



BeWell.

Blueprint Alliance for a Future Health Workforce
Strategy on Digital and Green Skills

Skills Strategy for the digital & green upskilling and reskilling of the health and care workforce

VERSION 1

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Executive Summary

Almost 15 million people work in health occupations [2], this represents over 7% of employed people, and 4% of the EU population. Health and care systems are key for health, economic and societal resilience and they fundamentally rely on the health and care workforce for their functioning. Megatrends such as globalisation, climate change, technological advancement, and demographic changes will shape developments in work and society time and again; in the long-run, other -presently unknown- trends may also emerge that will have an influence on required skillsets and labour markets [3].

A resilient and effective health and care workforce are the foundations of effective health and care systems. The requirement to support and strengthen them was further highlighted by the experiences during and after the COVID-19 pandemic. The workforce's ability and preparedness to deal with current and future challenges are vital. To this end, this strategy highlights the urgent need to upskill and reskill the health and care workforce with digital and green skills.

To this end, the implementation of this skills strategy can only be successful and sustainable when coupled with appropriate actions to address the fundamental problems of the health and care sector. This includes increased investment in health and care workforce recruitment and retention; creating working conditions that promote a healthy work-life balance; offering rewarding salaries; providing a safe working environment to protect the physical and mental health and well-being of the workforce; and improving health and care information systems for better data collection and analysis.

The aim of this strategy is to advocate lifelong learning and continuing professional development as key elements for an informed and equipped health and care workforce, raise awareness about the advantages of the uptake of digital and green upskilling and reskilling, and call upon policymakers to integrate the health and care workforce's needs into the design and implementation of policies at the local/regional, national, and European levels.

This strategy has been started by a multi-stakeholder consortium called BeWell, co-funded by the Erasmus+ programme of the European Union (Grant Agreement number 101056563). The BeWell partner organisations are working closely with local/regional, national, and European actors and are fully committed to helping them implement the recommended actions with a view to progressing digital and green upskilling and reskilling at a European level.

A substantial and diverse pool of leaders representing stakeholders in the health sector at regional, national, and European levels have come together to begin this strategy. Importantly, the strategy is developed by and for the health and care workforce. Collaborators also include employers, trade associations, trade unions, public service unions, non-governmental organisations, research institutions, vocational education and training providers, higher education institutions, industry, health authorities, insurers, as well as organisations representing and bringing the perspectives of health and social care professionals including doctors, nurses, pharmacists, radiologists, and health managers.

This skills strategy introduces six strategic objectives which provide guidance on how to achieve the digital and green upskilling and reskilling of the health and care workforce:

- Objective 1: assess the health and care workforce's skills mismatches and advance the transfer of knowledge
- Objective 2: enhance and promote adequate levels of digital literacy and digital competences for the health and care workforce
- Objective 3: enhance and promote the health and care workforce's green literacy and green competences
- Objective 4: strengthen the promotion of soft skills within the health and care sector
- Objective 5: promote the physical and mental health and well-being of the health and care workforce
- Objective 6: advance training and curricula opportunities targeting continuing professional development and life-long learning

For the uptake of upskilling and reskilling at the local/regional, national, and European levels through the Pact for Skills [4], the strategy recommends concrete implementation actions which call upon stakeholders to:

- **commit** to making upskilling and reskilling a priority;
- **involve** their communities and, in particular, the health and care workforce;
- **secure** financing through public investment and European-funded opportunities; and
- **implement** the skills strategy based on the specificities of their countries.

BeWell addresses the need to prepare the health and care workforce for green and digital solutions introduced in European health and care systems to ensure they can respond to challenges, which were additionally emphasised by the COVID-19 pandemic, such as increased prevalence of chronic diseases and comorbidities, the changing population demographics and increasing demands on the healthcare budget in public expenditure.

This strategy is being developed in two versions. This is the first version, and it has been created using BeWell consortium member expertise, and skills intelligence gathered. It will be shared broadly with the public until December 2025 to gather feedback from all stakeholders.

Outputs and indicators that will be delivered during the piloting phase of the training programmes in the frame of the BeWell project will inform this strategy. In addition, the Theory of Change framework will be used to continuously evaluate and monitor the strategy throughout the consultation phases.

Following these phases of consultation, the BeWell skills strategy will define a clear set of activities, milestones and outputs to complement and support the implementation actions which are recommended in this first draft of the strategy.

The final version of the skills strategy will therefore become a strategy by and for all stakeholders in the health and care ecosystem and will be published in June 2026.

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List of Abbreviations

BeWell	Blueprint Alliance for a future health workforce strategy on digital and green skills
CPD	Continuing professional development
DG EMPL	Directorate-General of Employment, Social Affairs and Inclusion
DG GROW	Directorate-General of Internal Market, Industry, Entrepreneurship and SMEs
DG REFORM	Directorate-General of Structural Reform Support
DG SANTE	Directorate-General of Health and Food Safety
DISH	Digital and innovation skills helix in health
EEHRxF	European Electronic Health Record Exchange format
EU	European Union
EUVECA	European platform for vocational excellence in health care
HE	Higher education
HEROES	Health workforce to meet health challenges
ICT	Information and communication technology
IT	Information Technology
LSP	Large scale partnership
LLL	Life-long learning
OECD	Organisation for Economic Co-operation and Development
SEPEN	Support for the health workforce planning and forecasting expert network
VET	Vocational education and training
WHO	World Health Organization
XpanDH	Expanding digital health through a pan-European EHRxF-based ecosystem

Introduction

This strategy is about the digital and green upskilling and reskilling of the health and care workforce. It is produced by a consortium called BeWell, in a project co-funded by the Erasmus+ programme of the European Union under Grant Agreement number 101056563 and runs from 1 July 2022 till 30 June 2026. It is produced by a multi-stakeholder movement, created by and with the health and care workforce.

This strategy is being developed in two versions. This first version has been created using BeWell consortium member expertise, and skills intelligence gathered. It will be shared broadly with the public to gather feedback from all stakeholders; concurrently, the BeWell project will pilot new qualifications, and the results of both initiatives will be incorporated into the second and final version to be published in June 2026.

This strategy gives an overview of the challenges faced by the wider health and care ecosystem and outlines the ecosystem's needs and underlying trends. It addresses existing gaps and mismatches in the area of digital and green skills designed to enhance digital and environmental health literacy and it also acknowledges the importance of other skillsets such as soft skills. It recommends implementation actions to stakeholders at the local/regional, national, and European levels who are committed to making upskilling and reskilling of the European health and care workforce a reality through the Pact for Skills [4]. It introduces a Theory of Change framework as a tool for the evaluation and monitoring of the skills strategy until its final validation in 2026. Finally, it draws conclusions and points to the future with concrete next steps.

