BeWell.

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

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

May 2026

BeWell is a European collaborative initiative supporting the upskilling and reskilling of the health and care workforce in response to digital transformation and the transition towards environmentally sustainable health systems. Bringing together partners from across healthcare, education, policy, research, and professional representation, the project has worked to identify current and emerging skills needs and translate them into a coherent and actionable European Skills Strategy.

The project combined skills intelligence, policy analysis and an extensive, multi-year stakeholder consultation involving health and care professionals, educators, health managers, policymakers and patient representatives across Europe. This process enabled the development of a Strategy grounded in real-world training needs, implementation constraints, and system-level priorities.

At its core, BeWell has delivered a structured competence framework covering digital, green and core competences, designed to support both initial education and continuous professional development. Building on this foundation, the Strategy proposes practical implementation pathways across governance levels and a set of indicative benchmarks to support reflection on progress and alignment of actions.

The BeWell Skills Strategy is intended as a reference framework for policymakers, healthcare organisations and education providers seeking to strengthen workforce capabilities and support the long-term transformation, resilience and sustainability of European health systems.

More about the project can be found at www.bewell-project.eu

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Executive summary

Health and care systems across Europe are undergoing a profound transformation driven by demographic pressures, workforce shortages, digitalisation and the transition towards environmentally sustainable models of care. These shifts are reshaping not only how care is delivered, but also the skills required from the health and care workforce. At the same time, training systems remain fragmented, often addressing emerging competences in isolation and with limited integration into professional pathways.

The BeWell Skills Strategy responds to this challenge by proposing a coherent and implementation-oriented framework for workforce development. It is grounded in the recognition that **strengthening workforce competences is not only a technical exercise, but a structural condition for resilient, sustainable and high-quality health systems.** The Strategy has been developed through an extensive, multi-year consultation process involving 765 stakeholders across Europe, including policymakers, health and care professionals, educators, managers and patient representatives. This process has ensured that the Strategy reflects real-world constraints, diverse national contexts and varying professional needs.

At its core, **the Strategy introduces a structured competence architecture built around three interdependent domains: digital, green, and core competences.** Rather than treating these as separate skill sets, **the framework emphasises their integration in professional practice**. Digital transformation, environmental sustainability and organisational change require not only technical expertise but also communication, collaboration, leadership and adaptability. The competence architecture is operationalised through modular competence matrices based on learning outcomes, allowing adaptation across professions, training systems and national contexts.

The Strategy also highlights that competence frameworks alone are insufficient to drive change. Implementation depends on a set of enabling conditions that are often constrained in practice. Workforce shortages combined with time scarcity, limited financing, uneven digital infrastructure and organisational constraints significantly affect the feasibility of training. **Without addressing these structural barriers, upskilling and reskilling efforts are unlikely to achieve scale or sustainability.**

To address this, the Strategy identifies key enabling conditions for realistic implementation. These include protected learning time, sustained investment in workforce development, adequate digital infrastructure, organisational readiness, leadership capacity and broader cultural change. Most importantly, the Strategy emphasises that **learning must be embedded within professional practice rather than added as an external or optional activity.** It also highlights the importance of **integrating digital, green and core competences into initial education and training**, ensuring that these skills are developed from the outset of professional careers.

The consultation underpinning the Strategy provides important insights into workforce priorities and implementation realities. **Digital competences emerge as the most immediate training priority,** with strong alignment between workforce demand, policy focus and existing training provision. **Sustainability competences are recognised as strategically important but remain unevenly integrated** into training systems and professional practice. **Core competences are widely valued and already more established**, playing a critical enabling role in supporting both digital and sustainability transitions. Across all stakeholder groups, the most significant barrier to training participation is lack of time, driven by workload pressures and staffing shortages.

Building on these findings, **the Strategy proposes multi-level implementation pathways across six governance levels:** European institutions, national and regional authorities, healthcare organisations, education and training providers, health and care professionals, and patient and civil society organisations. Each level has a distinct role in enabling workforce development, from shaping policy frameworks and funding mechanisms to integrating competences into curricula and daily practice. The Strategy emphasises that **effective implementation requires coordination across these levels, rather than isolated initiatives.**

At the European level, policy frameworks such as the European Health Data Space (EHDS), the Artificial Intelligence (AI) Act and the European Green Deal create both the need and the opportunity for coordinated skills development. At the national and regional level, workforce strategies, accreditation systems and incentives are critical for embedding new competences. At the organisational level, the focus shifts to operational feasibility, including protected learning time and work-integrated learning. Education providers play a central role in transforming curricula, while health and care professionals themselves are key

actors in engaging with lifelong learning. Patient and civil society organisations contribute by strengthening accountability and ensuring alignment with societal needs.

