EHMA
European Health Management Association

HEALTH MANAGEMENT policy stocktake

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Authors
Federica Margheri, Interim Executive Director
Zachary Desson, Principal Scientific and Policy Advisor
Jacob Levi, Policy Officer
Lisa Becker, Junior Policy Officer
Dolores Cviticanin, Policy Officer
Laurène Mathey, Director of Projects
Lyudmil Ninov, Programme Manager
Rebecca-Evelyn Papp, Junior Policy Officer
Eleonora Varntoumian, Policy Manager
European Health Management Association (EHMA)

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Executive summary

The Health Management Policy Stocktake provides a comprehensive overview of the European Health Management Association's (EHMA) current positions on key health management policies across Europe. Its primary goal is to consolidate and monitor EHMA's strategic stances on critical health issues, guiding the Association's policy development, stakeholder engagement, and future advocacy efforts. Synthesising insights from EHMA's conference sessions, webinars, research projects, white papers, and coalition working groups, the stocktake ensures that the Association's policy opinions remain relevant, responsive, and reflective of emerging health trends.

The document is structured into two major sections: care-related policies and medical and disease-related topics. The care-related policies section addresses essential areas like governance, leadership, health system resilience, and digital transformation, with a particular focus on strengthening the health care workforce and ensuring financial sustainability through value-based health care models. Key themes such as person-centred care, integrated care, and equitable health care access are also explored, highlighting EHMA's commitment to addressing health care barriers and improving outcomes for all populations. Additionally, preventive measures like immunisation are emphasised as crucial components for long-term health care sustainability and disease prevention.

The medical and disease-related topics section concentrates on managing both communicable and non-communicable diseases, outlining strategies to improve disease prevention, crisis preparedness, and public health response. This section underscores the interconnectedness of disease management with broader health policies and systems, particularly in the context of managing future health crises and enhancing resilience to emerging health threats. EHMA's focus on improving pandemic preparedness and promoting disease prevention frameworks is a key feature of this section, ensuring that health systems can effectively manage future challenges.

The stocktake also includes a Definitions section that establishes clear understandings of health management and its scope. Health management, as defined by EHMA, goes beyond health care management to include a broader, more holistic approach to health at individual, organisational, and systemic levels. The document also clarifies EHMA's inclusive definition of Europe, considering both the European Union and the WHO European Region.

The Policy Networks section highlights EHMA's involvement in key European health policy networks, such as the EU Health Coalition, the European Alliance for Value in Health, and All Policies for Healthy Europe. Through these networks, EHMA actively engages with a wide range of stakeholders, including policymakers, health care providers, and patient organisations, contributing to strategic discussions on topics like digital health, integrated care, and value-based health care. EHMA's participation in these networks ensures that its policy positions are well-informed and aligned with broader European

health priorities, reinforcing its leadership role in shaping the future of health management across Europe.

Overall, this Policy Stocktake reflects EHMA's commitment to promoting excellence in health management by offering clear policy positions and actionable recommendations that support sustainable, resilient, and patient-centred health care systems in Europe. The document will continue to evolve, ensuring that EHMA's policy stances remain up to date with the latest health developments and challenges facing European health systems.

Contents

Glossary

AI	Artificial Intelligence
AP4HE	All Policies for a Healthy Europe
AMR	Antimicrobial Resistance
CMA	Critical Medicine Alliance
DG SANTE	Directorate General for Health and Food Safety
DHTs	Digital Health Technologies
EAVH	European Alliance for Value in Health
EC	European Commission
ECDC	European Centre for Disease Prevention & Control
EEA	European Economic Area
EEHRxF	European Electronic Health Records Exchange format
EFTA	European Free Trade Association
EHDS	European Health Data Space
EHMA	European Health Management Association
EHU	European Health Union
EMA	European Medicines Agency
EU	European Union
EU HPP	EU Health Policy Platform
FAO	Food and Agriculture Organisation
GDP	Gross domestic product
HaDEA	European Health and Digital Executive Agency
HCPs	Health care professionals
HERA	European Health Emergency Preparedness and Response Authority
HTA	Health Technology Assessment
IHRs	International Health Regulations
NGOs	Non-governmental organisations
OECD	Organisation for Economic Cooperation and Development
PD	Programme Directors
PHEIC	Public Health Emergency of International Concern

PPPs	Public-private partnerships
PREMs	Patient reported experience measures
PROMs	Patient Reported Outcome Measures
RRF	Recovery and Resilience Facility
RTRS	Rare tumour risk syndromes
RSV	Respiratory syncytial virus
SAC	Scientific Advisory Committee
SDGs	Sustainable Development Goals
SEPEN	Support for the health workforce planning and forecasting expert network
SIG	Special Interest Group
UHC	Universal Health Coverage
UNEP	United Nations Environment Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VBHC	Value-based health care
WHO	World Health Organization
WHO EURO	WHO Regional Office for Europe
WOAH	World Organisation for Animal Health

Introduction

The European Health Management Association (EHMA) is a not-for-profit membership organisation that enhances the capacity and capability of health management to deliver high quality health care. Our vision is excellent health management for a healthy Europe, which we contribute to by supporting the spread of knowledge on excellence in health management at all levels: systemic, organisational, and individual. We strive to improve sustainability and effectiveness of health systems and services for the improved health of Europe's citizens and communities.

EHMA has a 40-year history of operating at European, international, and national levels. Based in Brussels, the organisation has a membership of over 50 organisations and 30 individuals. EHMA has a large network of managers, educators, providers, researchers, citizens, innovators, and policy makers.

EHMA's activities revolve around three key workstreams:

- Membership-focused actions and network engagement.
- Research and EU-funded project work focused on dissemination and stakeholder engagement.
- Events and workshops, such as the European Health Management Conference or the yearly Programme Directors' Group Meeting, the webinar series and executive workshops.

The policy stocktake monitors and provides access to the repository of EHMA's policy work, establishes a strategic approach to policy areas, and defines its policy stance on both EHMA conference topics and EU priority topics.

The aim of this stocktake is to provide an overview of EHMA's position on key health management policy topics synthetising relevant messages from conference sessions, webinars, projects, white papers, coalition working groups and many other fields of activities. It is intended as a living tool to support EHMA's policy opinions, as well as being the go-to document that guides EHMA's statements on diverse topics, both for interventions at events and for interactions with the organisation's network and partners.

The stocktake purpose is to:

- Explicitly present what EHMA's definition of health management is and who we perceive to be health managers.
- Clearly define Europe to identify when it is referring to the 27 Member States of the European Union, continental Europe, or countries in the WHO European Region.
- Present the drivers of health management policy in Europe, such as current EU legislation, guidelines, and policy documents on issues of key relevance to health management.
- Describe EHMA's involvement in policy networks.
- Outline a strategy for EHMA's future policy work.
- And finally, present EHMA's previous statements and define the organisation's position on key health management policies and topics.

This document takes stock of EHMA's policy activities and will be updated over time to reflect the developments in policies and EHMA's position on key themes.

Consultation process

This document has been built through an extensive consultation process with the members of the Scientific Advisory Committee (SAC), as well as with our members and networks. The Scientific Advisory Committee has been consulted to receive expert advice on given topics and ensure that the definitions and concepts outlined in the stocktake correspond to the latest and highest standards of health management research. Individual members of EHMA's network and Board have been approached as appropriate to receive expertise on specific sections of the stocktake.

Definitions

This section includes essential definitions for the understanding of this policy stocktake and EHMA's approach and positions.

Health management

> *Health management provides guidance and leadership to administer health at the individual, organisational and systemic level. Health management embraces a holistic vision of health, in which health is impacted by behavioural, social, and environmental determinants. Health management includes and goes beyond health care management, which comprises community, primary, secondary, and tertiary care provision. It also happens outside of care settings and builds synergy with other related policy and societal areas in line with the 'One health' concept. Health management encompasses the entire health ecosystem in which health managers collaborate with patients, informal and formal caregivers, patient organisations, legislators, educators, policy makers and regulators, public health experts, researchers, health insurance experts, and pharmaceutical industries. Together, they aim to create a clear health vision and alignment strategy, as well as lay down the organisational, societal and technological conditions to achieve optimal health outcomes for individual patients and the entire community. Health managers are jointly responsible for establishing effective and holistic governance structures, built on a co-design and co-production model.*

Health care management is the practice of providing leadership, management, and direction to organisations that provide health care services and to different units within those organisations. Health care management is centred around three main concepts: effectiveness, efficiency, and equity. Health care management is an umbrella term and some of the job positions that fall within the scope of that term are medical director, clinical manager, nursing home administrator, laboratory manager and office manager. Health managers carry out six core functions, namely planning, organising, staffing, controlling, directing, risk-assessing, and decision-making. Health care managers ensure that their organisation or department improves in efficiency, financial strength, and service quality to ultimately deliver the best possible care to patients.

Although health care facilities are essential in managing, maintaining, and improving the health of citizens, health does not only happen within care facilities. The Ottawa Charter for Health Promotion (1986) described health as being: *"…created and lived by people within the settings of their everyday life; where they learn, work, play and love. Health is created by caring for oneself and others, by being able to take decisions and have control over one's life*

circumstances, and by ensuring that the society one lives in creates conditions that allow the attainment of health by all its members".

With this vision of health in mind, health management and public health are closely intertwined. Effective health management at individual, facility, and community level will ultimately lead to better health outcomes and enhance public health. Health management is therefore a practice that encompasses health care management yet has a wider approach. Health management is practiced from an individual to a population level. In fact, at an individual level, people can manage their health by monitoring their vital signs and taking their treatments as prescribed and act as a decision-maker in lifestyle choices. In addition, individuals who may have higher risk for developing a given disease can decrease their risk of diseases by engaging in prevention activities. Within the care system, patients can self-manage their wellbeing and care to reach desired health outcomes. Lastly, citizens can participate in initiatives and advocate for their health and the health of their fellow citizens at the community and policy level.

Beyond the individual responsibilities, health is impacted by personal, situational, societal, and environmental determinants. In this aspect, a health manager can be described as individuals and organisations that are working at different levels on those factors that have a direct, and sometimes indirect, impact on health. This comprises health (including health care) policy and decision-makers, social care professionals, and professionals in systems outside of health care. The precise meaning of health management thus varies according to the perspective taken. While the terms of health management and health care management are often used interchangeably, the scope of the former is larger and encompasses a more holistic vision of health.

EHMA focuses on the wider health care ecosystem and works in a transdisciplinary manner on initiatives that involve a variety of stakeholders, including patients, informal and formal caregivers, patient organisations, hospital management representatives, legislators, policy makers, educators, public health experts, researchers, and representatives from the health insurance sector and pharmaceutical industries. EHMA's engagement is therefore across the entire health ecosystem in line with the 'One Health' concept and is not limited solely to health care management. EHMA embraces a vision in which health can be managed at the individual, organisational, and systemic levels.

Europe

The definition of Europe is constantly evolving and its boundaries changes depending on whether Europe is perceived as a geographical, cultural, or political entity. While Europe is historically a geographical term, multiple definitions of Europe exist nowadays: Europe as a Continent, as a Cultural

Union, as a Political Union, as an Economic and Commercial Union and as a union of countries under the WHO European Office.

Continental Europe

Europe is first and foremost a geographical term designating the Western peninsula of the giant supercontinent Eurasia. Europe is divided from Asia by the Ural Mountains and the Black Sea. It is bordered by the Arctic Ocean to the North, the Atlantic Ocean to the West, Asia to the East and the Mediterranean Sea to the South. Europe extends from Iceland in the West to the Ural Mountains of Russia in the East. Europe's northernmost point is the Svalbard archipelago of Norway. To the South, Europe includes the islands of Greece and Malta. This continent is characterised by different peninsulas (Iberian, Italian, Balkan, Scandinavian, and Jutland) and important islands (Iceland, Ireland, the United Kingdom, Sicily, Sardinia, Corsica, Cyprus, and Malta amongst other).

Political Europe

Nowadays, Europe is popularly viewed as political. In fact, the term Europe is often used interchangeably with European Union, even if, geographically, Europe contains more than 27 countries. The modern European Union was born in 1992, after years of economic and commercial treaties between countries. The European Union is a political and economic union aiming to create cohesion, harmony, and solidarity amongst Member States. As of 2021, 27 countries form part of the European Union: Austria, Belgium, Bulgaria, Czech Republic, Cyprus, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden. Albania, Bosnia and Herzegovina, Moldova, Macedonia, Montenegro, North-Macedonia, Serbia, Turkey and Ukraine are Candidate Countries and are currently following procedures to join the European Union.

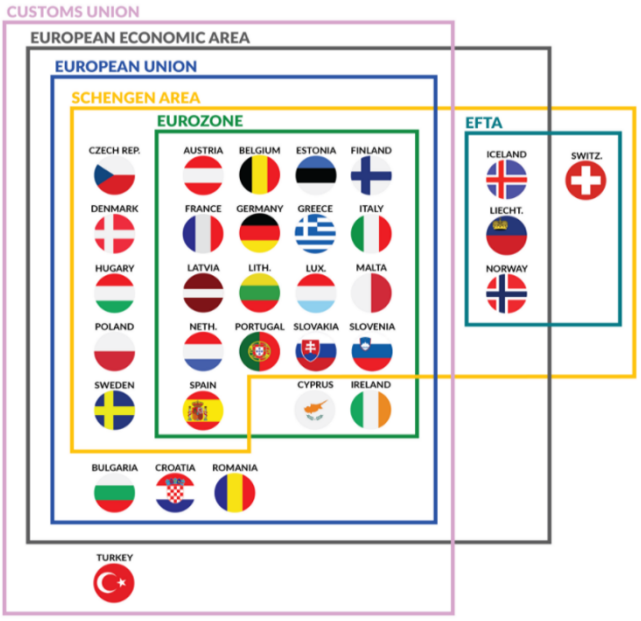
Cultural Europe

Europe was historically unified by mass Christianity, which has shaped Europe’s identity for several centuries. In more recent years, Europe has been characterised by a feeling of unity and democracy, in which its inhabitants share common values and ideals. While European countries are linked through their heritage and history, they maintain their own national identity. For instance, the Council of Europe, with its 47 members, adopts a more cultural approach to Europe and aims to uphold European values such as democracy and human rights while promoting European culture worldwide. The 20 countries that are not EU Member States, but form part of the Council of Europe are Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Liechtenstein, Northern Macedonia, Moldova, Monaco, Montenegro, Norway, Russia, San Marino, Serbia, Switzerland, Turkey, Ukraine, and the United Kingdom.

Economic and commercial Europe

Economic and commercial Europe is characterised by a unique single market and free trade agreements. The idea developed after World War II. It aimed to create an economic and political cooperation to avoid future conflicts and enhance the life standards of inhabitants.

The economy of the European continent is based on agriculture, livestock, fishing, mining and tourism. On top of the 27 EU Member States, the European Economic Area (EEA) also includes Iceland, Liechtenstein, and Norway, thus allowing these countries to form part of the EU single market. These three countries, together with Switzerland, also belong to the European Free Trade Association (EFTA), which promotes free trade and economic integration (*see Figure 1*).



Source: The Channel Group glossary.

Figure 1 – Defining Europe

WHO European Region

The World Health Organization has a unique view on Europe. WHO considers the following countries as European countries: Albania, Andorra, Armenia, Austria, Azerbaijan, Belgium, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxemburg, Macedonia, Malta, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkmenistan, Turkey, Ukraine, United Kingdom and Uzbekistan.

EHMA goes beyond a definition of Europe that is solely limited to the European Union and embraces a broader interpretation of Europe in which countries share common core values. The organisation aims to continue working together with the European Commission to provide support on European projects, while accepting members who have a strong interest in health management from all over the world. **The international and interdisciplinary view on health management is one of EHMA's key strength.**

Drivers of health policy in Europe

The Drivers of Health Policy in Europe have evolved significantly in recent years, with the COVID-19 pandemic and other global health challenges reshaping the priorities and strategies at both the European Union and national levels. The European Union has taken substantial steps to strengthen health care systems, foster collaboration among Member States, and address emerging health threats through new policies, legislation, and initiatives. These key drivers reflect the EU's ongoing commitment to promoting health equity, sustainability, and resilience across its health care landscape.

The European Health Union (EHU) initiative, launched in 2020 in response to the pandemic, remains a central pillar of EU health policy. The EHU aims to strengthen crisis preparedness and response capabilities within the EU, reinforcing the mandates of critical agencies like the European Centre for Disease Prevention and Control (ECDC) and the European Medicines Agency (EMA). A cornerstone of the EHU is the establishment of the European Health Emergency Preparedness and Response Authority (HERA), which plays a key role in monitoring, preventing, and responding to health emergencies. HERA is tasked with ensuring the availability of medical countermeasures and fostering cross-border cooperation to address health crises more effectively.

The EU4Health Programme (2021-2027) is one of the largest EU health funding programmes, with a budget of €5.3 billion. It addresses both short-term health challenges, such as COVID-19, and long-term structural issues in health care systems. Key objectives of the programme include strengthening health care systems' resilience, improving disease prevention, and enhancing health care accessibility across Europe. The programme also promotes the digital transformation of health care, the use of real-world data to drive decision-making, and the implementation of EU-wide standards for patient care and safety.

Another major policy initiative shaping health in Europe is Europe's Beating Cancer Plan, which aims to reduce the burden of cancer by improving prevention, early detection, treatment, and survivorship support. With a dedicated budget of €4 billion, the plan promotes integrated, multidisciplinary cancer care, as well as innovations such as personalised medicine. It also seeks to address health inequalities by ensuring equal access to high-quality care across Member States. Cancer is a key focus of the EU, highlighted by the creation of the Mission on Cancer under the Horizon Europe programme, which funds research and fosters cross-country collaboration to accelerate progress in cancer prevention and care.