In the literature, various terms are used such as “health workers”, “health professionals”, “healthcare professionals”. In this strategy, the term is used in a broad and inclusive way to imply “all people engaged in work actions whose primary intent is to improve health, including doctors, nurses, midwives, public health professionals, laboratory technicians, health technicians, medical and non-medical technicians, personal care workers, community health workers, healers and traditional medicine practitioners. The term also includes health management and support workers such as cleaners, drivers, hospital administrators, district health managers and social workers, and other occupational groups in health-related activities as defined by the International Standard Classification of Occupations (ISCO-08).”[1]

The BeWell consortium is working closely with the European institutions. These include European Commission Directorates-General such as Health and Food Safety (DG SANTE), Employment, Social Affairs and Inclusion (DG EMPL), Internal Market, Industry, Entrepreneurship and SMEs (DG GROW), and Structural Reform Support (DG REFORM).

It is envisaged that, through the Pact for Skills, various stakeholders of the health and care ecosystem will take the strategic objectives forward at local, regional and national levels. In doing so, the strategy will help to raise awareness around the skills gaps faced by the health and care workforce, promote life-long learning (LLL) and continuing professional development (CPD), and embrace the green and digital transformations of the sector.

The stakeholders in BeWell mainly include, but are not limited to:



education and training providers (VET and HE)



research institutions



key industry stakeholders (medical devices and pharmaceutical industries)



public sector authorities and private sector organisations with regulatory function for education and training systems (local, regional and national)



social partners



technology developers



healthcare providers



professionals in the health and care workforce, including health students, clinical and non-clinical health professionals (nurses, doctors, pharmacists, operators, managers) and professionals in emerging occupations



patients and the public



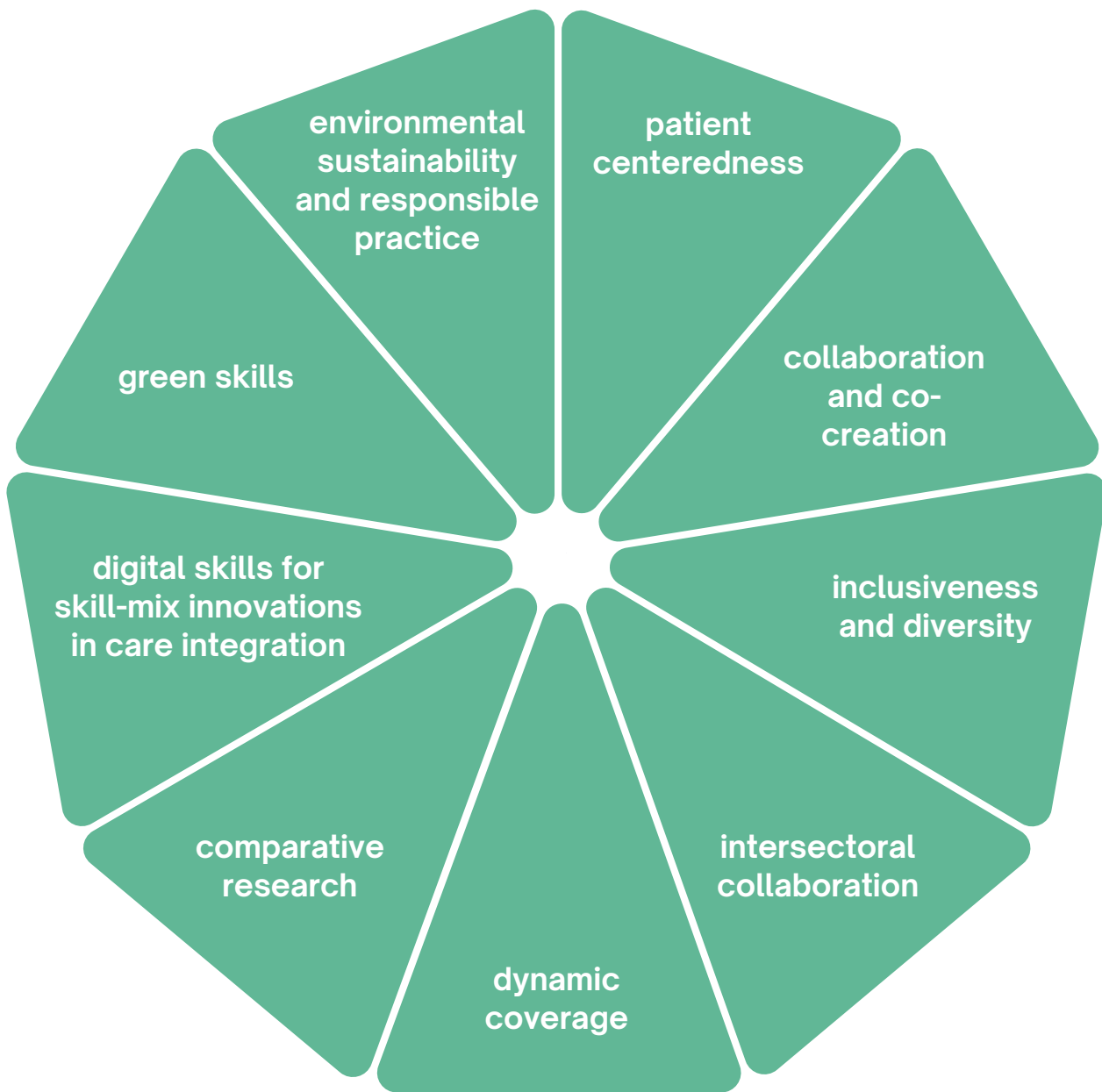
EU projects, initiatives, networks, and associations working towards the upskilling/reskilling of the health and care workforce, and presenting opportunities to synergise