Rather than proposing prescriptive targets, **the Strategy introduces a set of indicative implementation benchmarks designed to signal a direction of travel and support reflection on progress.** These benchmarks are deliberately flexible and adaptable, recognising the diversity of health systems, workforce structures and professional roles across Europe. They are aligned with broader aspirational commitments under the Pact for Skills Large-Scale Partnership for the health ecosystem, which promotes the ambition that by 2030, 10% of the workforce will participate annually in digital upskilling and 8% in green skills development.

The benchmarks are structured across four dimensions: competence development, training systems and education, organisational implementation, and policy and governance. They focus on enabling conditions - such as access to training, curriculum integration, protected learning time and policy alignment - rather than on measuring individual performance. The Strategy also acknowledges that while large-scale implementation remains a future step, the project has already contributed to increased alignment among stakeholders, greater awareness of skills needs and early developments in training design and organisational approaches.

Overall, the BeWell Skills Strategy is not intended as a prescriptive roadmap, but as a shared reference framework to guide action. It provides a structured and adaptable approach that can support policymakers, healthcare organisations, education providers and professional communities in strengthening workforce competences. By linking competence development with implementation conditions and governance pathways, **the Strategy aims to support a realistic and coordinated transition towards a workforce capable of delivering high-quality, sustainable and patient-centred care across Europe.**

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Introduction

The health and care workforce is the cornerstone of a well-functioning health system. Across Europe, however, health systems are facing a convergence of pressures that are transforming the context in which the workforce operates. Workforce shortages, rising service demand, digital transformation and the transition towards environmentally sustainable health systems are reshaping the skills required from health and care professionals. Many countries are faced with ageing workforces, increasing demand for services and persistent difficulties in attracting and retaining professionals. These pressures were intensified during and after the COVID-19 pandemic, which placed extraordinary strain on the workforce and exposed underlying vulnerabilities in workforce planning, working conditions and training systems. These challenges manifest differently across countries and professional groups, reflecting variations in health system organisation, regulatory frameworks and workforce roles, and require adaptable approaches to skills development.

The consequences of these pressures are increasingly visible in staff working conditions and well-being. Recent large-scale surveys across the European Union (EU), Iceland and Norway have shown high levels of psychological distress among doctors and nurses, associated with factors such as long working hours, workplace violence and demanding working conditions[1]. These findings highlight the **urgent need to strengthen workforce resilience and support systems that enable professionals to maintain their well-being while continuing to deliver health promotion, disease prevention, and high-quality care.**

At the same time, health systems are undergoing a profound digital transformation. Digital health technologies are becoming integral to the organisation and delivery of care, including electronic health records, data-driven decision-making tools and emerging applications of artificial intelligence (AI). While these technologies offer opportunities to improve efficiency, quality and patient engagement, their successful adoption depends heavily on the workforce's capacity to use them effectively. Evidence shows that barriers to the uptake of digital technologies often relate to infrastructure as well as to workforce training, organisational readiness and time constraints[2]. This transformation is also shaped by evolving European legislation, including the European Health Data Space (EHDS) Regulation and the AI Act, which mark a structural shift in the use and governance of health data.

Alongside digitalisation, the transition towards environmentally sustainable health systems is gaining increasing policy attention. Health systems are both vulnerable to the effects of climate change and contributors to environmental impacts through energy use, procurement and waste generation. This creates new expectations for health and care professionals and organisations to adopt more sustainable practices and integrate planetary health considerations into clinical and organisational decision-making. Developing green skills across the workforce therefore becomes an important component of the broader transformation of health systems.

Despite these evolving pressures, approaches to workforce skills development remain fragmented. Training systems often address digital skills, sustainability competencies and core professional capabilities in isolation. Many education and training structures remain oriented towards initial professional education rather than continuous upskilling and reskilling throughout a professional career. Furthermore, initial education curricula for health and care professionals do not yet systematically integrate competences related to digital and green transitions.

