to Foresight

This module gives a general overview of various aspects of doing a foresight study. It covers the three elements: Purpose & Methodology (why and how?), Process & Participation (how and with whom?) and Product and communication (what and for whom?).

#### Overview general module

<b>Module 1</b>
<b>Lecturers</b>
Henk Hilderink (RIVM), Luís Lapão (UNL), Marie Delnord (Sciensano)
<b>Learning Objectives</b>
<ul style="list-style-type: none"><li>• Provide a general introduction to what Public Health Foresight is.</li><li>• To provide participants with basic definitions and terminology.</li></ul>
<b>Content (brief summary)</b>
<p>This module focuses on providing participants an introduction to basic concepts and definitions in Public Health Foresight. This module covers three elements:</p> <ul style="list-style-type: none"><li>– Purpose &amp; Methodology (why and how?)<ul style="list-style-type: none"><li>○ Why: Understanding uncertainty</li><li>○ How: Six Step approach</li><li>○ Examples of population health foresight studies</li></ul></li><li>– Process &amp; Participation (how and with whom?)<ul style="list-style-type: none"><li>○ Normative uncertainties</li><li>○ Involving Stakeholders</li><li>○ Data and analysis</li></ul></li><li>– Product and communication (what and for whom?)<ul style="list-style-type: none"><li>○ Population health reporting and evidence-informed policy making</li><li>○ Knowledge translation</li><li>○ Options for products (report, website, infographics)</li><li>○ Data-information-knowledge-wisdom pyramid</li><li>○ Policy cycle and evidence-informed policy making</li></ul></li></ul>
<b>Training methodologies</b>
Lectures, interactive exercises and discussion (plenary and break out groups). A set of materials will be provided before the course started. Additional materials will be shared during the course.
<b>Learning Materials</b>
<b>For course preparation</b>
<a href="https://www.oecd.org/strategic-foresight/">https://www.oecd.org/strategic-foresight/</a> <a href="https://www.rivm.nl/en/foresight-studies">https://www.rivm.nl/en/foresight-studies</a> <a href="#">The Dutch Public Health Foresight Study 2018: an example of a comprehensive foresight exercise</a>
<b>Further reading materials</b>
<ul style="list-style-type: none"><li>- Verschuuren, M., Hilderink, H.B.M., Vonk, R.A.A., The Dutch Public Health Foresight Study 2018: an example of a comprehensive foresight exercise. <i>European Journal of Public Health</i>. Volume 30; Issue 1, February 2020, pp.30-35, <a href="https://doi.org/10.1093/eurpub/ckz200">https://doi.org/10.1093/eurpub/ckz200</a></li><li>- Ferreira Maia, M.J. Foresight Exercises as a tool for decision-making: the example of two case studies in health. <i>Enterprise and Work Innovation Studies</i>, 9, IET, pp.39-66.</li><li>- Graham ID, Logan J, Harrison MB, Straus SE, Tetroe J, Caswell W, Robinson N. Lost in knowledge translation: time for a map? <i>J Contin Educ Health Prof</i>. 2006 Winter;26(1):13-24. doi: 10.1002/chp.47. PMID: 16557505.</li><li>- Blessing V, Davé A, Varnai P. Evidence on mechanisms and tools for use of health information for decision-making. Copenhagen: WHO Regional Office for Europe; 2017 (Health Evidence Network</li></ul>

(HEN) synthesis report 54): [https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0011/351947/HEN-synthesis-report-54.pdf](https://www.euro.who.int/__data/assets/pdf_file/0011/351947/HEN-synthesis-report-54.pdf)

- Mayer, R.E., Fiorella, L. & Stull, A. Five ways to increase the effectiveness of instructional video. *Education Tech Research Dev* 68, 837–852 (2020). <https://doi.org/10.1007/s11423-020-09749-6>
- Marie Delnord, F Tille, L A Abboud, D Ivankovic, H Van Oyen, How can we monitor the impact of national health information systems? Results from a scoping review, *European Journal of Public Health*, Volume 30, Issue 4, August 2020, Pages 648–659, <https://doi.org/10.1093/eurpub/ckz164>
- Gregório J, Cavaco A, Lapão LV. A scenario-planning approach to human resources for health: the case of community pharmacists in Portugal. *Human resources for health*. 2014 Dec;12(1):1-3.
- Lapão LV. The future of healthcare: the impact of digitalization on healthcare services performance. In *The Internet and Health in Brazil 2019* (pp. 435-449). Springer, Cham.
- Rees GH, Crampton P, Gauld R, MacDonell S. The promise of complementarity: using the methods of foresight for health workforce planning. *Health services management research*. 2018 May;31(2):97-105.