BeWell Project Overview

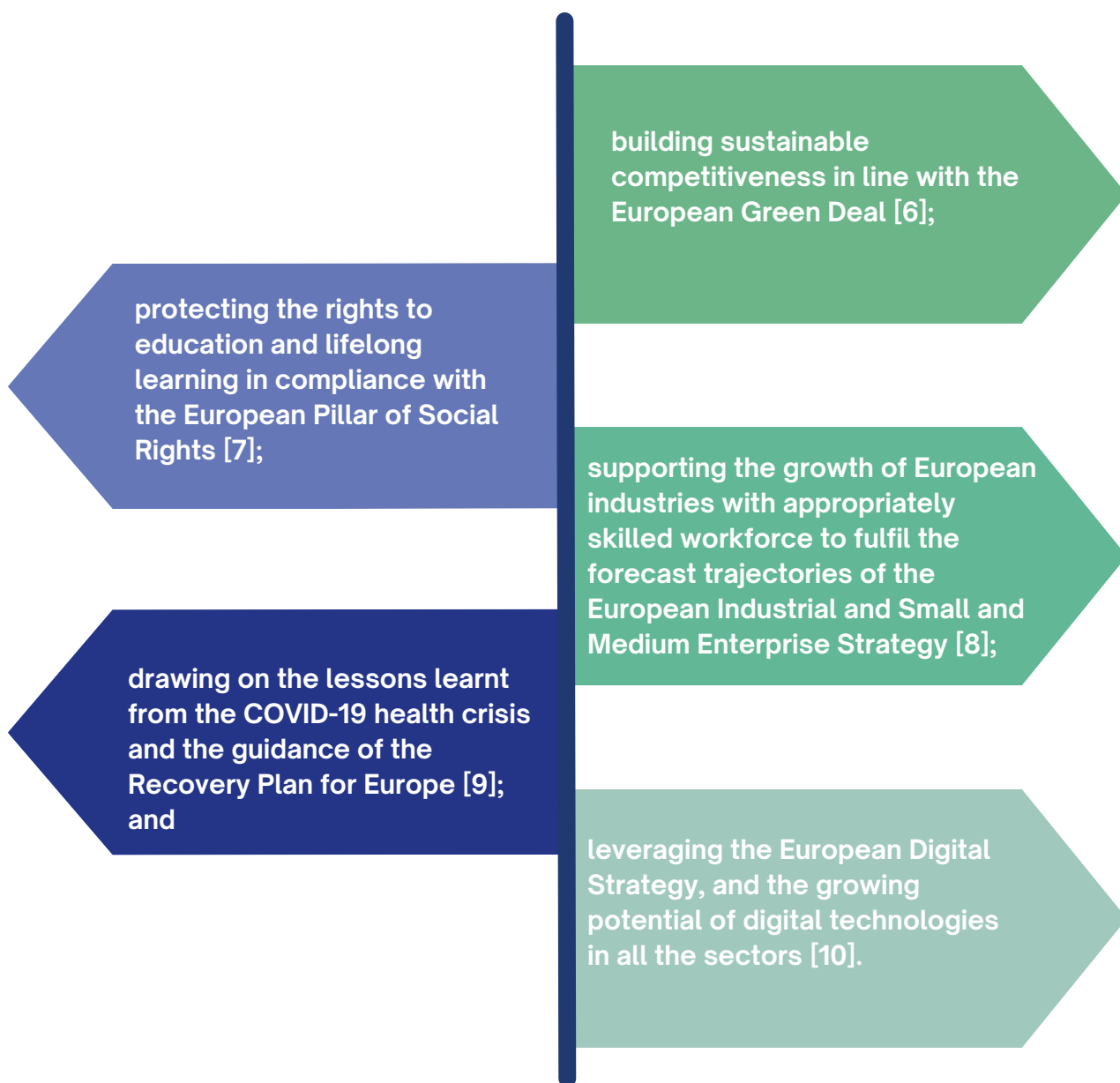
BeWell is a multi-stakeholder movement, created by and with the health and care workforce, to develop digital and green skills intelligence for a strategy focused on the upskilling and reskilling of the European health and care workforce. This strategy will be implemented at local, regional, national, and European levels through the Pact for Skills. The Pact for Skills aims to mobilise and incentivise all relevant stakeholders to take concrete commitments for upskilling and reskilling, and, when relevant, pool efforts thanks to partnerships. To this end, BeWell has established and coordinates the pan-European and multi-stakeholder large scale partnership (LSP) for the health ecosystem. The LSP plays an important role in shaping the skills strategy as well as skills development within the European health and care ecosystem. Therefore, it supports the twin transition to a green and digital economy, makes EU health and care systems more competitive globally, and enhances Europe's open strategic autonomy.

BeWell addresses the need to prepare the health and care workforce for green and digital solutions introduced in European health and care systems to ensure they can respond to challenges, which were additionally emphasised by the COVID-19 pandemic, such as increased prevalence of chronic diseases and comorbidities, the changing population demographics and increasing demands on the healthcare budget in public expenditure. The project anticipates and addresses the skills needs of the health and care workforce by factoring in many current and future issues such as staff shortages. It also identifies and forecasts skill gaps and mismatches so as to enable the health and care workforce to be better prepared in view of future challenges and adapt to ever-evolving socioeconomic contexts. To do this, the project builds comprehensive curricula and training programmes that will target all professionals of the health and care workforce, including health students, clinical and non-clinical health and care professionals (nurses, doctors, pharmacists, health promotion and public health professionals, operators, managers, IT and administrative staff) and professionals of emerging occupations. The training programmes – co-created by universities, VET providers, companies, and health and care professionals – will reach the target populations through life-long learning and continuing professional development.

The BeWell project methodology was developed on the basis of nine principles intended to respect and unite the diversity of Europe's health and care ecosystem:



The BeWell project serves the objectives of the **European Skills Agenda 2020** [5], which aims to support individuals and organisations to develop better skills by



BeWell is also strongly associated with the overall objective of developing a culture of lifelong learning, as set out in the mandate for the European Year of Skills and responds to the objective of the Pact for Skills to get public and private organisations to work together and encourage them to make concrete commitments to upskilling and reskilling adults.

BeWell is co-funded by the Erasmus+ programme of the European Union under Grant Agreement number 101056563 and runs from 1 July 2022 till 30 June 2026.

1. Purpose

The BeWell skills strategy aims to prepare the health and care workforce – and the health and care ecosystem in general – to tackle existing and future challenges, adapt to ever-evolving societal contexts, and be more competitive in a highly demanding and rapidly changing labour market. Upskilling and reskilling of the health and care workforce is not only fundamental for the health and care sector but it also supports human capital development in Europe overall.

As a cross-collaborative endeavour, the skills strategy will be developed and upscaled by European health and care stakeholders, to voice the key priorities for the health and care ecosystem in a unified way. This version is the first draft of this strategy and it is being launched during the European Year of Skills, giving greater impetus to the work done at European level in support of upskilling and reskilling the health and care workforce. This first draft of the skills strategy is open for consultation until December 2025, subsequently the second and final version will be published in June 2026.