The European Health Data Space (EHDS), proposed in May 2022, is another critical driver of health policy, aimed at facilitating the use of health data for health care delivery, research, and innovation. The EHDS will allow patients and health care providers across the EU to securely access and share medical data, thereby promoting more coordinated care and fostering

innovations in treatments and health care services. The secondary use of health data will support research, policymaking, and the development of new therapies and medical technologies, helping the EU build a data-driven health system.

The Pharmaceutical Strategy for Europe, launched in 2020, continues to shape health policies by ensuring access to safe, affordable, and innovative medicines. The strategy seeks to strengthen supply chains and reduce medicine shortages, a critical issue highlighted by the COVID-19 pandemic. It also supports the development of innovative treatments, such as personalised and advanced therapies, while promoting environmental sustainability by reducing the ecological impact of pharmaceuticals. The strategy works in tandem with the EU's Action Plan on Antimicrobial Resistance (AMR), which is critical in combating drug-resistant infections.

In November 2022, the European Commission adopted a Global Health Strategy to position the EU as a leader in global health governance. This strategy promotes the EU's role in addressing health challenges beyond its borders, focusing on areas such as pandemic preparedness, the fight against antimicrobial resistance, and the promotion of equitable access to vaccines and medicines. The strategy also underscores the importance of health as a key component of EU foreign policy, aligning global health with sustainability, climate action, and digital transformation goals.

Aligned with the European Green Deal, the intersection of health and environmental sustainability is an emerging driver of policy, particularly under the One Health approach. This approach recognises the interconnection between human, animal, and environmental health, with growing emphasis on addressing the health impacts of climate change and promoting sustainable health care practices. EU policies are increasingly focused on reducing the environmental footprint of health care systems, encouraging the circular economy, and addressing the health impacts of air pollution and environmental degradation.

The digital transformation of health care, as outlined in the EU's Digital Strategy, continues to drive health policy. Digital tools such as artificial intelligence, telemedicine, and mobile health apps are increasingly integrated into health care systems to improve efficiency, accessibility, and patient outcomes. This digital shift is complemented by investments in digital skills for health care professionals, with initiatives aimed at closing the gap between the rapid development of digital technologies and the workforce's ability to use them effectively.

The Recovery and Resilience Facility (RRF) remains a crucial mechanism for helping Member States strengthen their health systems in the aftermath of the COVID-19 pandemic. Investments through the RRF are directed towards building more resilient, sustainable health care infrastructures, with a focus on digitalisation, preparedness for future pandemics, and environmental sustainability. EU policy continues to emphasise the importance of Universal

Health Coverage (UHC) and equitable access to care, which are key to building robust, inclusive health systems.

These evolving policy drivers reflect the EU's commitment to creating resilient, sustainable, and equitable health systems. Through initiatives like the European Health Union, EU4Health Programme, Europe's Beating Cancer Plan, and the European Health Data Space, the EU is working to enhance health systems, strengthen crisis preparedness, promote digital transformation, and address health inequalities across Europe. As these policies continue to develop, they will shape the future of health care delivery and innovation, ensuring a healthier, more resilient Europe.

Policy Networks

Policy networks present an opportunity for EHMA to connect and engage with key stakeholders across European health systems; contribute to long-term strategic thinking and policy development; influence political debates; and promote the organisation's policy priorities at the EU level. EHMA's involvement in policy networks opens doors for new collaboration opportunities and gives EHMA a chance to share work from projects and feed information to members.

EU Health Coalition

The EU Health Coalition is a multi-stakeholder initiative looking at mapping the future of health care in Europe. In particular, the Coalition explores how to make the most out of innovation, investigates the role of the European Union in addressing health care challenges, and critically assess how different sectors can converge to deliver the best outcomes for patients in Europe. The vision of the Coalition revolves around people-centricity, prevention and wellbeing (including health inequalities), and value- and outcomes-based health care.

The EU Health Coalition brings together 50+ organisations representing patients, EU research-oriented medical societies, industry organisations, health care providers, regional and local health authorities and other relevant stakeholders, making it the largest and most diverse and influential for the health policy community in Brussels. EHMA joined the EU Health Coalition in 2019 to ensure that health management best practices are considered when discussing the future of health in Europe and issuing recommendations.

Role, objectives and upcoming activities

Since its inception, the EU Health Coalition worked with its members to issue recommendations to health policy and decision makers around four themes:

- Boosting health research & innovation
- Improving access to health innovation and reducing inequalities
- Accelerating the digital transformation of European health systems
- Advancing health systems integration.

In 2022 the EU Health Coalition presented its set of recommendations during the 2022 EU Health Summit '*Towards an EU Health Union*'. The EU Health Coalition's vision is of a Europe where health and life sciences represent the third strategic pillar alongside the green and digital transitions, and where health and care systems are without siloes and centred on people and patients. To deliver this vision, the EU Health Coalition proposes the following recommendations:

- **Digital transformation**: Standardise health data, invest in digital infrastructure and skills and establish Europe as an AI hub.
- **Health system integration**: Enhance integrated care across EU borders with dedicated reporting.
- **Boosting research & innovation**: Invest in R&I, align strategies, and focus on patient-centric tools.
- **Access to innovation**: Monitor new health technologies, support patient-focused care, and treat health care spending as an investment.

In 2023 the EU Health Coalition presented its most recent set of recommendations during the 'Our Manifesto for a healthier Europe'. The EU Health Coalition's vision is of a Europe where health and life sciences represent the third strategic pillar alongside the green and digital transitions, and where health and care systems are without siloes and centred on people and patients. With the 2024 European Parliament elections, there is a need for a robust and integrated strategy for health policy at the European level, building on a One Health approach. To deliver this vision, the EU Health Coalition proposes the following 5 recommendations:

- **Integrated health systems**: make health systems people-centred.
- **Health workforce**: invest in upskilling.
- **Health care investment**: treat health care costs as investments.
- **Research hub**: position Europe as a leading R&I hub.
- **Health leadership**: create a health and life sciences office in the European Commission.

EHMA's role

EHMA chairs the working group focused on the digital transformation of health care and actively participates in the working group focused on integration of health systems.

European Alliance for Value in Health (EAVH)

The European Alliance for Value in Health is a group of associations representing a broad range of stakeholders including patients, scientific and professional societies, health care managers and professionals, hospitals, payers and industry active in the broader European health systems. The vision of the Alliance is a Europe where health systems are value-based, sustainable, and people-centred. By connecting different stakeholders, their mission is to facilitate health system transformation, share knowledge and best practices, and engage with policy makers and stakeholders at European, national, and regional levels.

Role, objectives and upcoming activities

The Alliance believe value-based, sustainable, and people-centred health systems are built around six principles:

- Outcomes that matter to people and patients, as well as benefits valued by health systems and societies, are at the centre of decision-making.
- Interventions and services addressing prevention, social care and health care are organised in an integrated way around people and patients.
- Resources are allocated towards high value care and prevention, with outcomes and costs of care measured holistically.
- Continuous learning, education and health care improvement is based on evidence, and supported by data and insights.
- Innovative ways of care delivery are fostered.
- Financing models and payments reward value and outcomes.

Over the course of 2022, two strategic initiatives have been carried out: a taxonomy to have a common understanding on frequently used terms related to value-based health care and a stakeholder engagement methodology to create internal alignment within the EAVH.

In 2021, the Alliance published its first policy paper *'Health systems after COVID-19 - Building resilience through a value-based approach'*. The paper highlighted that health systems of the future should adopt an outcomes-focused and holistic approach, and that assessment of health system resilience should be value-driven and people-centred. The Alliance website now hosts a rich resource library with several publications on value-based health care; a series of case studies on value-based health care implementation; and a glossary.

EHMA's role

EHMA is an active member of the Alliance. In 2022 and 2023, EHMA was co-chair of the Alliance. EHMA's involvement in the group is focused on ensuring that health management knowledge and best practices are considered when discussing how to build health systems that are value-based, sustainable, and people-centred.

All Policies for Healthy Europe (AP4HE)

All Policies for a Healthy Europe is an intersectoral initiative that aims to ensure that citizen's health and wellbeing are a core priority for Europe and a strategic objective for the next Commission. Health and wellbeing are considered as crucial contributors to a new and stronger economic model that encompasses more than just GDP and fiscal rules, and targets inclusive growth and sustainable development. AP4HE works on the inextricable links between healthy societies, a healthy environment, and healthy systems, while embracing the potential of data and digital technologies that improve wellbeing.

Role, objectives and upcoming activities

The Alliance brings together diverse organisations with the objective of discussing how policies can impact our health systems and therefore EU citizens' wellbeing. The work of the alliance is organised around three main clusters: digital, environment, and economy.

EHMA's role

EHMA joined the AP4HE coalition to leverage diverse stakeholders' expertise in shaping progressive health policies and prioritising sustainable health care practices, with a focus on patient-centred care and workforce training. This collaboration boosts EHMA's efforts to promote excellence in health management, drive innovation, and enhance health care systems and outcomes across Europe.

In 2024, EHMA made two impactful contributions. In the 'Healthy Lifestyles' group, we showcased innovative strategies for upskilling and reskilling the workforce, while in the 'Digital Health' group, we highlighted the critical role of Health Technology Assessment.

EU4Health Civil Society Alliance

EU4Health is a civil society alliance started as a reaction to the Future of Europe white paper presented in 2017 by the European Commission President, Jean Claude Juncker, which included, in the five outlined scenarios, the option to 'do less' on some policy areas. The Alliance aims to ensure that EU action on health remains high on the political agenda, while advocating for meaningful participation of civil society in initiatives of the European Commission. The EU4Health Civil Society Alliance brings together organisations that share the vision of a Europe where all people are as healthy as they can be throughout their lives. The members of the alliance actively engage with the European institutions so that they will continue to guarantee health protection and promotion.

Role, objectives and upcoming activities

In 2021, EU4Health primarily advocated for the reinstatement of operating grants under the EU4Health Programme, allowing for stronger contributions by NGOs and supporting integrated work among Member States' health systems. The advocacy campaign was successful and resulted in the reinstatement of operating grants. In 2022, the Alliance advocated for the continuation of Operating Grants for health NGOs in the 2023 Work Programme through a multi-annual process. The Alliance launched a joint paper on civil society engagement, which calls for a more meaningful engagement with civil society in policymaking.

Critical Medicine Alliance (CMA)

The Critical Medicines Alliance, established in January 2024, serves as a consultative mechanism that brings together relevant stakeholders from EU Member States, key industries, civil society, and the scientific community. The Alliance's primary mission is to identify key areas and priorities for action, proposing solutions to strengthen the supply of critical medicines in the EU. This initiative aims to enhance efforts to prevent and address shortages effectively, aligning with the broader goals of the European Health Union to ensure timely and equal access to medicines for all European patients.

Role, objectives and upcoming activities

The Alliance tackles regulatory aspects of the EU pharmaceutical legislation while addressing industrial and competitiveness dimensions. This requires engaging all stakeholders and will result in significant health care sector advancements. The Alliance is established for five years, allowing all members to participate in the Forum. This Forum is regularly consulted on key milestones, ensuring all voices are heard and considered.

The Alliance has established two thematic Working Groups focused on enhancing EU manufacturing capabilities and fostering international partnerships. Their recommendations will shape a Strategic Plan, outlining multi-year actions and milestones. Drafted by the Steering Board and endorsed by the Forum, this plan will guide EU decision-makers, scheduled for adoption by the end of 2024.

EHMA's role

EHMA is involved in promoting efficient health care through digital innovation. EHMA urges the Health Emergency Preparedness and Response Authority to ensure EU hospitals digitalise and automate medication management systems for real-time stock visibility in the Critical Medicines Act. We advocate for a Medicines Alliance project aiming for 90% digitalisation in EU hospitals by 2026, supported by the EU4Health program. Additionally, EHMA recommends sharing best practices from regions or hospitals that have invested in digitalisation to improve medicine stock and demand data.

Global Patient Safety Network (GPSN)

The Global Patient Safety Network is an online platform for key stakeholders to share and discuss ideas, approaches, tools and best practices from around the world, with the aim of improving patient safety. It hosts a repository of resources, including adaptable strategies of low-cost interventions, best practices and key lessons learnt. This network aims to stimulate dialogue, promote continuous learning and creates unique opportunities for contributing to improving patient safety globally, particularly for low- and middle-income countries.

EHMA's role

EHMA joined the WHO Global Patient Safety Network to engage in a global platform for exchanging experiences, approaches, resources, ideas, and collaboration opportunities to support health care improvement efforts. This platform enables us to connect with national and international patient safety agencies and organisations, ministries of health, focal points at all levels from WHO Member States and WHO offices, and all partners and stakeholders. We aim to develop and influence patient safety policies and support the dissemination of webinars to enhance health service delivery and population health.

Online Order and Home Delivery of Medicines Alliance (OnHOME)

The Online Order and Home Delivery of Medicines Alliance is a group of patient organisations and other stakeholders determined to advocate for all Member States to allow their patients the choice to obtain their prescription medicines online and get them delivered at home by registered pharmacies.

The OnHOME Alliance aims to:

- Improve patients' access to health care services and medicines
- Support chronic and rural patients
- Enhance treatment adherence
- Ensure preparedness for health threats

The OnHOME Alliance calls on EU policymakers to improve the availability of medicines online by encouraging Member States to take the necessary steps to allow online access to prescription medicines, leveraging the current revision of the General Pharmaceutical Legislation.

EHMA's role

EHMA, as an active member of the OnHOME Alliance, advocates for policy changes that enhance digital health care (medicines) access across Europe. EHMA focuses on removing outright prohibitions that are not evidence-based and do not respond to the principles of necessity and proportionality. This change is essential to ensure that EU citizens can access prescription medicines online, thereby removing barriers for patients who face mobility issues or who live in remote areas. EHMA urges EU policymakers to seize the current legislative opportunity to promote digital health care services and support patient care across Europe. We also recommend that successful digital initiatives be scaled and replicated across the EU to standardise online access to medicines.

European Network for Infection Prevention and Antimicrobial Resistance (ENIPAR)

The European Network for Infection Prevention and Antimicrobial Resistance (ENIPAR) was founded in March 2024 and serves as a multi-stakeholder platform consisting of academics, patient groups, health care professionals, and more. The Network is committed to contributing to the implementation of effective infection prevention and control measures and policies in health care settings and in the community, and to the sensibilisation on prudent and sustainable use of antibiotics in the community, long-term care facilities and health care settings.

The ENIPAR aims to be a vigilant body which fosters dialogue among relevant stakeholders, in support of global, European and national initiatives to educate and promote awareness on the root causes of and key solutions to antimicrobial resistance. The ENIPAR provides a platform for interested stakeholders to convene and discuss the implementation of effective, results-driven, policy measures.

EHMA's role

EHMA actively participates in the network and contributed to the development of the development of the Call to Action for EU and national legislators, published in October 2024.

Policy manual

The Policy Manual represents a comprehensive and structured guide to EHMA policy positions, offering detailed insights into key health management issues. It is divided into two primary sections: care-related policies and medical and disease-related topics, both critical for achieving EHMA's vision of excellence in health management.

The care-related policies section addresses wide-ranging topics such as health systems' governance, leadership, and resilience, particularly in the face of challenges like the COVID-19 pandemic. It also covers the digital transformation of health care, the evolving health care workforce, and the need for sustainable financing models that align with value-based health care. This section places a strong emphasis on person-centred care, integrated care models, and addressing barriers to health care access, especially for vulnerable populations. Prevention, including immunisation, is also highlighted as a key element in reducing disease burden and ensuring long-term health system sustainability.

In contrast, the medical and disease-related topics section focuses on the management and prevention of both communicable and non-communicable diseases (NCDs), with a particular focus on improving health outcomes through coordinated disease response frameworks. This part explores the strategic responses to emerging health threats and pandemics, addressing issues like health system preparedness, disease surveillance, and public health interventions. These topics are intrinsically linked to the broader care policies, as effective disease management cannot occur in isolation from the systemic health policies governing care delivery and access.

Together, these sections offer a holistic view of EHMA's approach to health policy, emphasising the interconnected nature of care delivery, system resilience, and disease management. The manual provides health managers, policymakers, and other stakeholders with the necessary frameworks and guidance to navigate the complex health landscape, ensuring systems that are both adaptable to current needs and sustainable for future challenges.

1. Care-related policies

This chapter provides conceptual framework, policy context, and EHMA positions regarding care management topics. EHMA-related activities drove the analysis, identification, and selection of topics. Although listed separately, the topics are strictly interconnected. Cross-references ease the appreciation of connections between sections.

Wide-ranging concepts such as governance and leadership, health systems' resilience, and digital transformation open the chapter. The chapter proceeds by scrutinising cross-sectorial policy areas. EHMA has been particularly involved in discussions around health care workforce and One Health. An overview of health economy, financing and procurement is also offered. Then, three approaches to care are analysed: person-centred care, value-based care, and integrated care. Finally, the chapter dives into two crucial topics on the EU health agenda: improvements and barriers to access to health care and prevention, with a focus on immunisation.

1.1. Systems and organisational governance and leadership

Governance and leadership in health consist in guiding health system and involve setting up strategic objectives, drafting policies, and developing laws and regulations while securing and deploying the necessary resources, skills and competencies to accomplish strategic goals. Special attention is given to the way the system is designed, to accountability mechanisms, to demonstrate results, to transparent financing and to monitor and assess performance. Strengthening governance refers to the capacity to steer the system to adapt quickly to new objectives and priorities, and to respond to major challenges through a range of governance tools and strategies.

Policy context

Health systems and governance at national level are determined by the State, the health service providers, and the citizens. The World Health Organization works to support countries to exercise effective health systems governance in the framework of the Sustainable Development Goals (SDGs). The WHO actions focus on strengthening the capacity of governments to develop and implement strategies towards achieving Universal Health Coverage (UHC) by 2030. The WHO Regional Office for Europe focuses on health governance and systems in our continent. Additionally, the European Observatory on Health Systems and Policies monitors, collects and synthesises evidence on systems governance in Europe.

