Data and digital health in the WHO European Region in 2022
A year in review
For the Division of Country Health Policies and Systems at the WHO Regional Office for Europe, 2022 was a significant year – not only for the numerous activities, missions, workshops, briefings and technical guidance that the Data and Digital Health team deployed in Member States of the WHO European Region but also for the important effects these had on improving people’s health. This document summarizes the activities conducted by the Division in 2022 in the area of Data and Digital Health.
In 2022 the data and digital health team completed:

**27 missions**

to 21 Member States, including 9 technical missions, 7 functional assessments and 11 partner engagement activities

In terms of tools and technical guidance, the team issued:

- **22** Reports, studies and policy briefs
- **3** Contributions to scientific research
- **3** External publications
- **9** Knowledge-management tools

Meetings and events are also important technical cooperation tools, and the team reached:

- **7347** Participants through 8 high-level events
- **17** Trainings or workshops
- **18** Technical meetings and 6 bilateral meetings
- **17** Webinars
Significant events extended our reach in digital health

The most significant event in 2022 was the adoption of a digital health action plan for the WHO European Region for 2023–2030 (1) at the 72nd session of the WHO Regional Committee for Europe in Tel Aviv, Israel, on 12 September 2022.

Digital health is among the four flagship initiatives of the European Programme of Work 2020–2025 (2). In adopting the resolution approving the action plan, delegates at the Regional Committee recognized the importance of digital solutions in making health care more people centred.

Member States noted that digital health has become indispensable, but that integrating digital solutions in policy-making remains a challenge. They pointed to the importance of collaboration among countries since digital health has potential to transform health care everywhere, but added that silos within and across countries must be broken down to allow people access to their data.

In his address, WHO Regional Director for Europe Dr Hans Henri P. Kluge said:

“Digital health should be seen as an enabler to achieve health goals, and not as the solution itself for health problems or needs. To be meaningful and really promote better health, digital tools need good governance, proper legislation, and policies that promote the healthy use of these tools while providing the people who use them – health workers and patients – with the training and support they need to make the best of them.”

Dr Kluge, together with Director of the Division of Country Health Policies and Systems Dr Natasha Azzopardi-Muscat and Regional Adviser on Data and Digital Health Dr David Novillo-Ortiz, published an editorial reflecting WHO’s views on digital health for the Region (3). They noted that health information systems have been strained from the onset of the COVID-19 pandemic, and highlighted the need to implement digital solutions that improve the efficiency of these systems.

Wider adoption of digital tools for health can help governments and people in the Region meet health challenges, including those brought about by the pandemic. Dr Azzopardi-Muscat explained:

“The digital literacy of all users should be a key component of any successful digital health strategy. Together with governments in our Region, we will work on solutions that put the needs of patients and health workers at the centre.”
To train digitally capable health personnel in Europe, the data and digital health team launched a series of webinars addressing important health topics (4). The team brought together experts in digital health to advance in-service training for health care professionals.

The WHO Regional Office for Europe also held a workshop in June for heads of WHO country offices on leveraging digital health, encouraging participants to focus on this increasingly important area.

The data and digital health team conducted the workshop “Impact training for big data in health care” for eight countries – Austria, Belgium, Denmark, Greece, Israel, Portugal, Slovenia and Spain – to help participants improve national capacity to implement and maintain data infrastructure.

The team also focused on the secondary use of health data (5) in an event with the Danish Health Data Authority, exploring ways to use this data in decision-making, health system management and improvement, and research.

For Ukraine, the team organized the Health Hackathon (6), an event that challenged participants to create innovative health products. Students, information technology specialists, health care workers and others formed groups to address problems related to healthy lifestyles, early detection and prevention of diseases, mental health support, and effective interaction for doctors.

The use of artificial intelligence (AI) in health has several implications, and the data and digital health team gathered experts for a workshop on ethics and governance for the new Western Balkans Digital Health Network to explore topics such as key ethical principles and regulation of AI, global perspectives, and AI essentials. The aim was to give participants a better understanding of what is needed to implement AI solutions in health care.

In Uzbekistan, a workshop for central Asian participants advanced the development of a regional telemedicine network, with discussion of concrete proposals for a functional network that would also help focus on pandemic preparedness.
Partnerships expanded digital health advances in Europe

A related highlight in 2022 was the signing of an agreement on digital health in Europe between WHO Regional Office for Europe and the Healthcare Information and Management Systems Society (HIMSS) (7). HIMSS has more than 120,000 members and supports the work of WHO in digital health. President and Chief Executive Officer Mr. Hal Wolf said, “By deepening our partnership with the WHO Regional Office for Europe, we can ensure that more countries in Europe and beyond can reap the benefits of equitable access to quality health services and information.”