The skills strategy acts as a roadmap

that advocates LLL and CPD which are key to keeping the health and care workforce informed about and equipped for future changes and challenges. It highlights the need for these two elements and improves their added value so that the health and care workforce can experience training for upskilling and reskilling as a worthwhile time investment. As a result, it is expected that the health and care workforce will be better prepared to provide high quality of care and improve their own well-being.

With a foresight analysis in place, the strategy takes future health and care systems into consideration. It foresees how these systems can be transformed and what skills will be needed to support the ongoing recovery from the COVID-19 pandemic -as well as other public health emergencies- and overall future health and care system preparedness. Therefore, it addresses skills gaps and mismatches and highlights necessary competencies by mapping the needs of the health and care workforce.

The strategy has a particular focus

on the advantages of the uptake of digital and green upskilling and reskilling, to equip the health and care workforce with the tools to have an active role in the digital and green transition within the health and care ecosystem. The health and care workforce will acquire a greater systemic understanding of digital and green solutions and will improve their digital and green literacy. They will be able to perform their tasks in a more time-efficient way and better organise their day-to-day work; reduce administrative workload and improve record-keeping; make better-informed and evidence-based decisions for patients; increase quality of care by being more available to engage with patients; contribute to the reduction of health inequalities; and ultimately, support the enhancement of cost efficiency in health systems through an increase in value based care.

Finally, the strategy calls upon policymakers

to integrate the needs of the health and care workforce into the design and implementation of policies at local/regional, national, and ultimately, European levels. With the active involvement of the health and care workforce in co-creating this strategy and in shaping policies, they are more likely to feel motivated and thrive in their work environment, support the ever-increasing needs of European countries to implement digital and green technologies and solutions, and will harvest the opportunities derived from LLL and CPD.

2. Background Context

Almost 15 million people work in health occupations [2], this represents over 7% of employed people, and 4% of the EU population. Health and care systems are key for health, economic and societal resilience and they fundamentally rely on the health and care workforce for their functioning. Therefore, it is imperative to keep the health and care workforce updated and properly equipped to respond to existing and future challenges. Megatrends such as globalisation, climate change, technological advancement, and demographic changes will shape developments in work and society time and again; in the long-run, other -presently unknown- trends may also emerge that will have an influence on required skillsets and labour markets [11].

Although it is an urgent need to upskill and reskill the health and care workforce with digital and green skills to tackle these challenges, this endeavour is impeded by several serious constraints. Health and care workforce retention is under pressure due to COVID-19-related burnout, ill health and general dissatisfaction [12]. This situation not only demotivates the health and care workforce to retain their jobs but also significantly reduces their availability for training opportunities. Furthermore, it is vital to consider and look after the workforce's physical and mental health. Between 8%-38% of the health and care workforce have experienced physical violence and harassment [13]. The percentage of employees experiencing violence or aggression is even higher if threats and verbal aggression are included in the calculation. It appears that nurses and other staff directly involved in patient care, as well as emergency room staff and paramedics, run higher risk in this regard [13].

While addressing the upskilling and reskilling of the health and care workforce is of utmost importance, there is often insufficient investment in LLL and CPD which deprives the health and care workforce of skills that are key to shaping a sustainable future for the health and care sector. Health systems need professionals with relevant specialisations and broader skillsets. This is essential not only to cope with the great volume of patients' health care needs, but also to better manage rising and more complex workloads and increasingly difficult working conditions. COVID-19 brought to the surface existing skills gaps and mismatches and, during 2020-2021, digital skills proved crucial in areas such as surveillance, monitoring, and vaccination roll-out.

Digital tools, such as e-health and m-health, became necessary for the health and care workforce to perform their daily tasks and provide remote care. In the future, digital and green skills will become even more important because they will be needed to improve people's experience in their health journey across the prevention and care continuum, they will boost technological and sustainable innovation, and will enhance working conditions for the health and care workforce.

The emergence of new digital [14] and green [15] roles and occupations in the health and care sectors highlight the pressures that health systems will undergo unless skills mismatches are adequately addressed. Yet, there remains a number of challenges to upskilling and reskilling. Education and training systems still need to adapt the courses that they offer to health and care systems needs to equip the health and care workforce with the right sets of skills [16]. Furthermore, lack of reliable data to assess each country's population health and health needs – as well as each country's health and care workforce's skills needs – results in a lack of workforce planning and/or outdated skills planning. This absence of information hinders the best possible balance between demand and supply of health and care professionals [17].

To varying extents, countries have offered training in digital technologies and green advancements to the health and care workforce. However, to fully and sustainably exploit these two areas, countries will require support to match current roles and competencies with the emerging requirements for digital and green skills. It is thus evident that further education and training is an essential factor to optimise the skill-mix of the future health and care workforce and to contribute to their engagement and confidence.

The European institutions acknowledge the daily challenges that the health and care workforce are facing. To address them, various actions, initiatives and projects (such as the BeWell project) have been launched. These actions are being implemented across Europe in order to tackle the current health crisis and anticipate future crises which may endanger the health and care sector anew. These overall European efforts include initiatives to address skill mismatches, workforce planning and policies on the ageing of the health and care workforce (see Annex). Bundled together in the 2023 European Year of Skills, many of these actions will continue their proactive work well into the second half of this decade. These strategic developments will need to be applied at speed, at scale, and often in small micro-credentialling doses. The BeWell project and its skills strategy will be applied in practice throughout the years to come. The fundamentals of BeWell's skills strategy are expected to offer a distinct contribution to the massive, upcoming, European evolution in digital and green skills in the health and care sector.

3. Strategic Objectives

Six strategic objectives are defined as key drivers for a robust skills strategy that is intended to provide guidance on how to achieve the digital and green upskilling and reskilling of the health and care workforce. The objectives consider the challenges, acknowledge the needs behind them and suggest ways forward to bridge existing gaps and mitigate the dangers of missing out on the opportunities for building sustainable and competitive health and care systems informed by the latest digital and green developments. This strategy details how each of these strategic objectives can be applied. All stakeholders are intended to be involved in the definition, consideration, and implementation of these strategic objectives.