Relation to health management

Good leaders must be good managers. Health organisations and hospitals are being deeply transformed under the new trajectories set by value-based health care, patient-centred redesign, and disruptive technology. Change needs to be guided. Having truly engaged clinical leaders is no longer optional, and new opportunities are arising for doctors that want to step into management as leaders of change within their organisations.

Our position

Governance

- Preparedness depends on the implementation of different governance mechanisms. EU Member States are diverse and so were their responses to the pandemic, which had an impact on basic human rights. Coherent governance mechanisms are needed to ensure human rights are respected in case of future pandemics. Different methods can be used for this purpose, policy surveillance being one of them.
- Although there is a clear southern-northern Europe divide in governance models, even bordering countries might have important differences in the governance structure of their health facilities.
- Optimisation models at the whole system can help determining hospital capacity and facility cost.
- There needs to be a better understanding of hospitals' current and possible functions, institutional dynamics, and how they should be managed.
- More work needs to be done to structure hospital governance differently and to articulate the relationship between different institutions more effectively.

Finance

- Health system financing models are usually hybrid and combine components from different models. To improve sustainability and resilience, value-based payment models prove to be helpful.
- When considering developing a hospital, the initial capital expenditure is unimportant. What matters is the flow of clinical expenditures.
- It is not worthwhile talking about a hospital's capacity or a hospital's cost, they need to be put in the context of a system and network to find the best way to deliver care.

Leadership

- Governance should not be seen as bureaucracy. Organisations have diverse leaders, with different backgrounds and opinions, and should be as inclusive as possible. Having multidisciplinary teams and removing management burden can add value.
- Consistent leadership is linked to organisational capacities and skills to support performance improvement.

- Proactive personality and psychological mindedness contribute to the ability to implement effective leadership actions: setting a direction for the workgroup; building relationships with followers to gain their commitment to change goals; and working with them to overcome obstacles to change. These personality traits may be considered in the selections for leadership roles.
- To meet future challenges, health managers should have a more holistic approach to managing and share leadership (or pair leadership) with other involved entities.

Transformation

- Health organisations have a need for 'transformer leaders' who are ready to confront organisational inertia and lead improvement efforts.
- Leadership has the most important task in guiding the shifting and re-orientation of the model of care and must change from being transactional and competitive to being more transformative and collaborative.
- Performance improvements can occur from changes to cultural efficacy, particularly in relation to improved communication and awareness of the local health system. Interconnected aspects of cultural efficacy include changes in organisational culture, leadership, and enhanced communication.

Relations with communities

- Public board meetings could be considered as a safeguarding act to prevent important matters from being missed.
- Health care systems are characterised by the interaction of many different stakeholders having many accountability relationships (policymakers, citizens/clients, providers, etc.). To have a good governance system, it is key to analyse and address these relationships.
- To support multidisciplinary collaboration, it is important to have a unified goal, build the team around the goal, and have champions that will share it widely within and outside the institution to gain further support. This entails having the right stakeholders, including patients, and break down any silos that might exist.

Policymaking

- Political leadership and commitment are essential to enable change towards digital transformation.
- Governance should try to observe the seven Nolan principles of Objectivity, Openness, Honesty, Leadership, Integrity, Selflessness and Accountability.
- Effective political leadership is needed for a resilient response to a pandemic and is characterised by key elements like responsiveness, resourcefulness and the capacity to learn.

Challenges / issues

- Governance is complex and evolving. A universal common framework or simple concept of health systems governance does not exist.
- Hospitals that are less integrated into the community and lack coordination with social and long-term services have more delayed discharges. Delayed hospital discharges have negative effects on patients' health status, health systems' functioning and health care expenditures.
- It is important to ensure that governance supports patient-centredness and there is a need to see how different countries meet this objective.
- It is difficult to engage physicians in leadership roles, as they devoted most of their life is to become experts in their field, and it is difficult to leave ground for other tasks.

Related EHMA activities

- **EcoQUIP+** [2020-2023]: series of webinars targeted to health managers to inform them about the benefits and opportunities of collaborative innovation procurement.
- **European Health Management Conference** [yearly]: opportunity for researchers, academics, practitioners, managers and policymakers to connect and discuss the most relevant issues in health management, as well as the specific Track of 'Governance, Leadership and Social Responsibility'.
- **Executive workshops** [periodic]: organised in the context of EHMA education mission and targeted at experienced health management professionals.
- **Executive Workshop 'Physicians as Leaders'** (The many avenues of Health Management) [2022]: looked at how physicians can be engaged as leaders to bring on the changes that can transform health care.
- **Programme Directors Group** [ongoing]: opportunity for EHMA members to discuss and share challenges in their academic programmes, health management leadership, and health systems.
- **Special Interest Group on South-Eastern Europe** [ongoing]: expert group aiming to strengthen health management capacity and capability in the region through exploratory research, development activities and the sharing of knowledge and best practices.

1.2. Preparedness and response, health care sustainability and health systems' resilience

The COVID-19 pandemic disrupted health systems. The lessons learnt from this pandemic must be used to increase resilience for future crises and move towards more responsive and sustainable health systems.

The World Health Organization defines a sustainable health system as a "*system that improves, maintains or restores health, while minimising negative impacts on the environment and leveraging opportunities to restore and improve it, to the benefit of the health and well-being of current and future generations*". Providing sustainable health services is only possible if health care is available, adequate, accessible, affordable and appropriate for everyone.

Policy context

In 2005, WHO adopted the International Health Regulations (IHRs), "*an overarching legal framework that defines countries' rights and obligations in handling public health events and emergencies that have the potential to cross borders*". IHRs are a legally binding instruments for 196 countries and define the criteria for WHO to declare a Public Health Emergency of International Concern (PHEIC). Each country should implement IHRs, ensuring preparedness and response to health threats. Additionally, WHO Member States are currently involved in a global process to draft and negotiate a convention to strengthen pandemic prevention, preparedness and response. In the context of the Sustainability Development Goals and the path towards the achievement of Universal Health Coverage, WHO supports countries with evidence collection, toolkit and papers' publication.

In the aftermath of the COVID-19 pandemic and in the context of the Next Generation EU, the European Commission adopted the Recovery and Resilience Facility (RRF). Among other objectives, the RRF aims to provide continuous support in strengthening health care systems of Member States by investing in health systems' resilience. Furthermore, to enhance EU Member States crisis preparedness, and in the context of the European Health Union initiative, the Regulation on Serious cross-border health threats, the mandate of the European Medicines Agency and the European Centre for Diseases Prevention and Control was extended in scope. Finally, a new European Health Emergency Preparedness and Response Authority was created.

Several relevant publications support countries with the latest evidence on health systems in Europe. Amongst others, the State of Health in the EU is a recurring two-year cycle of knowledge that resulted from a collaboration between the European Commission, the Organisation for Economic Cooperation and Development Health Division and the European Observatory on Health Systems and Policies. Also relevant are Health systems resilience during COVID-19: Lessons for building back better and COVID-19 Health System Response Monitor (HSRM).

Relation to health management

In times of permacrisis, health systems should get used to emergencies. When facing a crisis, systems enter a shock cycle: those that can manage well each stage of the cycle are recognised as resilient. Innovative financing models and management tools, such as assessment frameworks, can be

used to measure and increase health system readiness, thus fostering resilience.

In a crisis, health managers can adopt different leadership models by using a different combination of communication, command, and control. Key is the health care workforce, on which rely the sustainability of the system and that is likely to suffer from bad crisis management, as proved by the pandemic. Finally, health managers could facilitate the shift to community-based, health-promoting and prevention-focused health systems.

Several lessons can be drawn from pandemic management to strengthen systems' resilience: the urge to implement a holistic One Health approach, overcome the difference between local and global, and adopt novel use of data are only few. Nowadays, health managers are increasingly aware of the full potential of digital technology and the opportunities unleashed for technical providers, health care providers, and patients. The outbreak of new health threats such as mpox offers health managers the opportunity to treasure the legacy of the COVID-19 pandemic.

Our position

Service delivery

- Readiness is the ability of the health system to rapidly and sustainably adapt its policies, processes and infrastructure to support integration of a component of care or way of working. Assessment frameworks can be used to increase health system readiness, but they need to rely on rigorously collected data.
- There should be a focus on health promotion and disease prevention, as these are key factors for the long-term sustainability of health systems. (cf. Prevention and immunisation chapter)

Human resources

- Future health systems depend on people, and resilient systems depend on resilient leaders. Investing in the future of health systems requires investing in the health care workforce of the future.
- Sustainable change in the efficiency of health care professionals involves the sharing of the same ambition for sustainable change, in which the professionals are aware of the reasons for change and the need to improve efficiency in health care.

Information systems

- Sharing knowledge and empirical experience is one of the best ways to speed up new and sustainable reforms in health care systems.

Medicines and technologies

- Preventing shortages and ensuring availability of essential medicines and medical supplies during health emergencies requires developing sustainable, flexible and decentralised supply chains.

- Establishing and maintaining stockpiles of essential medicines and medical devices, with regular rotation and updates, is vital for ensuring rapid responsiveness during health emergencies.
- Public-private partnerships, together with offering financial incentives for regional production units, are effective measures to swiftly ramp up production capacity in response to sudden increases in demand.

Financing

- Funding and investments are needed to help transition towards sustainable care models. Investment in health systems does not only positively impact wellbeing, but also supports economic growth in the long-term.
- Funds are crucial to support recovery and resilience, but equally important is the development of regulations and legislative frameworks to allow investments to reach their maximum effectiveness.

Leadership and governance

- To be sustainable, health systems should adopt a wide understanding of sustainability that encompasses economic, environmental and social aspects.
- When allocating investments towards the recovery of health systems and increasing resilience, it is important to consider investments in frameworks that support prevention and improve systems integration.

Challenges / issues

- The COVID-19 outbreak demonstrated that the readiness to implement health system change is uneven across different countries.
- Prioritise funding for prevention and epidemic preparedness. Investing more in prevention means saving more on treatment in the future, thus having more funding for more services.
- Ensure that health systems do not suffer from further cuts in prevention budgets and adopt a forward-looking approach. In fact, short-term savings lead to long-term drawbacks.

Related EHMA activities

- **TO-REACH** [2016-2020]: aimed at producing research evidence supporting health care services and systems to become more resilient, effective, equitable, accessible, sustainable, and comprehensive.
- **Multi-Act** [2018-2021]: aimed to increase the impact of health research on people with brain diseases.
- **HEART** [2021–2025]: aims to improve urban health and reduce health disparities through an innovative urban planning methodology that embraces and promotes proper Blue-Green-based technologies with techniques for changing individual citizens' behaviour.
- **Webinar series 'Health Management in action: fostering health systems' resilience'** [2022]: presented best practices, case studies,

practical examples, and implementable solutions to enhance health system preparedness and rapid response to health threats.

- **White Paper 'The health system burden of Respiratory Syncytial Virus (RSV) in Europe'** [2022]: presents evidence-supported, actionable recommendations to build RSV-resilient and prepared health systems.

1.3. Digital transformation

The digital transformation of health care services and systems is transforming organisations' approach to care delivery. The European Commission defined the digital transformation as "*a transition in which more health services and processes will be digitalised. The digital transformation encompasses the instrumented effort to meaningfully introduce new digital information and communication technologies and corresponding new processes into the health care sector*[1]".

The use of digital technologies in the health care sector has been increasing in the past years, and the onset of the COVID-19 pandemic has further highlighted the need for digital solutions. Digital technologies can help to better adapt to local conditions and make health systems more person-centred, responsive, resilient, financially and environmentally sustainable.

Digital transformation in health care is key to achieving high-quality patient care at local, regional, and national levels. It can help health care professionals support their clinical decisions, issue electronic prescriptions and use of eHealth, keep track of medical stocks to prevent shortages, access medical records, and facilitate communication with patients through telehealth and mobile apps. In addition, telemedicine and telecare can help ensure continuity of care and facilitate the management of chronic conditions. Digital technologies can also be employed to collect and generate real world evidence, which can subsequently be used to draw evidence-based health policies and identify best practices. Lastly, digital tools also empower patients to take their health in their own hands.

An important aspect of the digital transition is the need to train the health workforce that targets mitigating the gap between required skills and digital technologies. Health care professionals' education and training should incorporate digital tools, enhancing their digital and technical competencies and increase their awareness regarding the use of digital skills.

Policy context

The policy discussion on the digital transformation started in 2018 with the Communication 'Enabling the digital transformation of health and care in the Digital Single Market: empowering citizens and building a healthier society' by

[1] Pita-Barros, P., Bourek, A., Brouwer, W., & Lehtonen, L. (2019). Assessing the impact of digital transformation of health services. Report of the Expert Panel on effective ways of investing in Health

the European Commission. This Communication outlined three steps: access to data across borders; use of data for research and personalised care; and empowering citizens to use technologies and share their data.

During her first presidency, Ursula Von der Leyen made the green and digital transitions a top priority. In 2020, the European Commission published its Digital Strategy for 2020-2025, which included a white paper on artificial intelligence, a European strategy for data, and the digital strategy. This laid the foundations for the third step, namely the European Health Data Space. On 3 May 2022, the European Commission put forward a proposal for a regulation on a European Health Data Space, with the aim to reconcile the regulation on the primary use of the health data by citizens and health care professionals and secondary use by researchers, innovators and policymakers. The EHDS will thus allow to collect and use a large amount of high-quality, standardised real-world health data to develop new treatments, provide personalised medicines, and inform decision-making.

The Digital Europe Programme (2021-2027) is a 7.5 billion EU-funding programme supporting projects in supercomputing, artificial intelligence, cybersecurity, advanced digital skills, and use of digital technologies. The European Health and Digital Executive Agency (HaDEA) is responsible for actions to advance digital skills by creating education programmes focusing on these areas and upskilling the current workforce. The aim of this funding programme is to drive the digital transformation in Europe and foster European Data Spaces in each sector. For health, this will mean creating an interoperable data system and governance bringing together the currently fragmented data from both the public and private sector. Digitalisation is also supported through other funding instruments such as the Connecting Europe Facility, InvestEU, Erasmus+, and Horizon Europe.

Relation to health management

While increased adoption of digital innovation is essential, it is people who drive change towards an inclusive and sustainable data-driven digital transformation. Health managers play a key role in guiding the digital transformation by ensuring that digital tools serve patients and health providers. They support the digital transformation of health care systems with the integration of interoperable data systems that drive innovation readiness and data maturity, while addressing the digital determinants of health to increase patient satisfaction. Most importantly, health managers will need to ensure that technological solutions are implemented in an inclusive, co-designed, efficient and effective way, including providing the necessary skills and training to health professionals. Since data is an important aspect of the digital transformation, health managers' role also consists of enabling access to data, as well as safeguarding security and privacy. Finally, the digitalisation of health care is not only a precious tool for health managers to overcome the fragmentation between care services but also a precondition to progress towards integrated care using an evidence-based research approach.

Our position

Benefits

- The use of digital solutions improves the availability, accessibility, acceptability, and quality of the care delivered. Patients can access services from a distance and easily communicate with a health professional. Moreover, digital health solutions have shown to be cost-effective options and can improve patient safety processes.
- Integrated IT solutions and data into existing health and social care pathways could help health professionals make the best use of digital solutions to deliver better outcomes.
- The health and care sector is becoming more and more regulated, mainly for patient safety and security reasons. Therefore, health professionals should understand and cope with regulations alongside the technological complexity of tools.
- The digital skill set of health professionals could effectively tackle the rise of chronic conditions, such as diabetes and heart disease, and associated NCDs behavioral/lifestyle risk factors among the elderly.
- Digital solutions and AI can be employed for managing medical records and data, thus saving time for health care professionals, especially nurses, who are currently spending around 25% of their time on administrative tasks. AI will, however, never replace physicians, but instead will give them more time to focus on patients and on co-creating practices relying on human skills. In the future, the high specialisation of professionals will be increasingly driven by the use of AI and advanced digital tools.
- AI and digital health solutions could address unmet needs and shortcomings in care by advanced training and by developing systems and algorithms that could provide personalised care.
- Leveraging technology can help prevent the disposal of undistributed medications, facilitate transparency in the supply and demand of medicines, monitor prescription behaviors, and improve medication adherence.
- It is important to limit the environmental impact of technologies that are used in care settings and ensure that digital solutions are not harming the environment.

Requirements

- There is a need for health workers with a high level of digital skills to make optimal use of the opportunities that digital technologies have to offer. To achieve this, countries must ensure that proper digital health education and trainings are available for health care professionals to develop the skills, trust, knowledge, and acceptance needed to use AI and to increase digital health literacy for patients.
- Health care professionals should be involved when developing health technology and training programmes.

- The data used in AI technologies must be accessible, transparent, and ethical. To build trust in AI, it is crucial to invest in research, design, and testing of ethical, transparent, and safe technologies, guarantee the quality of the data, raise awareness and knowledge about AI and how it works, and ensuring that liability regimes are in place.
- Digitalisation will only be successful and harmonised if all stakeholders are able to capture total value through: (1) improvements in quality of and access to care, (2) reimbursement regulation, (3) network-based organisational benefits such as efficiency gains, learning, or knowledge transfer, and (4) legitimacy gains resulting from institutional isomorphism.