### Course evaluation

At the end of the general module, participants will receive an evaluation form (survey) and will be requested to give their input and feedback on what they want to learn to further develop the following (tailored) modules.

This general module will be given in sessions of 4 hours each. This session will be offered on three dates: 25<sup>th</sup> March 2021, 15<sup>th</sup> April 2021, 22<sup>nd</sup> April 2021.

### Program general module

Thursday 1 (25/03/2021), Thursday 2 (15/04/2021), Thursday 3 (22/04/2021)

Time (CET)	What	Description	Who
10:00 – 10:10	Welcome	Introduction of the general module objectives, participants	Mariken Tijhuis
10:10 – 10:20	Exercise: Thinking about the future	Mental move to the future (headline exercise)	Henk Hilderink
10:20 – 10:45	1A: Purpose and methodology	Participants will learn why and how foresight studies are done	Henk Hilderink
10:45 – 11:15	Exercise: DESTEP, Incl reporting back	List the most important driving forces and trends	Henk Hilderink
11:15 – 12:00	1B: Examples of Foresight studies	The results of the inventory of Task 9.1 will be presented	Luís Lapão
12:00 – 12:30	Break		
12:30 – 12:45	Exercise Values	Participants will learn about different values and normative aspects regarding health	Henk Hilderink
12:45 – 13:15	1C: Process and participation	Overview of the process of doing a foresight study (general), stakeholders, data needs.	Henk Hilderink
13:15 – 13:20	1D: Exercise: Knowledge Translation	Participants will interactively discuss various forms of knowledge translation	Marie Delnord
13:20 – 13:50	Products and communication	Target audience, DIKW pyramid, Knowledge transfer	Marie Delnord
13:50 – 14:00	Next steps	Feedback round and overview of following modules	Mariken Tijhuis
14:00-14:30	Open space networking	Time to meet participants/lecturers, ask questions or discuss topics	All

## B. Advanced Modules: In depth module on specific foresight topics

The content of the advanced modules will be finetuned with the results of the survey and the feedback of the participants of the general module (See PHIRI WP 9 Delivery 9.1).

Topics (TBC):

- Process (capacity, stakeholder involvement, skills).  
This module will elaborate on for example:
  - o Deciding the Foresight study aims and timeline
  - o Normative perspectives
  - o Understanding different perspectives
  - o Techniques for involving (and selecting) different stakeholders
  - o Combining qualitative and quantitative outcomes
  - o Interacting with clients and potential users
  - o Governance structures
- Data and methods.  
This course will have a more in-depth consideration of for example:
  - o Foresight purpose
  - o Foresight method selection
  - o Data needed
  - o Data sources
  - o Trend analyses techniques
  - o Understanding uncertainty
  - o Working further with the DESTEP methodology
  - o how to do demographic and epidemiological projection
  - o use of indicators
- Population health reporting  
This module will elaborate on for example:
  - o Communication modes
  - o Visualization techniques
  - o More in-depth understanding of Knowledge translation
  - o Policy cycle
  - o Policy take up
  - o Measure impact
- Step-by-step: how to set up your foresight study
  - o Synthesis of all previous modules
  - o Practical guidance in doing a foresight study
  - o Making a plan to do your own foresight study

Duration: 2-3 hours per session; depending on attendance, each session might be offered more than once

## VIII. Biographies of Lecturers and Team



Dr. H.B.M. (**Henk**) **Hilderink** is Senior Scientific Advisor Population Health Foresight at the Dutch National Institute for Public Health and the Environment (RIVM National Institute for Public Health and the Environment). He studied Mathematics and obtained his PhD in Demography. He has been working at RIVM National Institute for Public Health and the Environment since 2014 and was project leader of two Public Health Foresight Studies. Before that, he worked on various national, European and global scenario studies, such as the Sustainability Outlook, OECD Environmental Outlook and the UNEP Global Environmental Outlook, where he contributed with the modeling of demography and population health. He is also working on Burden of Disease (BoD) estimates for the Netherlands.