In addition, the WHO Regional Office for Europe partnered with the United States of America’s Centers for Disease Control and Prevention (CDC) (8) and several other entities to launch an informatics fellowship for future technical leaders and public health officials in eastern Europe and central Asia. The aim is to enhance country capacities to advance digital health literacy and better govern digital transformation in the health sector.

Tools and technical guidance helped European countries face digital health challenges

The WHO Regional Office for Europe published a study reviewing data from over 20,000 studies in 53 countries that showed telemedicine has clear benefits (9) in the screening, diagnosis, management and treatment of chronic diseases.

Another report by the WHO Regional Office for Europe and the Brazilian Network Information Centre reviewing activities in eight countries across three WHO regions found that digital health programmes and interventions are often not monitored or evaluated (10).

Looking at the problem of misinformation (11), a systematic review of published studies showed that incorrect interpretations of health information, which increase during outbreaks and disasters, often negatively impact people’s mental health and increase vaccine hesitancy, and can delay the provision of health care. The study found that social media have been propagating poor-quality health-related information during pandemics, humanitarian crises and health emergencies at an increasing rate. Such spreading of unreliable evidence on health topics amplifies vaccine hesitancy and promotes unproven treatments, the authors said.

In a related topic, a study in 33 countries showed that countries faced challenges in presenting and disseminating COVID-19 information (12), with issues related to trust, transparency and the need for simplicity in the use of open data. The study by the WHO Regional Office for Europe and HealthPros highlighted the importance of tracking the spread of potentially harmful misinformation.

On AI, which is increasingly used in medicine and health care, a study by the WHO Regional Office for Europe and the Polytechnic University of Valencia in Spain found that its impact on people’s health is still limited, as it is still largely used in laboratories and for testing (13). The overview of systematic reviews was published in the International Journal of Medical Informatics (14).

Finally, the data and digital health team conducted a study that found that digital health technologies are not equally accessible to all communities and areas in Europe (15), raising concerns over the equitable use of digital tools for health. The research showed that people with poor health are among those who are struggling the most to access these tools.
As part of its activities in the areas of data, monitoring and analysis, the WHO Regional Office for Europe signed an agreement with the Institute for Health Metrics and Evaluation to support countries in strengthening capacities in data analysis, modelling and forecasting methods.

The WHO European Health Information Gateway, a powerful tool providing easy access to health data and resources for all 53 Member States in the Region, was revamped and upgraded to enable integrated access to health indicators and make data shareable in various formats. It also now features measurement indicators from the European Programme of Work.

In a related theme, the new edition of the annual publication “Core health indicators in the European Region”, which focuses this year on the European Programme of Work measurement framework, is now available. The European Health Report 2021 was also published, providing insight on the effects of the COVID-19 pandemic on population health and health inequities, and marking progress towards the health-related Sustainable Development Goals.

In partnership with the European Observatory on Health Systems and Policies, a series of summaries on the Health Systems in Action Insights was published, highlighting progress and challenges in non-European Union Member States, including Armenia, Bosnia and Herzegovina, Georgia, Israel, Kazakhstan, Kyrgyzstan, Montenegro, North Macedonia, the Republic of Moldova, Serbia, Tajikistan, Türkiye and Uzbekistan.

Mental health is also among the flagship initiatives and top priorities of the European Programme of Work. A workshop for health and data professionals expanded knowledge on how big data and AI tools can help countries plan mental health services and even monitor mental health problems among populations. Public health emergencies including the COVID-19 pandemic, the war in Ukraine and economic problems have increased demand for mental health services, which remain under-resourced.

However, while AI and data tools have great potential, low levels of digital literacy pose a major challenge to their equitable use. The workshop explored ways to ensure that those who currently lack access to or knowledge of digital tools are not left behind.

The workshop also noted that these tools can also help to identify and prevent misinformation on public health concerns and develop targeted communications to promote behaviour change, along with predicting and intervening in mental ill health.

Relevant policy documents to data and digital health in the WHO European Region

**Digital health**
- Regional digital health action plan for the WHO European Region 2023–2030
- Resolution: leveraging digital transformation for better health in Europe

**Data**
- Measurement framework for the European Programme of Work, 2020–2025: approach, targets, indicators and milestones
- Development of the measurement framework for the European Programme of Work, 2020–2025
- Resolution: the measurement framework for the European Programme of Work, 2020–2025

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1 All references were accessed 25 May 2023.