These limitations highlight the **need for a more integrated and implementation-oriented approach to workforce skills development. Addressing digital, green and core competencies simultaneously requires coordinated action across education systems**, including the adaptation of curricula, healthcare organisations and policy frameworks. Coordinated action includes creating flexible learning pathways, supporting lifelong learning and ensuring that training opportunities are compatible with the realities of clinical work. At the same time, **efforts to strengthen workforce skills cannot take place in isolation.** Effective upskilling and reskilling depend on supportive working conditions that enable professionals to participate in training and apply new competences in practice. They also require the active involvement of health and care professionals in the design and delivery of training offers, as a key condition for relevance, uptake and sustainability.

The BeWell project was established precisely to address these challenges. Bringing together a broad

[1] Mental Health of Nurses and Doctors survey in the European Union, Iceland and Norway. WHO Regional Office for Europe. Copenhagen, 2025.
[2] Accelerating the uptake of digital solutions by the health and care workforce in the WHO European Region. WHO Regional Office for Europe. Copenhagen, 2025.

alliance of stakeholders across Europe, including organisations representing health and care professionals, education and training providers, healthcare organisations, research institutions, social partners and international NGOs, the project aimed to develop a coherent strategy for the digital and green upskilling and reskilling of the health and care workforce.

The BeWell Skills Strategy builds on the evidence generated throughout the project, including skills intelligence work, policy briefs on digital and green skills, and stakeholder consultations across the European health sector. These consultations, conducted through surveys and targeted workshops over an extended period, brought together a wide range of stakeholders and contributed to shaping the priorities and structure of this Strategy. This process has helped build shared ownership of the Strategy and strengthened its relevance across different sectors and governance levels. Building on this foundation, the Strategy has translated these findings into a practical framework aimed at supporting policymakers, healthcare organisations and training providers in strengthening the capabilities of the health and care workforce for the challenges ahead.

1. The BeWell competence architecture

A central output of the BeWell project is the development of a structured competence framework designed to guide the transformation of the European health and care workforce in the context of digitalisation and environmental sustainability. This architecture provides the technical backbone of the BeWell Skills Strategy and serves as the organising framework through which the competences required for future health systems are defined, structured and operationalised.

The competence architecture responds to two structural shifts affecting health systems across Europe. The first is the accelerating digital transformation of healthcare delivery, including the increasing use of digital health technologies, health data infrastructures, artificial intelligence, and telehealth solutions. The second is the growing recognition that health systems must contribute to environmental sustainability and climate resilience, both through changes in clinical practice and in organisational transformation.

Addressing these developments **requires a workforce capable of navigating complex technological environments, understanding sustainability challenges and working collaboratively across disciplines.** The BeWell competence architecture therefore identifies three core competence domains that together form the foundation of workforce transformation: digital competences, green competences and core competences.

These domains are not intended to operate as independent skill sets. Instead, **they form an integrated competence model designed to reflect the interconnectedness of professional practice in contemporary healthcare systems.** Digital transformation, sustainability and organisational change not only require technical capabilities but also behavioural, organisational and collaborative competences.

To translate this conceptual framework into practical training and workforce development pathways, the BeWell framework is operationalised through a system of competence matrices based on learning outcomes. These **matrices define the knowledge, skills and competences required for specific professional functions and provide the structural basis for training programmes, micro-credentials and assessment mechanisms.**

The matrices follow the learning outcomes approach widely used in European education and training policy frameworks. In this approach, competences are described in terms of what a learner knows, understands and can perform after completing a learning process. Learning outcomes are therefore expressed through three interrelated dimensions: knowledge, skills and competence, with competence understood as the demonstrated ability to apply knowledge and skills in real work situations with appropriate levels of responsibility and autonomy.

The BeWell architecture organises learning outcomes into logical units that can be combined into training modules, courses, or micro-credentials. These units can, in turn, be aggregated into broader qualification pathways or integrated into existing professional education and training programmes. This modular structure allows the competence architecture to support both initial education and continuing professional development, as well as upskilling and reskilling pathways for the health and care workforce.

1.1. Digital competences

Digital competences form a central pillar of the BeWell competence architecture, reflecting the growing importance of digital technologies in the organisation and delivery of healthcare services. Digital technologies are reshaping clinical workflows, care coordination and decision-making processes. For health and care professionals to operate effectively in these environments, a broad set of digital competences is required. These competences extend far beyond basic computer literacy and encompass the ability to understand, use and critically evaluate digital tools within healthcare contexts, including the ability to understand, interpret and appropriately apply artificial intelligence systems in clinical and organisational settings.