**Luís Lapão**, Habilitation, PhD, MSc, Professor of Digital Public Health at Instituto de Higiene e Medicina Tropical at Universidade Nova de Lisboa. Visiting Professor of Healthcare Management at Karolinska Institutet and at Dubai University. Member of the World Health Organization Collaborating Centre for Health Workforce Policy and Planning. He was Director of the PACES program (within the Ministry of Health) in Management and Leadership for Primary Healthcare Managers (2008-10). Auditor of the European Commission on Healthcare Information Systems and Associated Editor of the BMC Medical Informatics and Decision-Making. He is president of the General Council of the Lisbon Nursing School. He works in Digital Public Health, Health innovation and health

information systems, mainly on implementation, Design Science, business models and telemedicine. He is the Principal Investigator in three research projects: INFACCT-EU-WP6 (Co-Lead) - Health information flagship training program (2018-2021); HAITool-EEAGrants and Elemental\_Diabetics and PRIMARYCARE@COVID-19. He is author of more than 140 papers and six books.



**Marie Delnord**, MA MSc, PhD is a EU public health researcher and epidemiologist currently working at Sciensano, the Belgian Institute of Health. Her current research is focused on methods to strengthen population health monitoring, the uptake of data innovations in the health system, and the use of scientific evidence in policy and practice. She is active in several EU projects on cancer, COVID-19, and perinatal health. She holds an MA in Child Development from Tufts University, a MSc in Paediatrics and community health from University College London, a PhD in Epidemiology from Paris Descartes University, and an Executive Diploma in Diplomatic Practice from UNITAR. Prior to joining Sciensano, she was project manager at INSERM, the French National Institute of Health and Medical Research, coordinating a maternal and child health

surveillance network active in 31 countries. She is a Marie-Sklodowska Curie Research Fellow, Section editor for Archives of Public Health, International Scientific Committee member for the European Public Health Association, and member of the OECD-Global Science Forum Expert group on Mobilising Science in Crises.