Digitalisation for better medication management

- Medication in hospitals is the highest spending chapter, after human resources, for health budgets according to Organisation for Economic Co-operation and Development. The lack of digitalisation of medication management in EU hospitals makes it a significant weakness for EU health care systems.
- 15% of hospital activity and expenditure is associated with patient harm and one person per million dies every day from a medication error costing the EU approximately to €43 billion and up to 3% of national health care budgets, increasing health service consumption, extending hospital admissions and contributing to work-related stress and burnout. Where closed loop medication management systems are available, medication errors decrease and workforce satisfaction and efficiency increases.
- Up to 70% of resources are wasted in any country due to poor drug management systems. An annual cost of 22.22€ per hospital bed from expired medication is associated with manual medication management. Digital tools and advanced logistic systems are required to provide accurate quantification of stock supply and information on consumption data and prescription patterns to reduce waste, make cost savings and achieve efficiency in health systems.
- Medicines shortages are at crisis level. Addressing shortages requires real-time information to better manage shortages and provide greater transparency along the supply chain. Digital tools can prevent and improve management of medicine shortages and provide accurate and real-time data to support the reallocation of medicines.
- Data on medication prescribed and dispensed/administrated to patients in hospitals are key to monitoring and evaluating treatments performance and for the delivery of trustworthy, efficient, personalised health care. Hospitals can save up to 15% on their budgets with better use of health information.
- Poorly designed health information systems are a leading contributor to increasing burnout rates within the health care profession. When implementing new digital systems, cultures of safety should be created ensuring benefits from new digital systems are maximised and safe

working environments are created. Consultation and co-design with health care professionals are essential to ensure the sustainable, effective, adoption and positive impact of digital medicine management platforms.

- Inappropriate antimicrobial consumption and prescribing may reach 90% and 75% respectively in hospitals and long-term care facilities and up to 96% of antibiotic prescriptions are given to residents without testing, which exacerbates the threat of Antimicrobial Resistance. The implementation and scale-up of digital tools and electronic medication management systems in health care facilities and antimicrobial stewardship programs can improve the prudent use of antibiotic prescriptions and reduce antibiotic consumption.

Challenges / issues

- A digital gap remains between those that can and cannot use AI, leading to inequalities. To close this gap and leave no citizen behind, countries need to invest in improving the digital literacy of their population. The digital transformation of health care services must be framed in the guiding principles of Universal Health Coverage.
- Implementation, use, and training on new digital systems and tools must be considered in conjunction with human factors. Investments and focus on improvement of professionals' overall digital literacy and skills will accelerate the adoption of digital technology.
- Currently, there is insufficient evidence to assess the cost-effectiveness of AI.
- There is insufficient availability of hardware and software to support the digital transition with evidence of regional inequities in levels of digitalisation and the availability of digital systems. The widespread availability of interoperable digital tools can support health care professionals deliver on global, European and national policy priorities to address unmet medical need, enhance patient safety, and ensure the availability and sustainability of medicines.
- Digital tools can connect and serve both patients and health care professionals, but medicine should not lose sight of the social and human element in favour of digitalisation.
- Where hardware is available, it is often siloed from the wider health care system and issues concerning interoperability in health care systems exist. Upscaling health care's IT systems is necessary to support European objectives related to the share patients' data to contribute to research and development for evidence-based decision making.
- Gaps in the digitalisation of health care systems contribute to health inequalities, impact care quality of patient groups and exacerbate poor health care outcomes for high-risk patient groups with serious, complex conditions.
- Medication data generation, collection, standardisation, and interoperability of patient-generated health data are critical for the delivery of personalised health care and is a vital component for the

implementation of AI; however, with the existing low levels of digitalisation, it is not possible to generate continuous data.

- Improved efficiency of health care services and patient care relies on integrated and interoperable data according to the EHDS. This objective is impeded by existing silos in IT systems within health services.

Related EHMA activities

- **DISH** [2018-2022]: aimed to bridge the gap between the progressive digitalisation of the health care sector and the lack of eHealth and innovation skills among health and social care professionals.
- **EUVECA** [2022-2026]: aims at creating Regional Vocational Excellence Hubs in 7 European regions and providing digital skills to the health care workforce.
- **BeWell** [2022-2026]: will develop a green and digital strategy for the health ecosystem that will be implemented at a local, regional, national and European level through the Pact for Skills.
- **AMR-EDUCare** [2023–2025]: targets the prevention and reduction of antimicrobial resistance's health burden by filling educational gaps on AMR for both clinical and non-clinical professionals.
- **TRANSiTION** [2023-2024]: aims to create a new state-of-the-art education and training programme for cancer health care professionals and non-clinical professionals, focusing on the acquisition of digital skills.
- **XpanDH** [2023-2024]: aims at mobilising and building capacity in individuals and organisations to create, adapt and explore purposeful use of interoperable digital health solutions based on a shared adoption of the European Electronic Health Records Exchange format across Europe.
- **White paper 'Digital Medication management in health care settings'** [2022]: outlines the Alliance for the Digitalisation of Medication Management in European Hospitals' calls for action to scale up the implementation of digital medication management systems in hospitals.
- **White paper 'Strengthening the European vaccine ecosystem: managing the digital transformation'** [2022]: highlights ways that the digital transformation impacts on the European vaccine ecosystem and presents several recommendations for policy makers and health managers to successfully manage this transformation at local, national, and international levels.
- **European Health Policy Platform Stakeholder Network on 'Profiling and training the health workforce of the future'** [2021-2023]: built on the previous Thematic Network (2020-2021) and explored practice around the evolving skills required of the EU's health workforce.

1.4. Health care workforce

Demographic change and the rising prevalence of chronic conditions are just some of the trends that impact significantly the demand for health services and determine the skill needs of health care professionals. The COVID-19 pandemic has highlighted the centrality of the health care workforce in the resilience and sustainability of health systems. Any transformation of health systems to make them resilient and innovative, while ensuring patients' safety and quality of care, must start with health care professionals, their educations and continuous learning. While the demand for more and specialised health care professionals is increasing, Europe is experiencing shortages. Common issues amongst European countries include staff recruitment and retention, mobility and migration of health care professionals, the ageing health care workforce, health care workforce planning and workload optimisation.

EHMA applies a broad and inclusive definition of 'health care workforce' that covers all professionals in the health services, public health and related areas, and workers who provide support to these activities.

Policy context

In 2017, in an endeavour to encourage activities in health care workforce planning, the European Commission established the 'Support for the health workforce planning and forecasting expert network' (SEPEN) that aims to share expertise and knowledge on enhancing health care workforce by developing a network, mapping relevant policies in all EU countries and providing support to workforce planning.

In 2016, the European Commission expressed their interest in supporting the European workforce and presented a European Skills Agenda to tackle the skills challenges. One of the key initiatives of the 2016 skills agenda was the Blueprint for Sectoral Cooperation on Skills. Under the Blueprint, key stakeholders within an industrial sector form an alliance to develop and implement strategies to address skill gaps in their sector at a national and regional level. In 2020, building on the European Digital Strategy, the Industrial and Small and Medium Enterprise Strategy, the Recovery Plan for Europe, the increased support for youth employment, the European Green Deal, the European Pillar of Social Rights, and the lessons learnt during the COVID-19 pandemic, the European Commission has developed a new European Skills Agenda, building on the 2016 Skills Agenda. The first flagship activity under the 2020 European Skills Agenda is the development of sustainable cooperation and large-scale European partnerships through the Pact for Skills to facilitate concrete actions towards the upskilling and re-skilling of the European workforce in key industrial ecosystems.

Relation to health management

The evolving societal changes have underpinned the need to upskill and reskill the health care workforce. The health workforce needs adequate guidance to respond to their duties and perform their tasks. Therefore, health

management is a key driver to address the skill-gaps and comprehend the skill-needs of health professionals. Appropriate levels of health management could encourage the upskilling and reskilling of the health workforce in a way that fits better their needs and competencies. Health managers should ensure that health professionals are equipped with the right set of skills to respond to current and future challenges of the socio-economic context, including the green and digital transitions.

Our position

- The evolving and increasing needs of citizens, the digitalisation of health services, as well as the move towards more co-creation of health and care with patients, are calling for a realignment of the health workforce, development of new skills – including digital skills – revamping of training and education programs, as well as a new approach to workforce planning.
- Future health systems depend on people, and resilient systems depend on resilient leaders. Investing in the future of health systems requires investing in the health workforce of the future. To increase retention rates, it is crucial for health systems to invest in and protect their existing health workforce, while providing incentives to increase recruitment of new generations of health professionals.
- The priority areas where digital transformation could be applied are strengthening primary care; the health workforce digital skills; digital mental health services for the public and the health workforce; and data governance.
- The health workforce should be engaged in developing education and training programmes and in monitoring, implementing and evaluating the evolution of their own performance. Digital skills and competencies should be integrated into health professionals' education and training programmes.
- Health professionals should be provided with certified training in interdisciplinary management skills and foster coping and wellbeing skills. Training in mental health could increase the mental health literacy of the health workforce.
- Health workforce planners need to estimate the future. They need to focus on the importance and significance of digital transformation and telemedicine as well as the necessary technical development in the health workforce, since digital transformation and telemedicine are supporting tools for harmonised health care throughout Europe.
- European countries have increasingly been recognising the importance of green and digital solutions and adopting them. These transformations have created unprecedented needs to update the training of the future European workforce while upskilling and re-skilling the current workforce to meet the demands of the transitioning society.
- Properly implemented, upskilling and reskilling initiatives will increase the attractiveness of the health sector, thereby helping to retain existing workers and recruit new ones to mitigate current workforce shortages.

These initiatives should also support the shift towards a health-promoting and person-centred sector, able to adapt quickly to emerging challenges and provide professionals with resources that will help them to reduce their workload and stress levels, while guaranteeing effective patient care.

Challenges / issues

- Data about the real needs of the health workforce are still limited. Most of the existing literature delves into specific areas of the sector. As a result, there are missing fields about the real needs of the health workforce such as skills mismatches, that are not being addressed.
- The health workforce should be engaged in designing education and training programmes. The ever-evolving societal contexts create room for new skills for health professionals to cope with future challenges. However, the uptake of skills needed produces gaps between the education and training of health professionals. The voice of the health workforce should be heard and incorporated into the training programmes.

Related EHMA activities

- **DISH** [2018-2022]: aimed to bridge the gap between the progressive digitalisation of the health care sector and the lack of eHealth and innovation skills among health and social care professionals.
- **iRaise** [2021]: was a hands-on training programme for professionals from health care organisations promoting innovation to boost demand-driven, effective and sustainable adoption of innovative digital solutions.
- **EUVECA** [2022-2026]: aims at creating Regional Vocational Excellence Hubs in 7 European regions and providing digital skills to the health care workforce.
- **BeWell** [2022-2026]: will develop a green and digital strategy for the health ecosystem that will be implemented at a local, regional, national and European level through the Pact for Skills.
- **European Health Policy Platform Stakeholder Network on 'Profiling and training the health workforce of the future'** [2021-2023]: built on the previous Thematic Network (2020-2021) and explored practice around the evolving skills required of the EU's health workforce.

1.5. One Health

'One Health' is an integrated and unifying approach that recognises that the health of people is closely connected to the health of animals and environment. In fact, our personal health depends very much on a healthy planet. The COVID-19 pandemic further underlined the interconnection between human health, animal health and healthy environments. In fact,

limiting people's exposure to potentially harmful biological, chemical, or physical agents in the environment protects their health and wellbeing, and reduces the emergence of future pandemics.

While climate change and environmental degradation are likely to increase the probability of repeated public health shocks, the involvement of the health sector has been limited in the activities to reduce the ecological footprint of its activities. There is therefore an urgent need for health systems to promote a green recovery from the COVID-19 pandemic and increase their resilience. Moreover, with the percentage of the population living in cities increasing, we must also ask ourselves how to design urban areas that are conductive to good health in which current and future generations can thrive.

Policy context

At the European level, environmental sustainability is high on the agenda of policy debates. During her first presidency, Ursula Von der Leyen has made the green and digital transitions one of the European Commission's top priorities. To lead on the green transition, the EU has adopted and launched several initiatives to counteract the world's escalating environmental crisis. In 2020, the European Commission launched its European Green Deal, a package of policy initiatives forming part of the EU strategy to reach climate neutrality by 2050. In addition, the European Commission launched its Pharmaceutical Strategy for Europe in November 2020 aimed at ensuring safe and quality medicines, while boosting the sector's competitiveness. The Pharmaceutical Strategy includes an environmental sustainability angle, as it aims to reduce the impact of pharmaceutical components and their residues on the environment and encourages pharmaceutical industries to commit to climate neutrality.

At a global level, the United Nations adopted the 2030 Agenda for Sustainable Development in 2015. The agenda contains 17 Sustainable Development Goals focused, amongst other, on good health and wellbeing, clean water and sanitation, and climate action. References to One Health are multiple in international and European health fora, such as G7[2], G20[3], and the World Health Assembly. Within the United Nations system, the Food and Agriculture Organisation (FAO), the UN Environment Programme (UNEP), the World Health Organization (WHO), and the World Organisation for Animal Health (WOAH) joined forces in November 2020 and established the One Health High-Level Expert Panel. Due to the lack of agreement around the meaning of One Health, the Panel focused its effort in elaborating a common accepted definition of the concept[4].

[2] *G7. (2021). Carbis Bay health declaration. Council of the European Union.* https://www.consilium.europa.eu/media/50362/g7-carbis-bay-health-declaration-pdf-389kb-4-pages.pdf

[3] G20. (2021). *The Rome Declaration* .Global Health Summit. https://global-health-summit.europa.eu/system/files/2021-05/GHS_The%20Rome%20Declaration.pdf

[4] Adisasmito, W. B., Almuhairi, S., Behravesh, C. B., Bilivogui, P., Bukachi, S. A., Casas, N., & Zhou, L. (2022). *One Health: A new definition for a sustainable and healthy future*. PLoS Pathogens. 18(6), e1010537

Historically, One Health has been strictly connected with AMR. In June 2017, the European Commission adopted the EU One Health Action Plan against AMR. The Action Plan aims to make the EU a best practice region in tackling AMR, boost research, development, and innovation, and shape the global agenda. The European Commission also chairs the EU AMR One-Health Network, which membership is composed of governments representatives that share updates about national action plans, strategies, and best practices to better coordinate the implementation of One Health. In October 2022, the European Commission renewed the structure of the Directorate General for Health and Food Safely (DG SANTE). The new organigramme is a clear indicator of the priority importance that One Health gained in the EU political agenda, with the creation of a new One Health Directorate, prominently dealing with AMR.

Relation to health management

Health management happens inside but also outside of care settings, and health managers are key to build synergies with other related policy and societal areas in line with a 'One Health' concept. Health managers can play an important role in working towards more environmentally friendly health care by collaborating with other sectors to promote greener policies, ensuring the implementation of health in all policies, and encouraging the adoption of environmental-friendly measures that lead to health benefits for the population. Having the goal of carbon neutrality in mind, health managers must learn and adopt best practices to establish the sustainability of processes such as procurement, logistic organisation, stock management and waste management. This will help protect and preserve the environment and human health and ensure that the right processes are in place to face the upcoming climate crisis.

Our position

Environmental sustainability

- Climate change and health care are interlinked in a circular motion: climate change is not only fuelled by the large amounts of carbon emissions produced by health care services and devices, but it also causes people to develop illnesses.
- There is a need to implement circular economy in health care by moving away from a linear 'take-make-use-dispose' economic model. This requires not only retaining value in products by designing for disassembly, reparability, recoverability or creating new business models, but it also requires a new mindset in organisations implementing these products and services.
- Value chain needs to be created nationally and globally to tackle the lack of hospital plastics recycling.
- Antimicrobial resistance does not only involve the health sector but also the agricultural sector, clean water and sanitation. Therefore, investing in health promotion and literacy can empower patients to prevent the misuse of antibiotics.

- Although the legislative measures do not directly impact health managers, they can make changes in their individual practices, including paying attention to sustainable procurement.
- Some examples of measures to be adopted by health systems and organisations to be more environmentally-friendly and where health managers have a key role to play are decreasing the energy consumption; improving supply chain and adopting environmental-friendly procurement processes; reducing reliance on fossil fuels and other dirty energy sources; implementing comprehensive waste management policies to reduce the use and waste of polluting materials and products; decreasing the use of toxic and potentially carcinogenic chemicals in disinfectants, surfaces and instruments; and reducing food waste in hospitals and other health care facilities.
- It is key to adopt a multistakeholder approach to reduce the environmental impact of medicines across their lifecycle by establishing shared responsibility among all actors and having clear governance structures in place.
- Technology can be leveraged to prevent disposal of undistributed medications, facilitate transparency in the supply and demand of medicines, monitor prescription behaviours, and improve medication adherence.
- Higher environmental health literacy in physicians, patients, and consumers of self-care products can help influencing medication-taking behaviours, reducing over-prescription, and enhancing physician-patient communication.
- Centralising processes in procurement, supply chain, and logistics can favour the purchase of medicines with low environmental impact where medicines are interchangeable; create a market demand for environmentally friendly health care products and services; reduce medicine stockpiling; and manage internal waste such as solid waste and wastewater.

Urban health

- Blue and green spaces have beneficial and restorative effects on mental and physical health. Public health benefits should be taken into consideration in urban planning and urban infrastructure.
- Successful salutogenic urban design needs effective multi-stakeholder collaboration between public health experts, policy and decision makers, city users, architects, and urban planners.

Challenges / issues

- Data on the impact of health care on the environment is still limited. There is therefore a need to incentivise standardised data collection at European level about emissions from greenhouse gases, wastewater, and solid waste related to the health and care sectors and more concretely to medicines and medical equipment

Related EHMA activities

- **EcoQUIP+** [2020-2023]: aimed to improve the sustainability of health care through innovation procurement by developing the pro-innovation capability of six individual partner hospitals. A specific webinar on procurement and environmental sustainability was organised as part of EcoQUIP+ webinar series for health managers.
- **HEART** [2021-2025]: aims to improve urban health and reduce health disparities through an innovative urban planning methodology that embraces and promotes proper Blue-Green-based technologies with techniques for changing individual citizens' behaviour.
- **BeWell** [2022-2026]: will develop a green and digital strategy for the health ecosystem that will be implemented at local, regional, national, and European level through the Pact for Skills.
- **White Paper 'Reducing the environmental impact of medicines from procurement to disposal'** [2022]: outlines strategies that health managers can implement to reduce the environmental impact of medicines at the various stages of the medicine's lifecycle

1.6. Economy, financing, and procurement

Health is a public good and is key to both security and the economy. Likewise, funding for prevention, health systems, innovation and health professionals is beneficial for the economy. The World Health Organization defines health financing as a "*core function of health systems that can enable progress towards Universal Health Coverage (UHC) by improving effective service coverage and financial protection*". Three of the major models of health care financing are private insurance sources; mutualistic systems; and the universalistic model. Normally, health systems apply a mix of these three models.