The BeWell competence matrices structure digital competences around several core capability areas. One important area concerns **information and data literacy.** Health and care professionals must be able to access, interpret and manage digital information and health data in a responsible and secure manner. This includes understanding how health information systems function, how data is structured and stored, and how data can be used to support clinical decision-making and service improvement.

Another key area relates to **digital communication and collaboration**. Digital technologies are increasingly used to support coordination between health and care professionals, patients and care organisations. Competences in this area therefore include the ability

to use digital communication platforms, participate in virtual care environments and collaborate through digital tools within interdisciplinary teams.

A further area concerns the **effective use of digital technologies and digital health applications**. Health and care professionals must be able to work with electronic health records, telemedicine systems, remote monitoring technologies and other digital health solutions, especially AI, that are becoming integral to care delivery and beyond. This also includes the ability to adapt workflows and professional practices in response to the introduction of new technologies, as well as to contribute to the design, selection and continuous improvement of digital tools to ensure their relevance, usability and alignment with clinical needs.

Digital safety and cybersecurity awareness constitute another important component of digital competence. Healthcare organisations manage large volumes of sensitive personal data and operate critical infrastructures that must be protected against cyber threats. Health and care professionals therefore need to understand the principles of data protection, privacy and cybersecurity in order to ensure the safe and secure handling of digital information and technologies.

Finally, **digital problem-solving competences** are required to enable professionals to adapt to rapidly evolving technological environments. These competences include the ability to identify digital solutions to professional challenges, troubleshoot technical problems and contribute to the continuous improvement of digital systems within healthcare organisations.

The BeWell competence matrices organise these competences through structured learning outcomes that describe the expected capabilities at different levels of professional complexity. The architecture supports progression across multiple proficiency levels aligned with the European Qualifications Framework (EQF), enabling training programmes to address both basic digital literacy needs and advanced digital health capabilities.

Importantly, **the competence architecture recognises that digital competences must be contextualised within healthcare practice.** The digital skills required by a hospital nurse, a health manager or a health data specialist differ significantly. The BeWell matrices therefore allow for differentiation between professional roles while maintaining a common structural framework for competence development.

1.2. Green competences

The second domain of the BeWell competence architecture focuses on green competences, reflecting the increasing importance of environmental sustainability within health systems. Healthcare systems themselves have a significant environmental footprint, including energy consumption, resource use, waste generation and supply chain impacts. At the same time, climate change poses growing challenges for public health and health system resilience. These developments require health and care professionals to understand the environmental dimensions of health and care practice and to contribute to more sustainable models of care delivery.

Within the BeWell competence architecture, green competences encompass the knowledge, skills and professional behaviours required to support environmentally responsible healthcare systems. These competences are structured around several interrelated capability areas. One important area concerns **awareness of environmental sustainability and planetary health**. Health and care professionals increasingly need to understand the links between environmental conditions and health outcomes, as well as the role of healthcare organisations in contributing to environmental impacts.

Another area focuses on **sustainable resource management within health and care settings**. This includes competences related to energy efficiency, water use, waste management and sustainable procurement. Professionals working in healthcare organisations must be able to participate in initiatives aimed at reducing resource consumption and improving environmental performance.

Waste management and circular economy principles represent another key component of green competences. Healthcare generates large volumes of waste, including hazardous materials and single-use medical products. Sustainable waste management practices therefore require professionals to understand waste reduction strategies, recycling approaches and environmentally responsible disposal methods.

Green competences also include the ability to support the **implementation of sustainable technologies and practices within healthcare organisations**. This may involve the adoption of environmentally friendly medical technologies, participation in sustainability initiatives within hospitals or the redesign of care processes to reduce environmental impacts.

An important element of this competence domain is systems thinking. **Environmental sustainability challenges are inherently systemic**, involving interactions between clinical practice, organisational management, supply chains and public policy. Health and care professionals therefore need to understand how different components of the health system interact and how changes in one area may affect environmental outcomes elsewhere.

By integrating these competences into training programmes and professional development pathways, the BeWell competence architecture seeks to embed sustainability considerations directly into the

professional culture of healthcare organisations. Rather than treating environmental **sustainability** as an external policy issue, the BeWell competence architecture positions it **as an integral component of professional competence and organisational responsibility**.

1.3. Core competences

While digital and green competences address specific areas of technical transformation, core competences provide the behavioural and organisational capabilities that enable these technical skills to be applied effectively within healthcare environments.

Healthcare delivery is inherently collaborative and requires continuous interaction between professionals, patients and organisations. As healthcare systems become more technologically complex and organisationally integrated, the importance of core competences has increased significantly.