OBJECTIVE 1

assess the health and care workforce's skills mismatches and advance the transfer of knowledge



OBJECTIVE 2

enhance and promote adequate levels of digital literacy and digital competences for the health and care workforce



OBJECTIVE 3

enhance and promote the health and care workforce's green literacy and green competences



OBJECTIVE 4

strengthen the promotion of soft skills within the health and care sector



OBJECTIVE 5

promote the physical and mental health and well-being of the health and care workforce



OBJECTIVE 6

advance training and curricula opportunities targeting continuing professional development and life-long learning



OBJECTIVE 1:

assess the health and care workforce's skills mismatches and advance the transfer of knowledge



Shed light on the health and care workforce's current situation with regards to the skills they possess, those they lack and those they can cultivate in order to keep abreast of digital and green developments.

This objective encourages actions among all stakeholders in identifying the skills needs of their workforce and ensuring dissemination of information, good practices, and knowledge. Furthermore, it calls upon the involved parties to collect and analyse evidence of how skill mismatches may affect the performance of the health and care workforce and comprehend the existence of gaps. By doing so, stakeholders may address the challenge and provide tailored and evidence-based solutions that will enhance the performance of the health and care workforce.

OBJECTIVE 2:

enhance and promote adequate levels of digital literacy and digital competences for the health and care workforce



Empower the health and care workforce to use digital technologies to meet wider health and care system objectives by equipping them firstly with basic digital skills, and secondly with more tailored skills that respond to their own needs and interests, and address the needs of patients.

Stakeholders are encouraged to align the identified digital skills for the health and care workforce with their existing skills and competences. They should consider differences between ages and levels of digital literacy amongst the health and care workforce and acknowledge the emergence of new digital roles. Stakeholders are advised to involve the health and care workforce in developing educational and training practices, training material and on-the-job training that should incorporate aspects of digitalisation such as e-health, m-health, cybersecurity, and big data and artificial intelligence (AI). This objective also reinforces gender equality and empowers the health and care workforce through the promotion of inclusive approaches to access in education and trainings about digital health technologies and skills.

OBJECTIVE 3:

enhance and promote the health and care workforce's green literacy and green competences

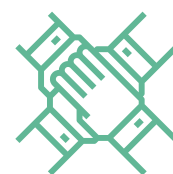


Support the health and care workforce to increase their awareness of green and sustainable transition, and empower them to use green and sustainable technologies and solutions to meet wider health system objectives. This will be done by equipping them with basic green skills and with more tailored ones that respond to their own needs and interests, as well as those of patients.

Stakeholders are encouraged to align the identified green skills for the health and care workforce with their existing skills and competences and acknowledge the emergence of new green roles. Stakeholders are advised to involve the health and care workforce in developing educational and training practices that should incorporate aspects of climate change and sustainability such as green logistics, procurement or hospital building design. The objective also reinforces gender equality and empowers the health and care workforce through the promotion of inclusive approaches to access in education and trainings about green health technologies and skills.

OBJECTIVE 4:

strengthen the promotion of soft skills within the health and care sector



Advocate the development of soft skills alongside digital and green skills as complementary, and a prerequisite for a successful digital and green transition, as well as for building a resilient health and care system.

This objective emphasises problem solving, critical thinking and human and efficient communication as core elements for interaction with colleagues and beneficiaries alike, as well as across sectors to mutually reinforce upskilling and reskilling efforts. It pinpoints the need for multidisciplinary and multiprofessional collaboration for a shift towards person-centred and personalised care for patients but also among the health and care workforce. It also promotes a more integrated approach across the prevention and care continuum and the implementation of high value care.

OBJECTIVE 5:

promote the physical and mental health and well-being of the health and care workforce



Support the health and care workforce in every possible way to safeguard their physical and mental health and well-being.

This objective underlines the importance of the uptake of upskilling and reskilling to improve the working conditions of the health and care workforce. This objective calls upon stakeholders to leverage the benefits of digital technologies and green advancements to tackle mental and physical health discomfort and challenges such as increased stress, burn-out, or inefficiently ventilated work spaces. By delivering their tasks in a more time-efficient way, better organising their day-to-day work, reducing administrative workload, and having access to green and environmentally friendly spaces, the health and care workforce may feel safer and better looked after.

OBJECTIVE 6:

advance training and curricula opportunities targeting continuing professional development and life-long learning



Highlight the importance and necessity of keeping up with global developments, changing societal needs and the competitiveness of the labour market.

This objective encourages stakeholders to research and create innovative teaching methods that will facilitate and enrich the professional life of the health and care workforce. It promotes CPD and LLL as part of the health and care workforce's daily work schedule and as key elements for increasing job satisfaction and for providing efficient and safe patient care in line with available and ever-evolving practices and knowledge. This objective advocates that CPD and LLL go hand-in-hand with job enrichment and promote a sense of achievement both of which play an essential role in the recruitment and retention of the health and care workforce. This objective endorses equity in the access to learning and professional development opportunities in a socio-economic-, age-, culture- and gender-inclusive way.

4. Recommended implementation actions

The BeWell skills strategy provides a roadmap with recommended implementation actions that reinforce synergies between initiatives and stakeholders at three levels:



Local/regional
level



National
level



European
level

Through the Pact for Skills, the roadmap galvanises sustainable change in the health ecosystem and leverages the potential of the skills strategy. For the implementation of the six strategic objectives, stakeholders need to **commit** to making upskilling and reskilling a priority, **involve** their communities, **secure financing** and **implement** a skills strategy based on the specificities of their countries. This implies specific implementation actions to be taken at the three different levels. The health and care workforce must be involved throughout this process to ensure and facilitate participatory and co-creative implementation.



At the local/regional level

Local and/or regional stakeholders, such as public/regional governments, health care providers, development agencies, education and training providers should address the implementation actions within their respective fields of expertise:

Local/ regional level	
Commit	Make digital and green upskilling and reskilling of the health and care workforce a priority by integrating the skills strategy into their operational plans.
Involve	Mobilise the local/regional ecosystem by conducting awareness raising campaigns and dissemination activities. Consultation processes with representatives from across the health care, education, training and employment spectrum should take place and outcomes should inform local/regional strategic plans.
Secure financing	Make use of existing national and European funds foreseen for local/regional development and seek investment opportunities within the local/regional ecosystem such as industry organisations.
Implement	Adapt, adopt and implement the recommended actions which respond to the specificities of their communities. They should indicate areas in need of mitigation and take necessary action to inform decision and policymakers on the national level. They should also introduce policies that could be scaled up on the national and, potentially, the European levels to the extent this is feasible.