In a globalised environment, logistic operations and procurement are vital elements of effective health systems who are faced with increased expenditures. They can also help reduce time, avoid resources waste, and ensure availability of supplies. In fact, procurement of medical materials has – in the light of the recent COVID-19 pandemic – proven to be crucial to ensure the functioning of health systems. Procurement is a powerful tool that can be used to improve the operation of hospitals, improve the working conditions of staff members, and most importantly, contribute to better health outcomes for patients. Smartly used procurement can result in more health for less money.

Policy context

Health economy and financing are critically interlinked with systems' preparedness, response, and sustainability. The WHO guidelines for health financing support countries progressing towards the Sustainable

Development Goals and UHC. Additionally, WHO Europe helps member countries to improve their health financial models. WHO has a direct role to play to fulfil its mission on procurement; the WHO Procurement Report provides an annual overview.

At the EU level, an Expert Panel on effective ways of investing in health was appointed in 2019. The Expert Panel aims to provide independent advice on effective, accessible and resilient health systems. The EU4Health Programme 2021-2027 was adopted by the European Commission to respond to the COVID-19 crisis and better prepare European health systems to future health threats. One of the key objectives of the Programme is to strengthen health systems, thus enhancing their resilience and contributing to the overall objectives of the Recovery and Resilience Facility (RRF). During the State of the European Union Address (SOTEU) 2021, the Health Emergency Preparedness and Response Authority (HERA) was launched. HERA will act in two ways: preparedness and emergency response. In times of crisis, the newly established organisation will activate emergency funding and monitor, procure, and purchase medical countermeasures and raw materials.

Relation to health management

Health systems face challenges at various levels. In a globalised environment, logistic operations and procurement are vital elements of effective health systems which are faced with increased expenditures. Adopting lean management can positively impact effectiveness of various processes and aid in the containment of expenditures whilst not compromising quality and value. Regarding procurement, health managers can use it strategically to deliver better health care services and contribute to achieving the hospital's objective by building competencies and resources. Procurement can also be used to bring about more environmental sustainability in the health care sector.

Our position

Economy

- Care, in all its forms, is a vital part of citizens' lives and a country's economy, despite difficulties to measure its economic impact. In the long term, a lack of care infrastructures or dysfunctional care systems could seriously hamper the European economic recovery.
- Wellbeing is not only a necessary cost, but a sound economic investment for future generations. Measuring wellbeing and going beyond solely using GDP is beneficial for the economy.

Financing

- Depending on the specific mix of combined funding mechanisms, hybrid financing models differently impact on the system's sustainability and resilience.
- To assess the value produced following allocation of resources, it is important to not only assess the financing towards hospitals and health

providers, but also consider investments made by private manufacturers, pharma, devices industry, technology providers.

- To improve sustainability and resilience, value-based payment models prove to be helpful. This type of payment model can be experimented in relatively simple contexts, such as innovative drugs and then scaled-up to other areas of care.
- It is importance to prioritise policies, regulations, and financial structures to improve continuity of care by applying available tools to analyse and improve health systems to long-term care settings.

Procurement

- Procurement can lead the way towards innovation, secure supply chain and sustainability.
- Joint purchasing by both health care providers and health insurers can lead to increased purchasing power and thereby reduce the financial burden. This is particularly relevant to safeguard equitable access to medication, as the consumption of expensive medicine has increased and has negative impact on health care budgets globally.
- Considering patients' values and better outcomes for patients is what should guide the procurement of goods and services. Focusing on outcomes will also contribute to shifting the way economy functions in the long run.
- Value-based procurement refers to moving away from lowest price purchasing and seeking short-term cost savings to thinking about long-term efficiency, sustainability, and effectiveness. Value-based procurement requires strategic alignment with suppliers to deliver better outcomes both from an organisational and patients' perspective.
- Key enablers to implement value-based procurement within a given health setting include a good leader, a supportive board of directors, the involvement of a multi-disciplinary team and co-creation processes between the supply and demand sides.
- Procurement and supplier innovation play a vital role in driving emission reductions to net zero.

Challenges / issues

- Long-term care facilities suffer from structural underfinancing contributing to insufficient human resources, unsafe, costly care and unattractive work environments. Long-term care needs can only be accommodated by integrating long-term care delivery with universal health coverage, while focussing on reducing fragmentation and increasing coordination. This cost-effective strategy, requiring 1-2% of GDP, would be relatively inexpensive compared to current total health care spending.
- Shifting to value-based procurement in the health sector requires making the process more attractive to professionals and training senior managers already on the job. Value-based procurement requires significant skills set, including collaboration and co-creation with

suppliers and effective communication with patients to determine what 'value' means for them.

Related EHMA activities

- **EcoQUIP+** [2020-2023]: aimed to improve the sustainability of health care through innovation procurement, by developing the pro-innovation capability of six individual partner hospitals.
- **Preventable** [2022-2025]: aims to estimate the cost-benefit of risk-reduction interventions in Rare Tumour Risk Syndromes (RTRS).
- **AP4HE Economy Working Group Paper 'Strengthening the link between well-being and the economy: the key to a successful and sustainable European Care Strategy'** [2022]: provides recommendations to reach sustainable long-term care in the context of the European Care Strategy.

1.7. Person-centred care

Person-centred care focuses on the individual's needs and empowers people to take charge of their own health, rather than being passive recipients of services. By prioritising the perspective of the individual, person-centred care offers solutions to challenges that particularly affect patients with chronic or multimorbid conditions, such as a disease-focused approach, the loss of patient information in the continuum of care, disrupted care pathways, and treatment fragmentation. Person-centred care means treating people with dignity and respect, providing coordinated care, offering personalised care and enabling people to recognise their strength and abilities for an independent life.

It consists in asking about what matters to patients, providers, organisations, and systems but always ensuring that patients are the final judges of value. Patients are thus fully involved in the decision-making, planning, development, and monitoring of their care. Rather than just being empowered, patients co-create and co-deliver their care according to their own wants and needs. Both integrated care and value-based health care are ways to move away from health care providers as decision makers to providers as health advisers. Instead of patients engaging in the health system, it is the health systems that engage with patients.

While person-centred care and patient-centred care are often used interchangeably, person-centred care goes beyond an individual seeking health care and extends the concept of patient-centred care to individuals, families, communities, and society. Attention is thus given to the health of people in their communities and their role in shaping health policy and health services.

Policy context

In 2016, the 69th World Health Assembly adopted a Framework on integrated people-centred health services. The Framework calls for a fundamental change in the way health services are funded, managed and delivered, by shifting the focus from around diseases and health institutions towards people, and supporting the process towards UHC.

Relation to health management

With changes in health care and populations, the search continues for the best ways to improve patient health and wellbeing. Health managers can lead a transformative organisational process and facilitate the implementation of person-centred care by designing health services with patients and around the patient specific needs and experience. Managers can facilitate the paradigm shift from a diseases-focused approach to care to a holistic treatment of people's wellbeing, moving the focus from the hospital's needs to the patient's perspective.

Our position

A tailored approach

- Health care needs to move from a one-size-fits-all approach to an individual and tailored approach by moving away from a traditional health care system pathway.
- Patient-centred care is a viable and holistic approach towards patient care. By putting a patient at the centre and involving the patient in the decision-making, planning, developing, and monitoring their care, the patient satisfaction and value can be enhanced while their health needs are met.
- Patient-centred care is about transforming the role of patients from a passive recipient to an active individual, with knowledge and decision-making power about their health condition.
- Patient-centred care, personalised diagnostic and treatment can improve care outcome and enhance patients' quality of life. In addition, it improves the patient experience and reach the goals of efficiency, effectiveness and quality of the care and treatment.

Role of health professionals

- Often, practitioners focus on patient-related outcomes measures and studies show that there is a big gap between what patients want and what doctors think they want. Therefore, there is a need for practitioners listen to patients and include them in the designing of their treatment plan. A focus on organising relationships and networks around patients is important.
- Only structured, patient-centred thinking can contribute to improvements in the patient experience and reach goals of efficiency, effectiveness, and quality for patients.

- Fragmented and discontinuous care particularly impacts the experience of patients with multiple and complex health needs, making the traditional care pathway inappropriate and requiring a paradigm shift. A solution is the adoption of integrated and person-centred care models which recognise and identify the needs, preferences, and values of every individual.
- Some of the methods to ensure that patients' needs and preferences are being met can be to change current health practices; develop new measurements to capture patient preferences; be more interested in population health; adjust payment mechanisms; align regulation and non-financial incentives; as well as develop different approaches to strategic purchasing to help support these actions.
- Directors should expand their focus beyond the hospital's needs to include the patient's perspective in their decision-making. A hospital manager should be aware of how patients experience the hospital's workflow.

Transformation

- Patient-centred care is about transforming the role of patients from a passive recipient to an active individual, with knowledge and decision-making power about their health condition.
- To implement sustainable reforms, patient involvement is key in ensuring that the right changes are implemented. Moving from patient empowerment to co-creation and co-delivery can ensure that patients are treated correctly and are content with the treatment they receive.
- The emergence of new treatments changes the traditional roles and responsibilities of health care providers. Co-designing care pathways together with patients is crucial to successfully re-organise care.
- Primary care delivery can be improved through personalising medicine, understanding the needs of under-recognised segments of the population and bold political decisions which allow fast and effective reforms.
- Digital health is a necessary tool to deliver and to adopt person-centred and integrated care. This would allow a more effective and adaptable implementation of health care technologies. Thus, it is important to invest in training and tools that help health care professionals adopt patient-centred approaches.

Challenges / issues

- The partnership between health care professionals and patients is central to the person-centred shift in care delivery model and calls for health professionals and clinical leaders to bring the typical levels of a business model into the health care sector. This is already widely implemented at the organisation level but must also occur at the professional level.

- Patient engagement should start with co-creation. Health managers should incrementally start engaging patients by using the tools and different frameworks that do exist.
- Better methods are needed to translate the patient's voice and implement it into both policymaking and care pathways, instead of treating it as a box-ticking exercise.
- The future for leadership will involve the introduction of soft skills to fully implement an integrated, person-centred health care systems.
- Incorporating patient-centred care into value-based health care can lead to tensions as health care systems need to change and adapt their current workflow and must consider limited resources.
- While patients are moving between different health care providers, the data rarely connects. Making use of the latest technology – such as blockchain-based solutions – can facilitate the sharing of patients' data and help care providers make informed clinical decisions. Ensuring patients' ownership over their data and how it is shared remains nevertheless the priority.

Related EHMA activities

- **Multi-Act** [2018-2021]: aimed to increase the impact of health research on people with brain diseases.
- **COVIRNA** [2020-2022]: aimed to generate a diagnostic test based on cardiovascular RNA biomarkers that can identify COVID-19 patients at risk of developing fatal cardiovascular complications.
- **REBECCA** [2021 – 2025]: aims to tap into the potential of Real-World Data to support clinical research and to improve post-treatment in breast cancer.
- **Executive Workshop 'Building a health care system one individual at a time'** (The many avenues of Health Management) [2022]: provided knowledge and skills in personalised medicine and how to best improve the patient experience.
- **European Health Policy Platform Stakeholder Network on 'Profiling and training the health workforce of the future'** [2021-2023]: built on the previous Thematic Network (2020-2021) and aimed to propose essentials skills such as soft skills that could help health professionals to improve their relationships with patients and engage them in co-creating their care pathways.

1.8. Value-based health care

Value-based health care (VBHC) is the paradigm re-shaping health care today that promotes the shift in focus from services to outcomes. The paradigm of VBHC was developed in 2006 by Porter and Teisberg and helped drawing back attention on the measurement of outcomes. It also contributed to making the necessary changes to structurally and systematically improve

the performance of health systems and organisations. The vision of value-based health care is based on the following key ideas: putting health care needs of people at the centre; provide diagnosis in a multidisciplinary perspective; create networks; improve digital medicine; and collect and analyse data. Adequate measurement of diagnostic and treatment outcomes are key processes from the perspective of the patients. Value-based health care, thus, involves redesigning delivery processes and measuring key value indicators to drive systems and health organisation toward better practices, and ultimately outcomes and patient experiences. Value-based health care can be implemented across different levels, including primary, secondary, and tertiary care.

A value-based health system is organised and resourced to maximise the health outcomes most important for patients and populations, while simultaneously making health care more cost-effective, accessible and resilient. It includes public health, social and long-term care as well as health policy making at the macro level.

Policy context

In 2012, DG SANTE set up an Expert Panel on effective ways of investing in health, an independent group of experts providing non-binding advice on topics related to effective, accessible and resilient health systems. In December 2018 the Commission requested the Expert Panel to draft an opinion on 'defining value in value-based health care', given that there is no single definition and common understanding of what is meant by 'value'. The factsheet[5] produced in July 2019 by the Expert Panel underlined that while value in the context of health is often discussed as 'health outcomes relative to monetised inputs', it is important to adopt a comprehensive understanding of value that goes beyond a purely monetary understanding of the term. The Panel proposed four value-pillars – including allocative, technical, personal, and societal value – to define value-based health care.

Shifting towards value-based health care was also a priority on the 2020 agenda of the G20. To support G20 Member States in their work on value-based health care, the World Health Organization drafted a policy brief entitled 'Building on value-based health care: towards a health system perspective[6]', together with a complementary document 'From value for money to value based health services: a 21st century shift[7]'. Key messages of these briefs included the need to 1) have a shared understanding of value across the entire health system and 2) align the actions of different

[5] Expert Panel on effective ways of investing in health. July 2019. Defining value in 'Value-based healthcare' Factsheet. https://health.ec.europa.eu/publications/defining-value-value-based-healthcare-0_en

[6] World Health Organization. Regional Office for Europe, European Observatory on Health Systems and Policies, Peter C Smith, Anna Sagan, Luigi Siciliani. et al. (2020). Building on value-based health care: towards a health system perspective. World Health Organization. Regional Office for Europe. https://apps.who.int/iris/handle/10665/336134

[7] World Health Organization. (2021). From value for money to value-based health services: a twenty-first century shift: WHO policy brief. World Health Organization. https://apps.who.int/iris/handle/10665/340724.

contributing actors (policymakers, purchasers, providers, practitioners, patients, citizens) to create a value-based health system.

Relation to health management

Health managers implementing value-based health care in their care settings can significantly improve health outcomes while controlling expenses. Health managers are in charge of orchestrating the process of transition from traditional to value-based care (adapting the VBHC concept to the local conditions, design processes and implement), creating the governance model for value-based care in practice, engaging with the patients (facilitating and incentivising co-creation and co-production) and making sure that the patient information is properly channelled into the design of care pathways. Health managers are also responsible for shaping the follow-up processes which result from implementing a value-based health care model (such as reimbursement models for instance).

Our position

Introducing VBHC

- The future of primary care will be more multidisciplinary with better integration, more multiplatform, personalisation will increase, and services will be tailored to the patient. One way to realise value-based health care is by involving patients in decision-making processes in health research and care practice. Involving insiders (scientists, policymakers, industry) and outsiders (care professionals, consumers, patients) is essential to co-create knowledge and will form a new way of working.
- An operational strategy for the implementation of value-based health care is an iterative cycle and involves the definition of key terms; decisions about design, principles and practices; contextual factors, such as an approach to execute medical condition focus; and an adaptation of practices due to approach to execute medical condition focus.
- Value-based health care should focus on organising relationships and networks around patients before focusing on organising the structure. There needs to be a perspective shift from engaging patients in health systems to health systems engaging in patient lives.
- To implement value-based health care, combining top-down and bottom-up approaches is key.
- Patients are the final judges of value, and it is important to ensure that measurements are relevant for them. It is necessary to move beyond outcomes, such as survival and waiting times, and include quality of life and other Patient Reported Outcome Measures (PROMs).
- To successfully introduce VBHC within health care organisations, health care system's leaders and managers have to 1) promote integration among disciplines and build teamwork, 2) consider the patients' perspective, 3) train professionals for both technical and soft skills, 4)

measure and control just significant parameters and align incentives, 5) transform data into management dashboard, and 6) define and frame projects in ways that enable scalability, reproducibility, and feasibility across organisations and stakeholders.

Governance

- The roles of different stakeholders need to be made clearer in the implementation of value-based health care, instead of just giving the responsibility to one player. Different actors have different perspectives and create different aspects of value. Good governance is key for aligning perspectives on value. The role of policymakers is to find the balance that maximises the overall value that the health system creates from the resources at its disposal.
- The entire health system must buy-in to implement value-based health care. It cannot only be done at a local level or within one organisation.

Benefits

- Value-based health care projects can improve the design of care pathways; increased knowledge and standardisation of care; and help learning more about costs, gaining the ability to benchmark and be more efficient.
- Value-based care is an effective vehicle to improve health service efficiency. Creating incentives for health care providers to offer the best care at the lowest cost results in savings in health care costs, patients receiving more value for money, and in an increased patients' quality of care and satisfaction.
- The scientific society should consolidate a strong narrative around the current and possible contribution of laboratories in health systems. Laboratories are not only cost centres, but also offer an opportunity for partnering to create value.
- Value-based payment not only provides incentives for higher quality, but fosters learning and innovation.
- Value-based health care models can lead to quality improvement and to a more rational way of paying providers and should therefore be applied more generally and broadly.
- Co-production can be considered an extensive driver in the improvement of patient satisfaction. Patient involvement can enhance patient's satisfaction and therefore also value.