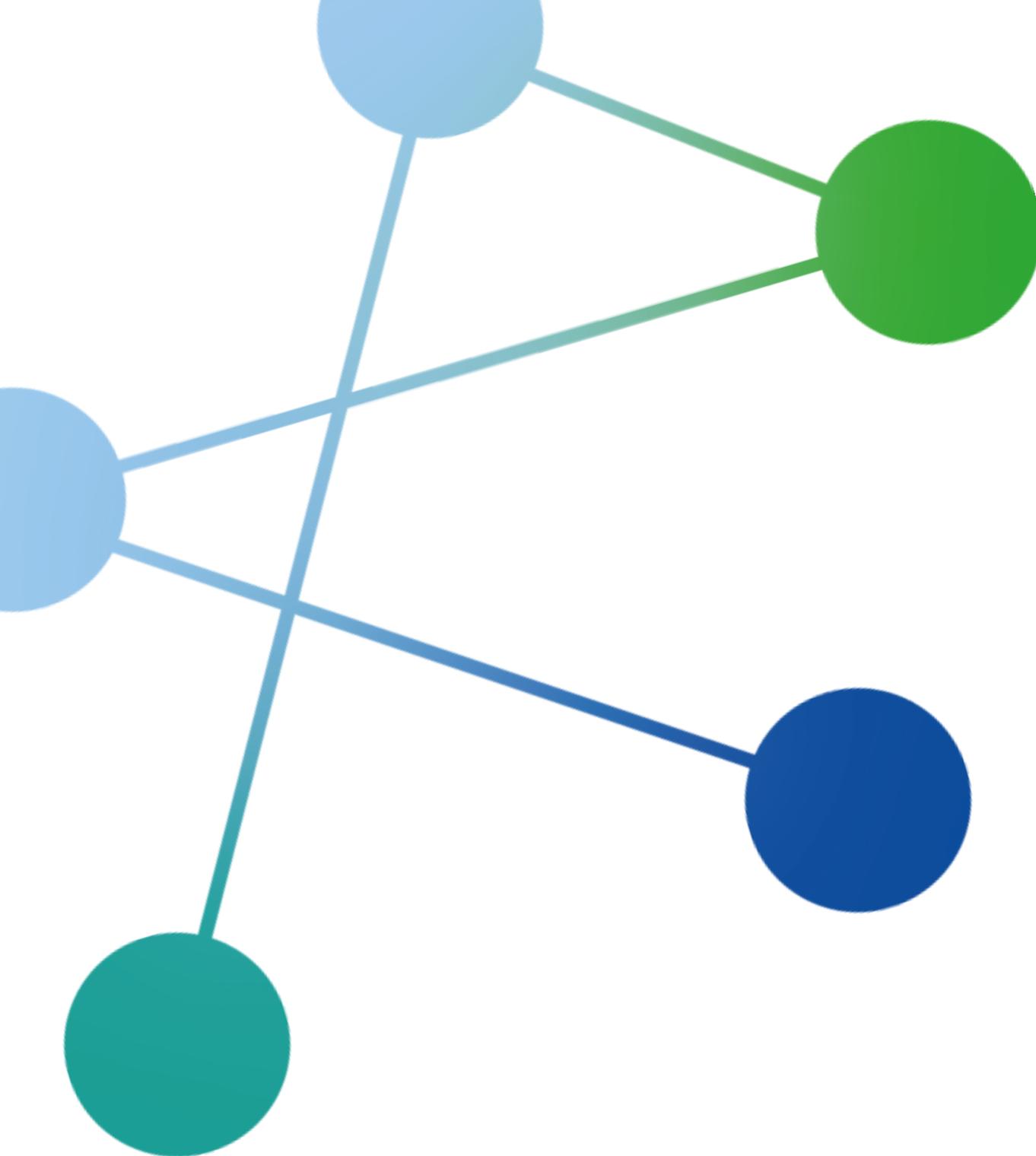
**Dr. Mariken J. Tijhuis**, Dutch National Institute for Public Health and the Environment (RIVM), Dept of Health Knowledge Integration. She contributes to various national and international health information activities aiming to underpin evidence-informed health policies. Among others, she coordinates the Dutch contribution to the EU Joint action on Health Information (InfAct), the EU Population Health Information Research Infrastructure (PHIRI) and the WHO European Health Information Initiative (EHII). Mariken holds a Master's degree in Health Sciences (Maastricht University), a PhD degree in Nutrition (Wageningen University) and is a board-certified post-doctoral epidemiologist. She is interested in a great range of topics from cell to society and inspired by multidisciplinary teamwork. Integration of information and concepts from different scientific areas have been recurring components of her work. Past/current topics include gene-environment interactions, benefit-risk analysis and health indicators.



**Dr. Daniela Moye Holz**, international health researcher at Dutch National Institute for Public Health and the Environment (RIVM) since 2020. She has a background in Pharmaceutical Chemistry, International Health, and got her PhD in Global Health and Health Policies. She has a mixed background after working in the private pharmaceutical industry, the academia, and the public sector. She has carried out health policy research for the WHO, WHO Collaborating Centres, the OECD, among others. Research interests include health inequalities and inequities, global health policies and the SDGs, access to healthcare and health technologies, and the access and use of health information to inform policy.



**Marit de Vries**, Msc, is a researcher at the Dutch National Institute for Public Health and the Environment (RIVM), Dept of Health Knowledge Integration, The Netherlands. Marit has a background in Urban Geography and Planning, and has worked as a lecturer at the University of Amsterdam in Human Geography and International Development Studies before she joined the RIVM in 2014. At the RIVM she has contributed to various national and international foresight studies, with a focus on scenario development and expert workshops on future trends. Marit enjoys working in multidisciplinary teams and is interested in a range of research topics, such as Healthy Urban Living, GIS analysis and international and regional differences in health and healthcare.



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