At the national level

Member states, in particular designated ministries, agencies and other national authorities, should address the implementation actions within their respective fields of expertise:

National level	
Commit	Ensure that people-in-charge in the respective national authorities commit to the uptake of the digital and green skills strategy and, in consultation with social partners, make it a priority in their agendas.
Involve	Coordinate efforts by aligning the digital and green skills strategy with other interconnected and complementary national strategies and initiatives. They should ensure the participation of all stakeholders throughout the process of consultation, integration, adjustment, implementation and evaluation of the strategy in accordance with and in addition to existing strategies or strategic plans. The process should be multidisciplinary and multiprofessional at all levels and at all times.
Secure financing	Prioritise investment in digital and green upskilling and reskilling of the health and care workforce and make use of the available European funds and financial mechanisms. They should reprogramme existing funds for the uptake and maintenance of the skills strategy. They should recommend the necessary policy elements and implement proposed activities to deliver the expected milestones and outputs depending on the resources available and existing constraints.
Implement	Integrate the digital and green skills strategy into their national strategies for health, education and employment and seek to align these two in accordance with existing resources and constraints. They should ensure that all stakeholders fulfil their commitments and obligations within concrete timelines which are clearly defined in their strategic plans.



At the European level

The European Commission, in collaboration with other EU institutions and agencies, should address the implementation actions within their respective fields of expertise:

European level	
Commit	Continue to promote the digital and green skills agenda through the support of initiatives, projects, networks and European-wide collaborations. Norms, standards, policies and regulations are needed to ensure the implementation of the strategy. European guidance, coordination and implementation of tools are required for its adoption and integration into existing systems and services of member states.
Involve	Liaise with other international organisations and coordinate actions with other EU projects, initiatives, recognised social partners, networks, and associations. This implies that regular meetings among all partners at the European, and when necessary, at the international level (e.g., with the WHO, the OECD), should take place to ensure alignment and proper implementation of the strategy.
Secure financing	Facilitate the provision of funds for the implementation and support of EU-wide projects, initiatives, networks, and associations which focus on the twin digital and green transition of the health and care sector. They should ensure that available funds respond to the specific needs of member states for the upskilling and reskilling of the health and care workforce.
Implement	Support and complement the endeavours of member states to implement the digital and green skills strategy by providing expertise on the local/regional and national level, fostering collaboration and dissemination among member states and monitoring emerging needs and tendencies at a global scale. Actions should be updated with ever-changing digital and green technologies, solutions and competences.

The implementation of the skills strategy will be successful and sustainable only if it is coupled with appropriate actions which address fundamental problems of the health and care sector. Stakeholders should invest in health and care workforce recruitment and retention; create working conditions that promote a healthy work-life balance; offer rewarding salaries; provide a safe working environment to protect the physical and mental health and well-being of the workforce; and improve health and care information systems for better data collection and analysis.

5. Evaluation and monitoring

A Theory of Change framework is incorporated into this BeWell skills strategy. It is an evaluation tool which maps out and creates causal links between the actions, processes, outputs and outcomes that lead to the desired impact of this strategy. This framework strives to help shape the content of the strategy, and ensures it achieves a shared understanding and structured conversation around the overall strategic impact, and the key activities and changes needed. It seeks to capture the heterogeneity of all stakeholders who inform the development of this strategy, and facilitate the necessary synergies within the complex landscape the wider health and care system finds itself in.

As this is the first version of this strategy, the key focus of the Theory of Change framework is to ensure the next and final version of this strategy, and its implementation, understands the context, and also looks ahead at the possible trends, challenges and opportunities that the health and care workforce may need to navigate through. In this sense, such a framework will be used as a foresight tool that complements and supports the development of the BeWell strategic plan, as well as helps with future-proofing BeWell efforts.

BeWell is using the Theory of Change framework (figure 1), to reflect the vision of equipping the health and care workforce for future health challenges through upskilling and reskilling tools accessible for all, gearing towards an interconnected digital and green transition. It does so by taking into account the wider macro-context potentially impacting efforts to a more health and care systems-focused context.

Notable contextual examples include the current lack of digital/green skills within the health and care workforce, poor working conditions in the health and care sector, staff shortages and overburdened workloads. Nonetheless, in the short term there is the potential to create renewed impetus around member states' commitments to the health and care workforce - optimising the expertise and initiatives within (and beyond) the BeWell movement to lay the foundations for basic digital, green and soft skills. Over the medium and long-term, the impact of this strategy could support the inclusion of upskilling and reskilling in training curricula and create greater drive for the reorientation of health and care systems towards prevention, and towards better working conditions and career prospects for the health and care workforce.

Elements which the project depends on, but go beyond its scope:

- Improved HWF capacities/planning/working conditions
- Upskilling/reskilling patients, citizens and communities
- Political commitment

IMPACT: Equipping the health workforce for future health challenges through upskilling and reskilling tools accessible for all, gearing towards an interconnected digital and green transition.

INPUTS/RESOURCES

- EU-funded project (consortium of 24 partners and 5 associated partners, financial resources)
- Multi-stakeholder expertise supported by the diversity of consortium
- Evidence-base generated by collective insight from consortium

ACTIVITIES

- Defining the parameters of digital and green as a primary activity which contributes to BeWell's vision
 - The blueprint strategy for the future health workforce on digital and green skills
 - Accredited training programmes with accompanying training material
- Large Scale Partnership for the Health Ecosystem

BARRIERS/ OBSTACLES

- Lack of political prioritization/foresight to support BeWell efforts
- Different organization of health and education systems, varied levels of investment
- Staff shortages, overburdened staff
- Lack of supportive working environment and conditions for training, fragile and reactive health systems
- Unequal access to opportunities for upskilling and reskilling

CHANGES

Short-term

- Positioning BeWell as a core Member State stakeholder, embedding BeWell efforts across country activities and creating 'renewed impetus' if need be around Member States' commitments to the health workforce.
- Optimising the expertise within (and beyond) the BeWell movement to lay the foundation for basic digital, green and core/soft skills.

Mobilising BeWell's further engagement with other complementary projects and initiatives

Medium-term

- Inclusion of green/digital upskilling and reskilling in training curricula, co-created and supported by the health workforce
- Health systems are reoriented towards prevention, and towards better working conditions and career prospects for the health workforce

Long-term

- The available training to health workforce is expanded to strengthen skills around cross-sectoral collaboration

Health systems are reoriented towards prevention, sustainability and are supportive of health and wellbeing of the health workforce, who equipped with the skills to take on future health challenges

MACRO-CONTEXT: evolving geopolitical landscape, cost-of-living and energy crisis, climate change and environmental crisis, demographic changes, COVID-19 recovery, emerging health threats, rapid technological developments, varying legislative frameworks.