Relation to other care policies

- Maximising value for patients is at the core of value-based health care. To achieve the best outcomes at the lowest cost, the health care system should move away from a supply-driven system that is organised around what physicians do towards a person-centred system organised around what patients need.
- The value-based approach needs to be combined with a public health approach, meaning population-level segmentation, multi-morbidity patients, people with risk.

- Leadership, the involvement of health care professionals and good IT platforms/digital tools are commonly cited as decisive for a successful implementation of VBHC projects.

Economy and payments

- Value-based health care is dependent on the number of slack resources organisations have and the number of resources to allocate to innovative projects.
- Value-based health care is not necessarily a cost-efficient approach, therefore not necessarily linked to a lean approach. It should allow for value to increase, even if that means increasing cost.
- Compared to a health economics approach, value-based care utilises cost-outcomes information proactively for every single patient; focuses on patient-relevant outcomes; uses outcomes and cost-information for managerial decisions and development; and develops value-based reimbursement methods.
- Conventional payment models are just volume-based and do not differentiate payment between providers based on quality of care. To counter this, one needs to infuse value-based payments in the purchasing policy of insurers.
- Value-based approaches looking at outcomes – both clinical and those mattering to patients – and using PROMs and PREMs will help reduce waste of resources (financial, material and human) by avoiding the provision of unnecessary care, increasing value to systems.
- Value-based health care was suggested to have the following characteristics: patient-related outcome, costs, burden of disease, patient engagement, health technology assessment, prevention instead of treatment, compliance and reliable reimbursement systems.

Challenges / issues

- Defining 'value' is difficult and changes depending on circumstances and people. Not everything that counts can be counted, and not everything that can be counted, actually counts.
- Hospitals often do not implement value-based health care as an integrated management strategy but choose only a few components. This leads to a fragmented value-based health care implementation.
- Studies and reviews show that there is lack of attention to the managerial aspects of valued-based health care since implementation strategies are rarely described and evaluated.
- Although value-based health care has the purpose of making health management more efficient, affordable and meaningful, there is a lot to be done before it can be fully implemented. There are very few examples of value-based health care, and more research into what 'value' means to patients and professionals would be needed.

Related EHMA activities

- **EcoQUIP+** [2020-2023]: aimed to improve the sustainability of health care through innovation procurement, by developing the pro-innovation capability of six individual partner hospitals.
- **Paper 'Making the difference – UNIVANTS' contribution to the outcomes' quest'** [2022]: identifies four examples of outcome-based projects recognised with the UNIVANTS for Healthcare Excellence award.
- EAVH: Value-based Health Care Taxonomy [2022] aims to provide a definition of 14 terms to build a common language that will enable Alliance partners and member organisations to discuss and align on how to implement person-centred, value-based health care at all levels
- **Paper 'UNIVANTS as a driving force for value-based healthcare'** [2022]: outlines the impact that a program such as the UNIVANTS for Healthcare Excellence Award can have on inspiring leaders towards implementing value-based health care.
- **White Paper 'Insights for value-based healthcare'** [2020]: recognises best practices from the 2019 and 2020 UNIVANTS award cycles, fostering scalability, replication and the understanding of each initiative, while promoting adoption by other laboratories and interdisciplinary teams.
- **EAVH publication 'A compass for collaboration: navigating stakeholders' roles in transitioning to value-based healthcare'** [2023]: offers clarity on the roles and contributions which can be taken by stakeholders to accelerate the journey towards developing value-based health systems.
- **EAVH publication 'Talking value: a taxonomy on value-based healthcare'** [2022]: provides a definition of 14 terms to build a common language that will enable Alliance partners and member organisations to discuss and align on how to implement person-centred, value-based health care at all levels and form a basis for discussions both within the community directly involved as well as towards any external stakeholders.
- **Executive workshop 'Value-based primary care'** [2021]: explored how to shift primary care from a sum of services delivered by uncoordinated professionals to a system organised around a clear vision.
- **Executive workshop 'Everybody's business: value-based healthcare'** (The many avenues of Health Management) [2022]: explored how health systems and organisations can drive the value-based revolution and concrete steps to make it happen.

1.9. Integrated care

Integrated care consists of health services that are managed, resourced and delivered so that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease-management, rehabilitation and

palliative care services, coordinated across the different levels and sites of care within and beyond the health sector, and according to their needs throughout the life course. Integrated care is a transactional movement, adopted as a model by WHO in 2016 which consist of ensuring that individuals are receiving continuative health care. Rather than being person- or patient-centred, integrated care is people-centred and thus focuses on population empowerment. Integrated care, involving both formal and informal caregivers, is widely acknowledged to be the way forward in care delivery. In fact, the adaptation of integrated care models yields evident benefits in various areas, including the improvement of patients' and their families' experience of care, and the improvement of population health. Policy context

Since 2009, the World Health Assembly has been calling for integrated care. In 2012, Member States of the WHO European Region supported 'Health 2020', an European policy framework which called for people-centred health systems. In 2015, the WHO launched the 'Global Strategy on people-centred and integrated health services'. Apart from the strategy itself, the document contains good practices, case studies, and evidence-based benefits from the implementation of people-centred and integrated care. The OECD has developed indicators to measure the level of care integration and to compare latest developments across countries.

In September 2022, the European Commission presented the European Care Strategy, a framework to provide quality, affordable and accessible care services and improve conditions for both care providers and care receivers. Additionally, initiatives at the EU level, such as the European Health Data Space, have the potential to contribute and to be the foundation for truly integrated health systems in Europe, by supporting the holistic management of chronic diseases, improving the organisation of health and care, and securing a higher quality of life for patients.

Relation to health management

Health managers should lead the way in integrating care across programs and organisation to provide higher quality care, a better patient experience of the care journey, and potentially save costs. The health managers' role is also to address some of the barriers that make integrated care difficult to implement in practice. These barriers include the inadequate sharing of information due to limited IT infrastructure and connectivity; inadequate time and human resources to launch new integrated care programs; and confusion over 'who is in charge of the patient'. Health managers are also responsible for measuring and evaluating integrated care programmes to adequately capture outcomes and processes.

Our position

- Integrated care is a means to an end, not an end in itself.
- Integrated care aligns with organisational change, and this contributes to its complexity, as one must collaborate with internal and external

partners, across different dimensions, in the daily practice and at system level.

- Integrated care is not only a technical project, but an ongoing interaction between people.
- Implementing new models of integrated care requires a radical transformation of skills and core competences of health workers.
- Integrated care is very contextual. Different people have different expectations and attitudes towards the integration of care.
- Health organisations should design tailored-made, integrated care focusing on patient participation in treatment decision-making.
- Integrated care models lead to the improvement of the experience of care for patients and their families; of population health and reduction of health inequalities for communities; of health care delivery for health care professionals; and of operational efficiency of the health system.
- To optimise integrated care programs, the comprehensive nature of the international WHO framework on integrated people-centred services should be considered from a system level, organisational level, health care provider level, and patient-level perspective. This complexity is reflected in the interaction between all different factors such as the role of older people and their informal caregiver and the establishment of multidisciplinary teams.
- To improve person-centeredness, prevention orientation, safety and efficiency in integrated care for older adults, four design features are relevant: improving user-involvement; improving coordination; empowering the workforce; and safeguarding the dignity of older people at a community level.
- Integrated care pathways lead to higher satisfaction amongst people with complex diseases and benefit the health care system by reducing hospitalisations and emergency room visits.
- The development of integrated care cannot happen without shifting towards a digitalised health care system.
- An orchestrated shift towards integrated care holds the solution to the raise in chronic diseases.

Challenges / issues

- Although many managers might know what they would like to integrate and why integrate, they often do not know how to do it.
- Funding can be a barrier to achieving integrated care. Almost by definition, funding is fragmented. As a result, it limits integrated care at a patient level, because health and social services are organised and financed separately. This is because the focus tends to be on providers rather than on the needs of patients.

Related EHMA projects

- **SUSTAIN** [2015-2019]: aimed to improve integrated care for older people living at home with multiple health and social care needs and ensuring

that improvements to the integrated care initiatives are applicable and adaptable to other health systems and regions in Europe.

- **Special Interest Group on Integrated Care** [2021]: facilitated knowledge exchange amongst health care professionals and researchers in the field of integrated care. It focussed on the implementation of integrated care in health and social care provision, and the evaluation of integrated care programmes.

1.10. Improving access to health care and health equity

Access to health care is an essential objective of health care systems, as it is one of the most important determinants of life expectancy and quality of life. Evidence suggests that health care access is socially biased to the disadvantage of the most vulnerable, which has a negative impact on health inequalities. Facilitating access to health care implies improving the affordability, accessibility, acceptability, availability, and adequacy of care services. Many subgroups of the population still face considerable barriers that impede them from accessing the necessary health care resources. For health systems to respond to ongoing and emerging health challenges, they must therefore first better address existing disparities in access to health services and ensure that they are not exacerbating or creating discrimination that leaves certain population groups behind.

Policy context

The World Health Organization committed to the Sustainable Development Goals, which are anchored to the value of Leave No One Behind. Access to health care and services is crucial for the achievement of Universal Health Coverage. For this purpose and in compliance with the achievement of the SDGs, WHO supports countries by identifying barriers, providing solutions, and fostering a timely access to primary care and health care in general.

European citizens have right to access health care in every EU country; care abroad can be reimbursed by the home country (cross-border health care). In 2021, the European Commission adopted the Strategy for the rights of persons with disabilities 2021-2030. The strategy strives to guarantee sustainable and equal access to health care for people with disabilities, including rehabilitation and prevention.

Tacking inequalities in cancer prevention and care is a key challenge of the Europe's Beating Cancer Plan. To this purpose, the Plan includes the European Cancer Inequalities Register, as one of the flagship initiatives. It collects data around cancer prevention and care and identify disparities and inequalities among EU Member States. The Register focuses on geographical and regional differences, inequalities due to sex and age, inequalities associated with socio-economic factors, and disparities between urban and rural areas.

Access to medical countermeasures relies on resilient supply chains. In the aftermath of the pandemic, the EU took several initiatives aiming at strengthening European supply chains, such as the reinforced mandate of European Medicines Agency and the establishment of HERA. Additionally, a Joint Industrial Cooperation Forum was created to prepare for and prevent future bottlenecks in the supply chain of medical countermeasures. Medical countermeasures need then to be accessible and equally distributed. Since the outbreak of the COVID-19 pandemic, the European Commission has been increasingly using joint procurement agreements, direct procurement, and advance purchase agreements[8].

Relation to health management

Health managers have the power to foster an environment where care is accessible, and equity can flourish. It is crucial to advocate for equity to be high on the European health agenda. Once barriers to access are identified, an organisational transformation of health facilities could facilitate their overcoming. Digital transformation - and specifically the use of eHealth and mHealth - can facilitate access to health care. Nevertheless, gaps in digital health access persist and the COVID-19 pandemic exacerbated them. Health managers could encourage global efforts for digital literacy in health. Additionally, health managers could realise and promote informative resources to raise citizens' awareness on the topic.

Our position

- To successfully increase access to medicines and therapies, multi-stakeholder collaboration is necessary. This includes improving health literacy amongst patients, as well as increasing patient engagement and involvement. It also implies active sharing of good practices amongst the scientific community and intensify the cooperation between health systems.
- Through Universal Health Coverage, it is possible for every citizen to access the health system without suffering severe financial consequences. COVID-19 has shown that UHC increases the resilience of health systems.
- Solutions to improve the access to appropriate treatment includes making technological advances more accessible, expanding digital portability, including by updating current digital infrastructures giving more people the opportunity to participate in health trials and enabling the dissemination of health knowledge.
- Efforts are needed to improve literacy on health rights and access amongst migrants, particularly amongst recent arrivals and undocumented communities.

[8] European Commission (2022), *State of the Health preparedness report*, Brussels, https://health.ec.europa.eu/system/files/2022-11/hera_shp-report-2022_en_0.pdf

- Economic, linguistic, and other barriers to care should be addressed to guarantee an equal access to health, with stronger national budgets dedicated to this.
- To improve health outcomes and reduce avoidable complications, patients need to be co-creators in their disease management plans. This is also strongly in line with value-based health care where the needs of people shall be put at the centre.
- In the aftermath of the COVID-19 crisis, it became crucial for EU Member States to promote citizens' health by guaranteeing that all have access to high-quality, effective and efficient health care systems that increase the quality of life, guarantee long-term economic development, and reduce disability and productivity loss.
- For people who lack access to quality services, hospitals are a true source of hope.

Challenges / issues

- Digital health has been identified as a means to improve access to good quality health care. Its potential is not fully realised, although digital health could improve person-centred health care and help build more resilient health systems.

1.11. Prevention (Immunisation)

Prevention reduces or eliminates the onset, causes, complications, or recurrence of a disease. Several levels are defined: primordial prevention (preventing the emergence of predisposing social and environmental conditions that can lead to causation of disease); primary prevention; secondary prevention; and tertiary prevention to improve function, minimise impact, and delay complications. Vaccination is the main tool for primary prevention of diseases and one of the most cost-effective public health measures available. Patients with chronic diseases are often at high-risk of complications from vaccine-preventable diseases. Even though specific vaccination recommendations often exist in national immunisation programmes, vaccination uptake amongst patients is low.

Policy context

Prevention is a key objective of the European Health Union. The prioritisation of prevention on the EU agenda is part of the legacy of the COVID-19 pandemic. The Regulation on Serious cross-border threats to health as well as the reinforced mandates of the European Centre for Disease Prevention and Control and the European Medicines Agency contribute to improve the EU capacity in disease prevention. Additionally, the Europe's Beating Cancer Plan has a strong preventative potential specifically related to cancer.

The health system stresses applied by the COVID-19 pandemic caused governments across Europe to place a renewed emphasis on strengthening

vaccination systems. Rather than being viewed as one small part of the greater public health toolkit, vaccines became central to public health strategies. This has brought renewed public and political attention to all aspects of vaccine ecosystems, from research and development to procurement, pricing, finance, logistics, administration, and users' acceptance. As European public health recovers from the brunt of the pandemic, that attention is now turning away from systems for COVID-19 vaccines and towards the ecosystem surrounding routine vaccinations that form the foundation of a healthy Europe.

Relation to health management

Health managers can support the implementation of preventative measures at different levels. Policymakers can nudge forward-looking policies that encourage increased investment in prevention. Health care facilities, such as hospitals, should be reorganised to provide more attention to prevention. Health managers can embed preventative measures in value-based health care programmes. Finally, effective health management should educate citizens to prevention and prevent the spread of misinformation.

Additionally, health managers have an outsized role to play in supporting strong vaccine ecosystems across Europe. Through decisions about pricing, procurement, and finance, health managers are responsible for ensuring that there is an adequate supply of vaccinations available to citizens. Health managers are also involved in the critical logistics and supply chain management activities required to provide easy access to vaccination and reduce waste. On top of that, health managers are essential to effective public communication about vaccines and vaccination, directly through planned campaigns and indirectly through a well-trained health workforce. Health managers can promote and ensure equitable access to vaccination programmes for at-risk and vulnerable groups ensuring that preventative health care can reduce pressures in the health system experienced during outbreaks of viral infections.

Our position

- Disease prevention, health promotion and literacy are the neglected part of health systems and must be invested in to empower patients. Investing more in prevention means saving more on treatment in the future, therefore having more funding for more services. There is a need for a forward-looking approach to health funding.
- Vaccination is one of the best ways to prevent disease and protect health. Globally, vaccines are estimated to save between 2 and 3 million lives every year.
- Routine immunisation protects both individuals and their communities. It helps pave the way to achieving Goal 3 of the Sustainable Development Goals: ensuring healthy lives and promoting wellbeing for all, at all ages.

- There is a need to improve capacity for the monitoring of vaccination coverage and the surveillance of emerging pathogens.
- Vaccination is often thought as being for children but should be seen as a need across the overall life course.
- Vaccination has some of the most convincing evidence in terms of public health benefits and cost effectiveness, yet often it has low shares in health investments and seems to also be the usual victim of budget cuts.
- Focusing on savings on vaccines procurement is not effective for the sustainability of the health care prevention services and crisis preparedness. Short-term savings lead to long-term drawbacks.
- Investing more in prevention means saving more on treatment in the future, therefore having more funding for more services. There is a need for a forward-looking approach to vaccines funding with prioritisation inside and outside of health care budgets.
- Creative ways of financing vaccination are required when dealing with challenges that are far beyond the regular vaccination programs.
- Emerging health data systems and networks need to be designed to ensure interoperability of vaccination data across countries.
- There is a need to remove obstacles to vaccination for every person in the European Union.
- It is critical to restore public confidence in vaccination. This starts with effective communication about vaccines and vaccinations from health managers and the health workforce.
- The research and development of new and improved vaccines need to be prioritised.
- Decisions on prioritisation of new pathogens for research and development, regulatory requirements, manufacturing and supply capacity, industrial and technology policies, procurement, pricing policies, forecasting, and stockpiling practices, and financing of vaccination programmes, all impact access to vaccines globally and in each country.

Challenges / issues

- Health systems need to review the low percentage of budgets allocated to prevention efforts. Investment in vaccine research and development is urgently required.
- The barriers and challenges for the uptake of new vaccination programmes need to be identified. Landscape changes are required in health systems to allow new vaccine technologies to be picked up by national vaccine calendars.
- Vaccination efforts need to be evenly distributed across population groups. Unequal access to vaccines as an immunisation measure adds to the widespread, systematic, burden on health systems caused by viral infections.
- The presence of misinformation related to vaccines is a significant issue and has been exacerbated by COVID-19. This issue is not being dealt

with appropriately. Public authorities, universities and health systems need to work together to increase trust in science and address the issue of misinformation on vaccines.