HEALTH SYSTEM CONTEXT: unsustainable and reactive health systems, poor working conditions, lack of skills to cope with new digital (&green) developments, varying/short-term/absent political prioritisation.

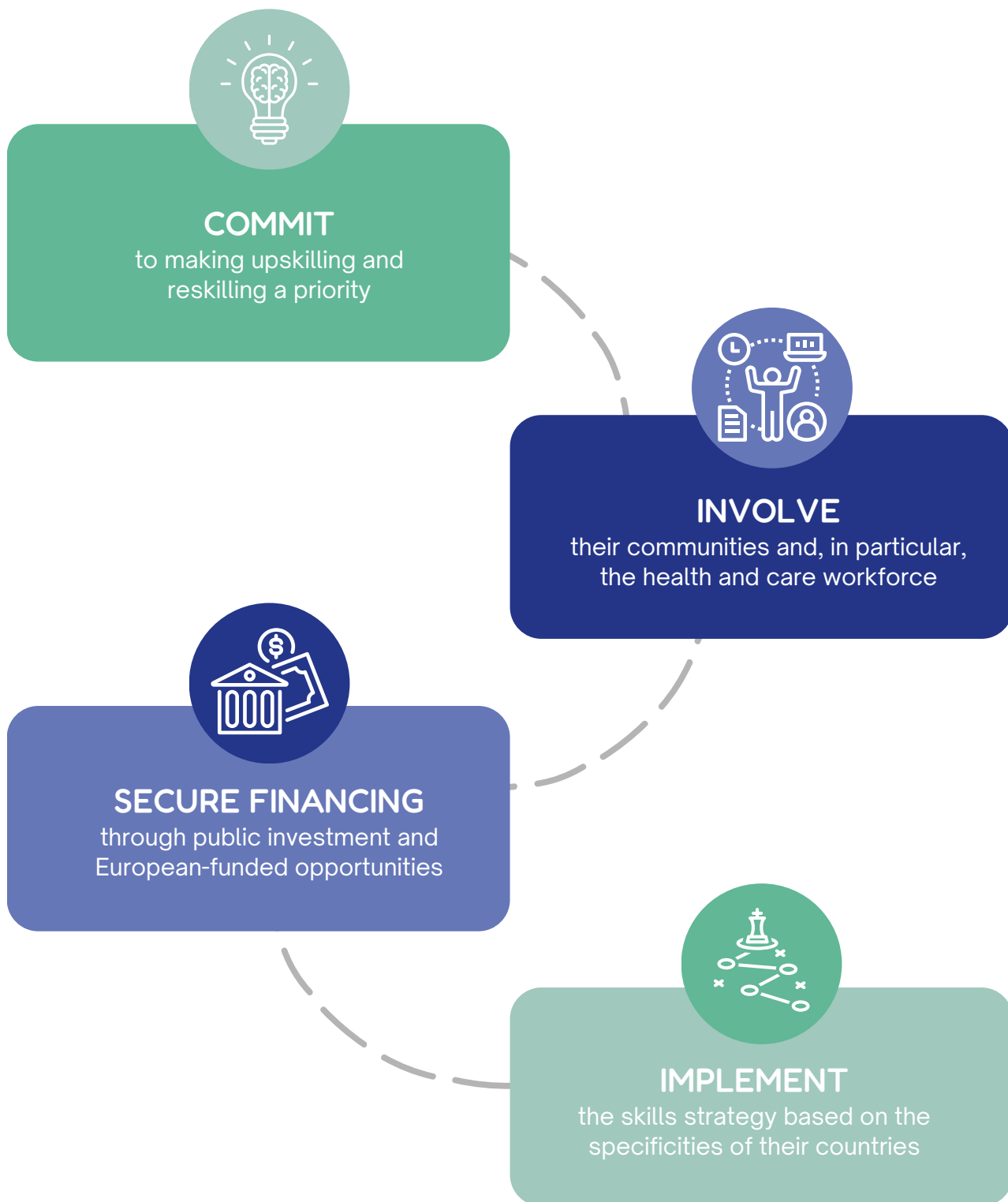
Conclusions and next steps

Resilient and sustainable health and care systems fundamentally depend on the resilience and effectiveness of the health and care workforce. The requirement to support and strengthen them was further highlighted by experiences during the COVID-19 pandemic, as well as in the post-COVID period. The workforce's ability and preparedness to deal with current and future challenges are vital. To this end, this strategy pinpoints the urgent need to upskill and reskill the health and care workforce with digital and green skills.

The aim of this strategy is threefold. It advocates lifelong learning and continuing professional development as key elements for a supported, informed, and equipped health and care workforce. It seeks to raise awareness about the advantages of the uptake of digital and green upskilling and reskilling, and calls on policymakers to integrate the health and care workforce's needs into the design and implementation of policies at the local/regional, national, and European levels.

It is crucial that the complexities and overarching challenges that the health and care ecosystem faces are addressed in order to make its twin digital and green transformation an attainable goal. Although LLL and CPD increase confidence and safety, they cannot be addressed in vacuum. Therefore, in order for the health and care workforce to have time and ability to further develop and seize opportunities through their digital and green upskilling and reskilling, dealing with workforce shortages, the retention crisis (in particular from the frontline), increased workloads, remuneration incommensurate with working hours, and unattractive working conditions must equally be prioritised. With the workforce's physical and mental health and well-being in mind, upskilling and reskilling have the potential to train a future-ready health and care workforce. As a result, they will contribute to the upgrade, modernisation and greening of the health and care sector.

For the uptake of upskilling and reskilling at the local/regional, national, and European levels through the Pact for Skills, the strategy recommends concrete implementation actions which call upon stakeholders to:



This first draft of the skills strategy is open for consultation until December 2025. In it, the health and care workforce is in the spotlight, since the skills strategy is being co-created with them. Consultation will be conducted in three phases:



BeWell partner organisations are working closely with local/regional, national and European actors and are fully committed to helping them adopt and implement the recommended actions with a view to progressing digital and green upskilling and reskilling at a European level.

The skills strategy will be informed with the outputs and indicators that will be delivered during the piloting phase of the training programmes in the frame of the BeWell project. It will also be continuously evaluated and monitored using the Theory of Change framework throughout the consultation phases.