EHMA related activities

- **VAC-PACT** [2019–2021]: aimed to improve the uptake and confidence in vaccines for patients with chronic diseases, families and communities.
- **White Paper 'The health system burden of Respiratory Syncytial Virus (RSV) in Europe'** [2022]: presents evidence-supported, actionable recommendations to build an RSV-resilient and RSV-prepared health system.
- **White Paper 'Strengthening the European vaccine ecosystem: managing digital transformation'** [2022]: seeks to address the role that the ongoing 'digital revolution' in health care will have in shaping the future of Europe's vaccine ecosystem.
- **Overcoming obstacles to vaccination** [2022-2024]: aims to support EU Member States in overcoming obstacles to vaccination of physical, practical, and administrative nature, with the aim of increasing vaccination coverage rates for all routine vaccinations in the EU.
- **Preventable** [2023–2025]: aims to estimate the cost-benefit of risk-reduction interventions in Rare Tumour Risk Syndromes (RTRS).
- **PREVENT** [2023-2027]: aims to improve and upscale primary prevention of cancer by addressing childhood obesity through implementation research.
- **HEART** [2021-2025]: aims to improve urban health and reduce health disparities through an innovative urban planning methodology that embraces and promotes proper Blue-Green-based technologies with techniques for changing individual citizens' behaviour.

2. Medical and disease-related topics

This chapter adopts a medical and disease-related lenses to policy and explores connections with health management. EHMA follows the traditional distinction between non-communicable diseases (NCDs) and communicable/infectious diseases.

2.1. Non-communicable diseases (NCDs)

Non-communicable diseases such as cardiovascular diseases, diabetes, chronic respiratory diseases, mental disorders, neurological disorders, or cancer are responsible for 80% of the disease burden in the EU and the leading causes of avoidable premature deaths.[9]

Cardiovascular diseases (CVDs) are the leading cause of death in Europe and account for 1.8 million deaths per year in the world, of which 40% are in EU. Cancer is responsible for 1.3 million deaths in the EU (in 2020); and this number is rising and causes large economic and social losses[10]. It is crucial to build back better and fairer to prevent the emergence of silent pandemics of chronic diseases, most specifically cardiovascular diseases. The pandemic has highlighted how insufficient prevention and treatment of CVDs had significant repercussions on COVID-19 complications.

Investing in prevention of a given NCD, such as cancer, will help reduce the overall burden of non-communicable diseases on societies and contribute to greater health system sustainability.

Policy context

At global level, target 3.4 of the Sustainable Development Goals is to reduce premature mortality from NCDs by one third by 2030, relative to 2015 levels. To accelerate the attainment of this goal, WHO has developed a roadmap for 2023-2030 in support of the prevention and control of non-communicable diseases. The Implementation Roadmap supports actions to achieve a set of nine global targets with the greatest impact towards prevention and management of NCDs.[11]

At European level, the European Commission has set up an Expert Group on Public Health in 2022, replacing the previous Steering Group on Health Promotion, Disease Prevention and Management of Non-Communicable Diseases to include both communicable and non-communicable diseases.

[9] European Commission. NCDs. https://health.ec.europa.eu/non-communicable-diseases/overview_en

[10] ESMO. 2020 cancer incidence and mortality in eu-27 countries. https://www.esmo.org/oncology-news/2020-cancer-incidence-and-mortality-in-eu-27-countries

[11] World Health Organisation. World Health Assembly approves development of implementation roadmap for achieving SDG target on noncommunicable diseases. https://www.who.int/news/item/27-05-2021-world-health-assembly-approves-development-of-implementation-roadmap-for-achieving-sdg-target-on-noncommunicable-diseases

The Expert Group's task is to advise the Commission on policy developments and transfer good practices related to major public health challenges.

In December 2021, the European Commission launched its Healthier together – EU non-communicable diseases initiative to support EU countries in identifying and implementing effective policies and actions to reduce the burden of major NCDs and improve citizens' health and well-being.

From all the NCDs, cancer is the highest on the EU political agenda. In November 2020, the European Commission launched the Europe's Beating Cancer Plan, which aims to tackle the entire disease pathway. Europe's Beating Cancer Plan is structured around four action areas where the EU can add the most value: (1) prevention; (2) early detection; (3) diagnosis and treatment; and (4) quality of life of cancer patients and survivors.

In September 2022, the European Commission has also launched a Proposal for a Council Recommendation on strengthening prevention through early detection: A new EU approach on cancer screening (adopted by the Council in December 2022). The proposal outlines updated recommendations based on the latest existing evidence, and thus replaces the previous recommendations dating from 2003.

Under the Horizon Europe Framework Programme for Research and Innovation (2021-2027), the European Commission created a special Mission on Cancer in 2021. The Mission on Cancer aims to provide a better understanding of cancer, allow for earlier diagnosis and optimise treatment and improve cancer patients' quality of life during and beyond their cancer treatment.

Relation to health management

Health managers play a crucial role in improving access to diagnosis, early detection, treatment and care of NCDs. They can address waste and inefficiencies in health systems to deliver comprehensive care and create efficient care pathways. They can work hand in hand with patients to co-design care pathways and successfully re-organise care. Health managers must also ensure adequate staffing levels of trained health care professionals that can effectively deliver education and care for NCDs.

Our position

Cancer

- Over the past 20 years there has been a change in the cancer treatment paradigm with new indications and approvals for active substances. Given the numerous available and approved treatments, questions about affordability have emerged.
- Implementation of anti-PD Drugs could improve all clinical outcomes amongst patients with cancer, including life expectancy and quality of life. These improvements make cancer treatment more tolerable for patients who also experience less adverse events

- Due to improvements in cancer management, early detection and screening, and innovative treatments, survival rates have increased.
- Health-related quality of life for breast cancer survivors is characterised by difficulties associated with the light effects of treatment and various psychosocial problems such as anxiety and depression. This appears to be the case in many treatment settings due to a psychosocial treatment gap for breast cancer patients. Virtual models of care can be promising to deal with these issues and Digital Mental Health is a promising approach for breast cancer survivors.
- Multi-disciplinary teams are central to deliver effective cancer services. They provide treatment recommendations based on available information about the patient and are involved in collective decision making for the patients' care. Multi-disciplinary teams improve effectiveness, encourage patient-centred care, and bring about quality improvements in multidisciplinary decision making.
- Lung cancer takes the biggest share of deaths from cancer in Europe; has a 5-year survival rate below other cancers; and has a large impact in terms of Disability-Adjusted Life Years. Survival is affected by early diagnosis and treatment. The burden of lung cancer can be reduced, but it requires a comprehensive and integrated approach. Early detection needs to be enhanced by implementing large-scale screening programmes, alongside smoking cessation programmes.
- Over the past 20 years there has been a change in the cancer treatment paradigm with new indications and approvals for active substances. Given the numerous available and approved treatments questions about affordability have emerged.
- Cancer has several associated comorbidities and disabilities. Using real-world data on top of randomised control trials can help extract indicators and infer causal relationships. Causal modelling will enable health managers and practitioners to measure the safety and effectiveness of breast cancer treatments and measure their impact on the quality of life after breast cancer treatment, to improve clinical outcomes and PROMs, and to help develop personalised recommendations and treatments based on the data collected by each patient, thus increasing the value for patients.
- Having blockchain-based solution in place could enable breast cancer centres to share patient data – upon patient's consent – and help care providers to rapidly make informed clinical decisions.

Cardiovascular diseases (CVDs)

- Cancer is being well prioritised; however, further attention to the burden of CVDs is essential, as they are the biggest killers in the EU.
- In cardiology, AI can identify markers, risk of disease, produce images, produce cluster analysis and mechanisms of diseases for early detection and accurate diagnosis. AI has the potential to decrease the chance of wrong diagnosis when paired with routine clinical practice. AI can provide better diagnosis and better treatment of cardiovascular

diseases, when used with ethical principles and clear standards. However, it requires medical doctors to also have specialised skills in the technologies.

- There is a need for an organised health data space dedicated to cardiovascular diseases with easy access for academics, researchers, and medical doctors within the European scope and beyond.
- Strong disparities remain in CVDs mortality rates between Eastern and Western Europe. The EU has a prime role to promote cross-border transfer of knowledge and best practices amongst Member States in the prevention, diagnosis, and treatment of CVDs.
- There is a wealth of evidence and solutions that are available on CVDs. It is now important to translate those evidence and medical knowledge into concrete actions and bringing these solutions to people.
- The biggest issue in CVDs is the existence of bottlenecks preventing patients to be aware of prevention programmes, treatment therapies and existing tools. CVDs require collaborative working.
- Public-private partnerships are challenging to develop, but once joint objectives and a win-win proposition have been identified, they can have a strong and positive impact on CVDs and inequalities. They can help to better respond to the growing burden of CVDs and provide adequate care for cardiovascular patients, as well as support the future of cardiology, which will include nanotechnology, genomics, and tissue engineering.
- Data science can be used for CVDs management, early risk estimation and improving diagnosis. Data science can also enhance precision care and outcomes monitoring and assist with real-time monitoring of diseases and associated risks
- Health-based apps and wearable sensors can support patients and physicians in CVDs management
- There is a need to challenge political complacency and misunderstandings around CVDs. The importance of preventing CVDs can be brought to the political agenda by demonstrating new and effective opportunities in diagnostics. Policy alliances should also be built, linking patients and advocates with diagnostics, cardiac rehabilitation, allied health care professionals, and preventive cardiology.

Diabetes

- Diabetes patients should become empowered co-creators of their disease management to reduce avoidable complications and improve their health outcomes.
- Chronic disease management for diabetes can be improved when patients and health care providers have a shared perception of a disease's impact on daily life.

Challenges / issues

- Investment in CVD research is low in comparison to the disease burden and innovation in cardiovascular medicine lacks behind other medical areas.
- CVDs receive less attention than COVID-19 and cancer by policy and decision-makers, despite CVDs being the biggest killers in Europe.
- There are systemic barriers to CVDs prevention. CVD biomarker tests are often underused and not reimbursed. The initiation of secondary prevention strategies is suboptimal across the care pathway. There is a lack of access to specialist nurse-led disease management programmes and cardiac rehabilitation. Primary care is not equipped to deliver long-term secondary prevention. In addition to the existing gaps in CVD strategic leadership, research, and innovation, diagnostics are consistently under-recognised across health systems globally.

Related EHMA activities

- **COVIRNA** [2020-2023]: aims to generate a diagnostic test based on cardiovascular RNA biomarkers that can identify COVID-19 patients at risk of developing fatal cardiovascular complications.
- **REBECCA** [2021-2025]: aims to tap into the potential of Real-World Data to support clinical research and to improve post-treatment in breast cancer.
- **PREVENT** [2023-2027]: aims to improve and upscale primary prevention of cancer by addressing childhood obesity through implementation research.

2.2. Communicable diseases

According to the WHO Regional Office for Africa, communicable diseases or infectious diseases are "*caused by microorganisms such as bacteria, viruses, parasites and fungi that can be spread, directly or indirectly, from one person to another. Some are transmitted through bites from insects while others are caused by ingesting contaminated food or water*". Communicable diseases include HIV/AIDS, tuberculosis, malaria, viral hepatitis, sexually transmitted infectious, neglected tropical diseases, COVID-19, and mpox. Access to primary health care, surveillance, prevention, early detection, and treatment are key to contain the spread of communicable diseases. Vaccination is recognised as one of the most cost-effective public health interventions for preventing infectious diseases.

Policy context

Reducing the spread of infectious diseases is a prerequisite for Universal Health Coverage, and therefore for the achievement of the Sustainable Development Goals. Globally, several actors are active in the fight against the infectious diseases. The World Bank supports countries in the essential health

intervention for communicable diseases. The Global Fund to fight AIDS, Tuberculosis and Malaria was established to fight some of the deadliest infectious diseases. Finally, the GAVI Alliance contributes to the global effort for children's vaccination against infectious diseases. Within the United Nations system, WHO and other agencies and funds - such as the Joint United Nations Programme on HIV/AIDS (UNAIDS), the United Nations Population Fund (UNFPA), and the United Nations Children's Fund (UNICEF) - take part to the global fight against communicable diseases.

An infectious disease originated the COVID-19 pandemic. In February 2020, WHO declared the COVID-19 pandemic a Public Health Emergency of International Concern, "*an extraordinary event which is determined to constitute a public health risk to other States through the international spread of disease and to potentially require a coordinated international response*", as defined by the IHR (2005). In July 2022, the WHO Director General declared also the mpox outbreak a PHEIC.

The COVID-19 pandemic exposed gaps in national health systems as well as in the global health institutional architecture. In December 2021 member states agreed to negotiate a convention, agreement, or other global international instrument under the WHO Constitution to strengthen pandemic prevention, preparedness and response. After the COVID-19 outbreak, the EU also built on the global momentum to enhance the Union's crisis preparedness. A proof of that is the identification of crisis preparedness as one of the pillars of the European Health Union. In this context, the European Commission proposed the reinforcement of the mandate of European Centre for Diseases prevention and Control, which was established in 2005 to strengthen Europe's defence against infectious diseases. In parallel, the European Medicines Agency mandate was reinforced, a cross-border health threats regulation was approved, and Health Emergency Preparedness and Response Authority was established.

The COVID-19 was not only a health crisis but had also socio-economic impacts. The long-COVID syndrome will likely exacerbate health care inequalities that the COVID-19 pandemic has already exposed. Humanitarian efforts are needed to promote and fund equitable access to health care, social and welfare support, and vaccines[12].

Relation to health management

Health managers should set in place more effective management processes for infectious diseases. The spread of COVID-19 proved that a transformation in the organisation of care should happen. In case of a major health threat caused by an infectious disease, health managers should be able to quickly embrace a crisis management mode and face the emergency deflagration, the following disorder, and possible divergence of opinion. Additionally, health

[12] Raman, B., Bluemke, D. A., Lüscher, T. F., & Neubauer, S. (2022). Long COVID: post-acute sequelae of COVID-19 with a cardiovascular focus. *European heart journal*, *43*(11), 1157-1172.

managers should take care of guaranteeing the stability and continuity of operation.

Our position

- Public health authorities can support the ongoing efforts to reduce the spread of infectious diseases with infection control, municipal hygiene, and preventive medicine.
- Environmental conditions can facilitate the spread of infectious diseases.
- Sentinel physicians can play a key role in implementing infectious diseases control programmes in fields such as food safety, vaccine programs, case detection and treatment, and in improving surveillance through vector control, risk indicators, and health outcomes.
- The role of the EU needs to be fostered as the pandemic has shown that diseases, infectious and non-communicable, are not impeded by EU Member States' borders.

COVID-19

- Managing the COVID-19 crisis required a whole-of-government and whole-of-society approach.
- The COVID-19 responses of countries were more effective when they considered the pandemic holistically and introduced combinations of policies both in the governance of health care and across other relevant sectors.
- Effective coordination within government (horizontal) and between levels of government (vertical) is necessary to implement the COVID-19 measures effectively and without hindrance to one another.
- While dealing with the COVID-19 pandemic, as with any other aggressive infectious disease, it is important to consider the time interval before the hospital admission of the patient and focus on preventive measures.
- The COVID-19 pandemic likely had a zoonotic origin. Such a possibility increased the importance of a One Health approach, the unity of multiple practices that work together locally, nationally, and globally to help achieve optimal health for people, animals, and the environment, and contain the spread of infectious diseases.
- The COVID-19 pandemic acted as a catalyst for implementation and use of digital solutions to respond directly to the public health emergency and to facilitate the provision of health services in other areas of care. The pandemic thus turned the implementation of digital health tools from an opportunity to a necessity. Use of digital tools will likely continue in the post-pandemic future.
- Ensure transparency, legitimacy and accountability in policymaking and its implementation increases trust and support for measures within a population, which is crucial for the outcome of the COVID-19 pandemic.

- The COVID-19 pandemic has rapidly triggered policy changes and highlighted new priorities in the health care agenda, as well as exposing numerous pre-existing gaps in health care systems across Europe. Stakeholders in the health care ecosystem should now implement lessons learnt to ensure preparedness for future crises.

Mpox

- Where possible, lessons learnt from the COVID response were applied to contain the mpox spread. Personnel were trained to respond to an uncertain situation and became more familiar with new digital technologies. Strategies and procedures for the vaccination campaign were already in place.

Respiratory Syncytial Virus (RSV)

- RSV causes a considerable disruption of health care systems every year, especially in hospital paediatric services.
- There is an important awareness issue on RSV. Considering its social and economic impact and the incidence of infections, the health literacy and awareness level on RSV of health professionals, the general population, and parents must increase. Moreover, due to the small number of studies on RSV, the social-economic impact might be higher than it is currently assessed.
- At a national level, more European policymakers need to include RSV in their agenda. This is especially needed in the context of COVID-19 where we must ensure the sustainability of health care systems.
- The new measures that are being taken because of COVID have had a positive impact in the prevention of RSV infections, as well as the management of RSV hospitalisation surges in winter.
- COVID-19 has altered the epidemiology of RSV and improved infection control through high standard usage of Personal Protective Equipment and wider adoption of hand hygiene.
- We collectively have an essential part to play in broadening the understanding of RSV among parents and caregivers, pushing to improve diagnostic capability, and working to set in place more effective management processes for RSV infections as we look forward to the potential for new preventative options on the horizon.

Challenges / issues

- The first wave of COVID-19 hit unprepared. It remains important to continue developing future readiness by learning key lessons and creating resilience in health systems, governance structures and political will.
- The COVID-19 pandemic caused delays and menaced access to diagnosis and care.
- The COVID-19 pandemic has exacerbated existing health workforce issues such as shortage of specialists, brain drain and poor working

conditions. Working conditions of the health workforce must be improved with appropriate policies that involve all stakeholders.