Following the three phases of consultation, the training programmes piloting, and the evaluation and monitoring process, the BeWell skills strategy will define a clear set of activities, milestones and outputs to complement and support the implementation actions that are recommended in this first draft of the strategy.

The final version of the skills strategy will therefore become a strategy **by and for all stakeholders in the health and care ecosystem**, and will be published in June 2026.

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Annex

Initiatives to address skills mismatches

In 2016, the European Commission presented a European skills agenda [18] with the purpose of tackling existing skills challenges, and therefore supporting the upskilling and reskilling of the health and care workforce. Subsequently, the European Commission developed a renewed European Skills Agenda in 2020, building on the European Digital Strategy [10], the Industrial and Small and Medium Enterprise Strategy [8], the Recovery Plan for Europe [9], increased support for youth employment [19], the European Green Deal [6], the European Pillar of Social Rights [7], and the lessons learnt during the COVID-19 pandemic [9]. The 2020 European Skills Agenda consists of 4 building blocks:

1. Calling for sectoral stakeholders to collaborate on a joint action by creating a Pact for Skills Alliance [4];
2. ensuring that people, including health professionals, have the right skills for their jobs;
3. supporting people in their lifelong learning pathways, and;
4. facilitating Member States' and private investments in skills.

The 2020 European Skills Agenda aims to enhance the quality of skills intelligence and skills formation; identifying training skills and qualifications; and advancing skills intelligence, documentation and informed career choices. Therefore, it offers an opportunity to generate positive shifts towards new opportunities for upskilling and reskilling of the health workforce.

In the frame of these opportunities, several European-funded projects have already been implemented, or are currently in progress, to tackle different aspects of skills mismatches and explore various means of intervention:

- DISH [20] [Erasmus+, 2018-2022] aimed to provide health managers with the framework and tools to bridge the gap between the progressive digitalisation of the healthcare sector and the lack of e-health and innovation skills among health and social care professionals;
- EUVECA [21] [Erasmus+, 2022-2026] aims at creating Regional Vocational Excellence Hubs in 7 European regions and providing digital skills to the health workforce;

- XpanDH [22] [Digital Europe, 2023-2024] aims at mobilizing 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 European Health Policy Platform [23] Stakeholder Network on ‘Profiling and training the health workforce of the future’ [since 2021] builds on the previous Thematic Network (2020-2021) and continues building a community of expertise and practice around the evolving skills required of the EU’s health workforce.

In addition, the European Commission declared 2023 as the European Year of Skills [24] with the purpose of discovering and putting forth best practices in support of the workforce of Europe; addressing skills shortages; and promoting reskilling and upskilling. The initiative is premised on the fact that a workforce equipped with the right skills will foster sustainable growth, increase innovation and support the competitiveness of companies. In particular, green and digital transitions will give rise to new opportunities for people, and the EU economy.

Initiatives to address workforce planning

In 2012, the European Commission adopted the first ‘Action plan for the EU health workforce’ [25], as part of the Employment Package, that aimed to boost economic recovery across the EU targeting jobs in the green economy, ICT, and health and social care. Member States were supported to establish effective training capacities and to mitigate the skills mismatch of the health workforce by anticipating future skills needs and to enhancing continuous professional development.

In addition to the European Skills Agenda 2016 and in an endeavour to encourage activities in health workforce planning, the European Commission established a 2013-2016 Joint Action on Health Workforce Planning followed in 2017 by the project ‘Support for the health workforce planning and forecasting expert network’ (SEPEN) that aimed to share expertise and knowledge on enhancing health workforce by developing a network, mapping health workforce policies in all EU countries, providing support to the health workforce planning, and publishing and documenting the above actions. The project ran for 2 years and built an active community to address issues regarding the health workforce planning and policy and to support all EU Member States to participate in activities to health workforce development.

Workforce planning is currently at the core Joint Action HEROES [EU4 Health, 2023 – 2026] which aims to enhance the health workforce planning capacities to ensure a future accessible, sustainable and resilient health workforce. HEROES will focus on creating (i) expertise for planning health workforce needs, (ii) forecasting tools and planning methodologies to address health workforce future challenges, and (iii) skills for effectively managing the health workforce planning and forecasting activities.

The training initiative under the EU4Health programme contributes to the efforts of updating the skills of health professionals. Seven projects launched in spring 2023 support professional development for clinical and non-clinical staff with a focus on digital skills and other skills needed to build future-proof health systems.

The Technical Support Instrument is providing support to close the digital skills gap in healthcare through the flagship initiative Digital Skills for Digital Transformation of Health and Care Systems. Furthermore, Horizon Europe, Healthy Citizens 2.0 focuses on digital competences of patients and Digital Europe programme supports initiatives to develop advanced digital skills, including in healthcare.

Existing policies on the ageing of the health workforce

Ageing population in Europe raises many questions and concerns regarding employment, working conditions, living standards and welfare, the sustainability of pension systems and the supply of labour [26]. In 2013, the sectoral social partners in the hospital sector EPSU and HOSPEEM adopted guidelines and examples of good practice to address the challenges of an ageing workforce [27]. In 2017, employment rates among older workers (aged 55 to 64) were substantially higher than those of the other main age groups [28]. In the same year, European cross-sectoral social partners signed the ‘Autonomous Framework Agreement on active ageing and an inter-generational approach’ [29] committing to facilitate older workers to actively participate and stay longer in the labour market while the European Commission launched the ‘European Partnership for Integration’ with the purpose of offering opportunities for refugees to integrate into the European labour market [30].

In 2020, the Commission relaunched the Partnership for the integration of migrants and refugees into the labour market in line with the premises of the European Pillar of Social Rights. At the same time, the 2023 European Year of Skills aspired to attract skills and talent from outside of the European Union, including by strengthening learning opportunities and mobility and facilitating the recognition of qualifications.

In addition to EU initiatives, European member states test different models and adopt measures to counteract health workforce shortages, and to overcome challenges pertaining to their recruitment and retention. In France, health professionals are allowed to continue working part-time when they reach the statutory retirement age. In Belgium, hospitals have allowed nurses over the age of 55 years to work 32 hours per week while earning a full-time salary. Estonia and Latvia, in an attempt to make health and care sectors more appealing, increase wages and foster professional development and improved working conditions.

BeWell partners



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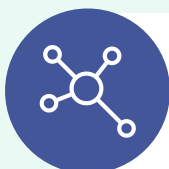


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