- The COVID-19 pandemic highlighted the need for increased partnership. The variety in vaccination adherence observed across Europe indicates a lack of partnership between health and social care.
- Differently from the COVID-19 pandemic, mpox impacted a more defined group of the population, thus making communication more sensitive.
- One of the main challenges is the lack of treatment or prevention solutions against RSV in all infants.
- RSV typically spreads during the fall and winter months; therefore, health care systems typically see a peak rise in infections within a four-to-six-week period toward the end of the year. This surge can impact health care systems, with significant disruptions in patient care, leading to less-than-optimal working conditions for health care professionals.

Related EHMA activities

- **COVIRNA** [2020–2023]: aimed to generate a diagnostic test based on cardiovascular RNA biomarkers that can identify COVID-19 patients at risk of developing fatal cardiovascular complications.
- **White Paper 'The health system burden of Respiratory Syncytial Virus (RSV) in Europe'** [2022]: presents evidence-supported, actionable recommendations to build an RSV-resilient and RSV-prepared health system.

List of EHMA activities

This section outlines the main activities conducted by EHMA over the past five years and currently ongoing. Activities are divided into projects (either funded by the European Union or by private sponsors), educational activities, Special Interest Groups, publications, and initiatives developed as part of policy networks and alliances EHMA is a member of.

Projects

- **BeWell** [2022-2026] aims to tackle skill mismatches and strengthen competencies to enable the health workforce to be better prepared to face future challenges and adapt to ever-evolving societal contexts. BeWell will develop a strategy on upskilling and reskilling the European health care workforce for digital and green skills that will be implemented at a local, regional, national and ultimately European level through the Pact for Skills. The project will also build comprehensive curricula and training programmes targeting all professionals of the health workforce and professionals of emerging occupations.
- **EUVECA** [2022-2026] supports the provision of future-oriented skills within the health and care sector by creating Regional Vocational Excellence Hubs in 7 European regions. These will collaborate within a European Platform for Vocational Excellence in Health Care. The project also looks at providing digital skills to the health workforce to cope with the progressive digitalisation of society.
- **AMR-EDUCare** [2023-2025] targets the prevention and reduction of antimicrobial resistance's health burden by filling educational gaps on AMR for both clinical and non-clinical health and care professionals. The project will particularly target Southern and Eastern European countries and address AMR in the areas of prescription, waste management and patient empowerment.
- **TRANSiTION** [2023-2025] aims to create a new state-of-the-art education and training programme for informal carers, clinical and non-clinical professionals that will empower them to acquire the digital skills and competencies required to meet the current and future needs of effective cancer care. This training programme will up- and re-skill the workforce while also supporting a swifter transition to more cost-effective and patient-centred health models.
- **XpanDH** [2023-2024] aims at mobilising and building capacity in individuals and organisations to create, adapt, and explore purposeful use of interoperable digital health solutions based on a shared adoption of the European Electronic Health Records Exchange format (EEHRxF) across Europe. The project will use a 'network-of-networks' approach ensuring that digital health actors are motivated and supported by tailored guidance and real examples to help early adopters to advance to the concrete use of EEHRxF-embedded digital

health solutions to add value to health and care and promote Personal and European Health Data Spaces.

- **EDiHTA** [2024-2028] aims to develop a flexible and inclusive framework for assessing various Digital Health Technologies (DHTs) in European health care. The EDiHTA framework will be designed to address the challenges posed by the adoption of DHTs, which have the potential to enhance the quality and sustainability of health care services in Europe. It pursues the aim of offering a user-friendly and state-of-the-art Health Technology Assessment (HTA) methodology for digital health technologies, ensuring a harmonised approach.
- **Preventable** [2023–2025] aims to merge specialised clinical knowledge on Rare Tumour Risk Syndromes (RTRS) pathways of care, real-life clinical data from RTRS patients and experiences from professionals and patients, with health economic models and social sciences approaches to estimate the cost-benefit of risk-reduction interventions in RTRS and delineate guidelines for its communication among and within clinical teams and RTRS patients.
- **PREVENT** [2023-2027] aims to identify and overcome barriers in implementing effective strategies against childhood obesity as well as to improve the upscaling of primary interventions for weight control management in childhood and adolescence, with the goal of reducing cancer risks in adulthood. The project will address upscaling challenges by researching barriers to current interventions and policies. It will introduce context-aware interventions and user engagement strategies to overcome bottlenecks and expand to diverse settings.
- **MELIORA** [2024-2028] aims to bring sustainable behavioural change to reduce effectively and cost-effectively the risk of breast cancer through the development and implementation of a novel intervention. The MELIORA intervention will be implemented in real-world settings in assorted studies targeting different social groups, including women at risk of developing cancer, cancer patients and survivors both in rural and urban areas.
- **REBECCA** [2021–2025] aims to tap into the potential of Real-World Data to support clinical research and to improve post-treatment in breast cancer. The goal of REBECCA is to use the indicators to infer causal relationships with PROMS and complex chronic conditions. The causal modelling then indicates causalities and sheds light on confounders. Causal modelling will enable health managers and practitioners to measure the safety and effectiveness of breast cancer treatments and measure their impact on the quality of life after breast cancer treatment, to improve clinical outcomes and PROMs, and to help develop personalised recommendations and treatments based on the data collected by each patient, thus increasing the value for patients.
- **HEART** [2021-2025] aims to significantly improve urban health and reduce health disparities through an innovative urban planning

methodology that embraces and promotes the policymaking of proper Blue-Green-based technologies with techniques for changing individual citizens' behaviour.

- **EPACT** [2022-2024] aims to develop solutions to reduce patient and health professional harm from medication errors and increase health care professional wellbeing by reducing the administrative burden of their workload within the medication management pathways of hospital settings. These solutions include the use of technology and automation to minimise manual input and errors, as well as the development of best practices and guidelines to standardise medication management processes across different hospital settings.
- **Overcoming obstacles to vaccination** [2022-2024] aims to support EU Member States in overcoming obstacles to vaccination of physical, practical, and administrative nature, with the aim of increasing vaccination coverage rates for all routine vaccinations in the EU.
- **RESOLVE** [2020-2024] aims to document and address current challenges to responding to paediatric respiratory syncytial virus (RSV) and provide recommendations to prevent infection spread and the disease burden based on best practices.
- **BREATHE** [2024] aims to uncover the health system burden of invasive pneumococcal disease and pneumococcal pneumonia as reported by health managers and the health workforce in 5 EU countries (Austria, Belgium, France, Italy and Portugal).
- **INTERACT** [2023-2024] aimed to improve patient safety, health care professionals' wellbeing, and the availability of medicines in South Africa and Europe. Exploring building an intercontinental exchange of practices and supporting local partners in establishing an Alliance of South African patients, hospitals, health care professionals, and industry representative organisations, the project advocated for the implementation and upscale of digital medication management systems and tools in South African health care settings.
- **EcoQUIP+** [2020–2024] aimed to improve the sustainability of health care through innovation procurement, by developing the pro-innovation capability of six partner hospitals. EcoQUIP+ not only implemented procurement innovation but also aim to maximise engagement with other potential buyers.
- **COVIRNA** [2020-2023] aimed to generate a diagnostic test based on cardiovascular RNA biomarkers highly predictive of the clinical outcomes of COVID-19 patients with the aim to improve individualised surveillance, care and follow-up of these patients in the context of the COVID-19 pandemic.
- **DISH** [2018-2022] aimed to bridge the gap between the progressive digitalisation of the health care sector and the lack of eHealth and

innovation skills among health and social care professionals to fully benefit from the use of innovative eHealth products and solutions.

- **iRaise** [2021] was a training programme targeting multidisciplinary teams of professionals involved in innovation promotion and adoption within health care organisations, aiming to increase their team skills and knowledge on innovating health care processes.
- **VAC-PACT** [2019–2021] aimed to improve the uptake and confidence in vaccines for patients with chronic diseases, families and communities.
- **MULTI-ACT** [2018-2021] aimed to increase the impact of health research on people with brain diseases. It developed a new model allowing for the effective cooperation of all relevant stakeholders and be applicable in defining the scope of health research and innovation as well as new metrics for the evaluation of its results.
- **TO-REACH** [2016-2020] aimed at producing research evidence supporting health care services and systems to become more resilient, effective, equitable, accessible, sustainable and comprehensive. TO-REACH was at the forefront of developing an international research partnership on health systems research.
- **SUSTAIN** [2015 -2019] aimed to improve integrated care for older people living at home with multiple health and social care needs and ensuring that improvements to the integrated care initiatives are applicable and adaptable to other health systems and regions in Europe.

Educational activities

- **European Health Management Conference**. Each year, the European Health Management Conference gathers speakers and participants from the world of health management. Participants whose expertise echoes EHMA's diverse membership have the chance to connect and discuss the most relevant issues in health management research and practice.
- **Webinar series 'Health Management in action: fostering health systems' resilience'** [2022] collected best practices, case studies, practical examples, and implementable solutions to enhance health system preparedness and rapid response to health threats through 10 episodes.
- **Webinar series 'COVID-19: from viral to containment'** [2020-2021]. The complex nature of the COVID-19 pandemic and its practical implications have generated unprecedented stress on several components of the health system and required rapid responses, re-organisation of how care is delivered and novel management solutions. The webinar series brought together key stakeholders, leaders and experts to share practical advice on how to manage the challenges posed by the COVID-19 pandemic.

- **Executive workshop series 'The many avenues of health management'** [2022] was targeted at experienced health management professionals engaged in policymaking, designing, and management of health care networks, facilities and services in search for frameworks, solutions, latest trends and scenarios, as well as competencies, skills and managerial tools.
- **Executive workshop 'Value-based primary care'** [2021] explored how we can shift primary care from being the sum of services delivered by uncoordinated professionals to a system organised around a clear vision and ambition, thus increasing value for patients and improve primary care practice.
- **Winter School 'Reimagining leadership for healthcare'** [2020] brought together experts from three European Universities to introduce the concepts of New Public Leadership and the competencies needed to confront the future challenges of health care.

Special Interest Groups (SIGs)

- **Programme Directors' Group (PD Group)** is an established group, which brings together Programme and Course Directors, Heads of Department, Deans or any other individual representing a study course, to help ensure that taught programmes continue to provide the highest quality education for health managers, health care professionals and other stakeholders. Programme Directors' Group meetings are a regular twice-a-year event, providing space for discussing pressing challenges, sharing knowledge on market needs, supporting improvement in programme content and delivery, and supporting the promotion of member programmes to prospective students.
- **Special Interest Group on South-Eastern Europe** aims to strengthen health management capacity and capability in the region through exploratory research, development activities and the sharing of knowledge and best practices. The group includes experts from Albania, Bosnia and Herzegovina, Bulgaria, North Macedonia, Montenegro, Moldova, Romania, and Serbia.
- **Special Interest Group on One Health Management** aims to advance a holistic understanding of health that considers the interdependence of human, animal, and environmental wellbeing. The group acknowledges the complex challenges in modern health scenarios, advocating for an approach that enables health management to transcend traditional boundaries between disciplines and sectors.
- **Special Interest Group on Integrated Care** facilitated knowledge exchange amongst health care professionals and researchers in the field of integrated care. This SIG focussed on two broad themes: the implementation of integrated care in health and social care provision; and the evaluation of integrated care programmes.

Publications

- European Health Management Conference Report [2024, 2022, 2021, 2020]. The conference reports provide a complete overview of the most relevant health management research and best practices; showcase the discussions around trending and complex topics in health and care that were featured at EHMA conferences; and set the agenda for health management for the following year.
- Health system readiness for innovation – Putting research into practice to drive effective implementation [2023]. This report features case studies of translation of research into practice and pays particular attention to the role of frameworks in supporting effective implementation of innovation.
- Strengthening the European vaccine ecosystem: managing the digital transformation [2023]. This paper provides policy recommendations for policy makers and health managers to implement modern digital technologies to support the vaccine ecosystem and ensure that these systems remain sustainable from the social, economic and workforce perspectives.
- Digital medication management in healthcare settings: an opportunity for the European Union [2022]. This White Paper includes clear recommendations for the digitalisation of the medication management pathway in European hospitals and is endorsed by members of the Alliance for the Digitalisation of Medication Management in European Hospitals.
- Reducing the environmental impact of medicines from procurement to disposal [2022]. This White Paper outlines recommendations specifically addressed to health managers on how to reduce the environmental impact of medicines throughout the medicine's lifecycle, from procurement to disposal.
- Making the difference – UNIVANTS' contribution to the outcomes' quest [2022]. The paper identifies four examples of outcome-based projects recognised with the UNIVANTS for Healthcare Excellence award that can give inspiration to invest in the value-based health care shift.
- UNIVANTS as a driving force for value-based healthcare [2022]. The paper outlines the impact that a program such as the UNIVANTS for Healthcare Excellence Award can have on inspiring leaders towards implementing value-based health care. It presents case studies and examples from the Award winners.
- The health system burden of respiratory syncytial virus (RSV) in Europe [2022]. This White Paper presents study findings on the burden of paediatric RSV in hospital and community settings, and the impact of RSV-infection on health systems performance and health care resource. The study is based on a survey among 374 HCPs in 20 EU countries.

- **Insights for value-based healthcare** [2020]. This paper focuses on recognised best practices from the 2019 and 2020 UNIVANTS award cycles, for a total of 12 best practices in 2019 and 24 in 2020. The aim is to foster scalability, replication and the understanding of the core of each initiative while promoting adoption by other laboratories and by interdisciplinary teams.

Other publications and initiatives on behalf of policy networks

- **Digital Health Manifesto** [2024]. The Manifesto emphasises the transformative potential of digital health technologies in empowering patients to control their health data and enabling health care providers to deliver optimal outcomes. Key points include fostering digital health system development, promoting health data harmonisation and interoperability, advocating for regulatory agility and sandboxes for innovation, addressing reimbursement policies for digital health solutions, and spearheading the integration of AI in health care.
- **EU Health Coalition Manifesto for a healthier Europe** [2023]. The EU Health Coalition's vision is of a Europe where health and life sciences represent the third strategic pillar alongside the green and digital transitions, and where health and care systems are without siloes and centred on people and patients. To deliver this vision, the EU Health Coalition proposed the 5 recommendations: 1. Integrated health systems that are people-centred. 2. Invest in upskilling for the health workforce. 3. Treat health care costs as investments. 4. Position Europe as a leading R&I hub. 5. Create a health and life sciences office in the European Commission.
- **EU Health Summit 'Towards an EU Health Union'** [2022]. The EU Health Summit is an initiative by the EU Health Coalition. The 3rd edition of the Summit took place on 15 November 2022. While in the middle of a geopolitical, economic, and energetic crisis, the Summit was the platform to present specific, concrete and implementable policy recommendations developed by the EU Health Coalition to progress towards a European Health Union and ensure that health remains a priority on the political agenda.
- **A compass for collaboration: navigating stakeholders' roles in transitioning to value-based healthcare** [2023]. This report was developed by the members of the European Alliance for Value in Health (EAVH). It aims to offer clarity on the roles and contributions which can be taken by stakeholders to accelerate the journey towards developing value-based health systems.
- **Talking value: A taxonomy on value-based healthcare** [2022]. The Taxonomy was developed by the members of the European Alliance for Value in Health (EAVH). It aims to provide a definition of 14 terms to build a common language that will enable Alliance partners and member organisations to discuss and align on how to implement person-

centred, value-based health care at all levels and form a basis for discussions both within the community directly involved as well as towards any external stakeholders.

- **European health and wellbeing deal** [2023]. This Manifesto by the All Policies for a Healthy Europe network advocates for wellbeing to be a core principle in policymaking. The manifesto advocates for the integration of health and wellbeing considerations into all EU policy areas by promoting a set of high-level recommendations for the next mandate of the EU, addressing both legislative proposals and EU institutional structure.
- **Strengthening the link between well-being and the economy: the key to a successful and sustainable European Care Strategy** [2023]. The All Policies for a Healthy Europe network developed this Policy Paper that provides recommendations to reach sustainable long-term care in the context of the European Care Strategy. These include putting care as a priority in existing funding instruments, invest in prevention and early diagnosis, open a structured dialogue for a holistic and life-cycle approach to care, promote holistic and intersectoral health and care funding structures, and invest in improving the skill mix of health and care workers.
- **Bridging the gap: digital skills in health and care** [2023]. The All Policies for a Healthy Europe network developed this Policy Paper, calling for a clearer strategy for digital health skills and a coordinated policy approach that can maximise the potential of digitalisation in Europe.
- **Achieving an economy of wellbeing** [2021]. The Economy Working Group of the All Policies for a Healthy Europe network developed this Policy Paper, focusing on achieving a better measurement of the state of society and the economy through the development of wellbeing indicators. In this paper, AP4HE is providing EU decision-makers with a proposed pathway to finally achieve a Wellbeing Economy.
- **Empowering citizens – The key to a successful digital health transformation** [2020]. The Digital Working Group of the All Policies for a Healthy Europe network developed this policy paper that tackles three key aspects of the digital transformation of health care and how they relate to the empowerment of EU citizens: Digital Skills & Literacy, the European Health Data Space, and the development of Artificial Intelligence.
- **Essential skills for a resilient and effective European health workforce** [2022]. In 2021, the Thematic network on Profiling and training the health care workers of the future was transformed into a Stakeholder Network. The primary aims of the Network are to highlight best practices, revisit and scale-up the survey on the core competencies of the health workforce and identify more concrete areas for action by health authorities. The Network released a report aiming to raise awareness on the existing and foreseeable skills gaps of the European health

workforce. It investigates the skills needed for a health care workforce that is resilient, effective and future-oriented.

- **EU HPP Thematic Network 'Profiling and training the healthcare workers of the future' – Joint statement** [2021]. This publication was developed as part of the activities conducted in the framework of the European Health Policy Platform (EU HPP) Thematic network on Profiling and training the health care workers of the future. The one-year Thematic Network comprised various health care stakeholders and aimed to map the future needs of the health care professionals and identify and enhance their core competencies. The statement provides insights into best practices in the health workforce education and a set of recommendations to inform the European Commission on health care workforce education, training, and planning for the future of care.