Within the BeWell competence architecture, core competences encompass a range of transversal capabilities that support effective professional practice. **Communication competences** are central to this domain. Health and care professionals must be able to communicate effectively with patients, colleagues and stakeholders across a variety of settings. This includes the ability to explain complex information clearly, engage in shared decision-making with patients and collaborate within multidisciplinary teams.

Collaboration competences are equally important. Healthcare delivery increasingly depends on coordination between professionals from different disciplines and organisations. Effective teamwork requires the ability to work constructively with others, manage conflicts and contribute to shared goals.

Adaptability and resilience represent another important competence area. Health systems operate in environments characterised by rapid technological change, evolving professional roles and growing service demands. Professionals therefore need the capacity to adapt to new practices, learn continuously and respond constructively to organisational change.

Leadership competences are also included within the core competence domain. Leadership in healthcare is not limited to formal managerial roles but involves the ability of professionals at all levels to guide teams, support innovation and contribute to organisational improvement.

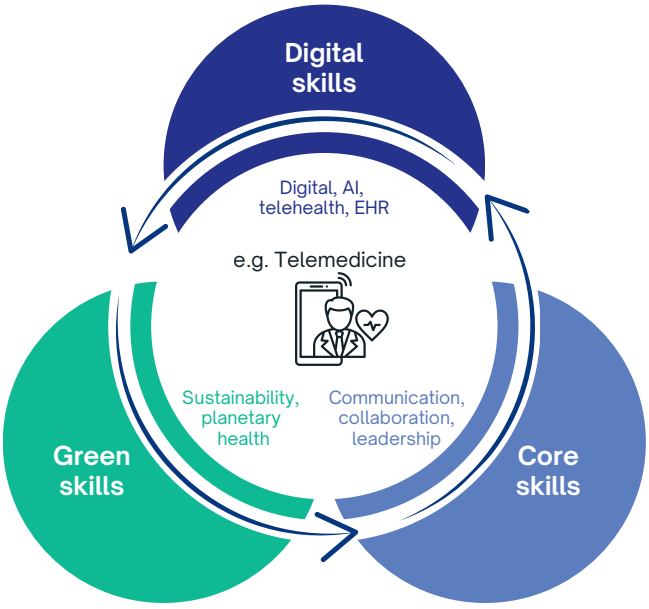
Finally, **patient-centred competences** on the part of health and care professionals are critical for ensuring that healthcare services remain focused on the needs and experiences of patients. These competences include empathy, ethical awareness and the ability to involve patients actively in care processes.

Within the competence matrices, core competences are integrated alongside technical competences in order to reflect the reality that **effective healthcare practice depends on both technical expertise and interpersonal capabilities.**

1.4. Interdependencies between the three domains

Although digital, green and core competences are described as individual items in the BeWell competence architecture, the framework emphasises their strong interdependencies. Digital transformation initiatives in healthcare, for example, require not only technical proficiency but also strong communication and collaboration competences in order to ensure that technologies are integrated effectively into clinical practice. Similarly, sustainability initiatives depend on organisational leadership, behavioural change and interdisciplinary cooperation. Treating these competence domains in isolation would therefore pose the risk of producing fragmented training approaches that fail to address the complexity of healthcare environments. The BeWell architecture instead promotes integrated competence development across the three domains.

Training programmes designed within the framework combine digital, green and core competences in ways that reflect real professional activities. For example, a training module on telemedicine may include digital competences related to the use of telehealth technologies, core competences related to remote patient communication and elements of sustainability related to reduced travel and resource use.



This integrated approach supports the broader transformation of health systems by equipping professionals with the diverse capabilities required to navigate technological change, environmental challenges and organisational complexity simultaneously. In this way, the BeWell competence architecture provides a comprehensive framework for workforce development that supports both individual professional growth and system-level transformation.

2. Enabling conditions for realistic implementation

Developing a Skills Strategy for the health and care workforce is only meaningful if the conditions exist to implement it in real-world contexts. Health systems across Europe operate under significant structural pressures that directly influence the feasibility of workforce development initiatives. Workforce shortages, financial constraints, organisational capacity and infrastructure limitations all shape the extent to which health and care professionals can realistically participate in upskilling and reskilling programmes. A successful Skills Strategy must therefore be grounded in these realities and identify the enabling conditions that allow workforce development initiatives to translate into practice.

Workforce shortages and time scarcity

Workforce shortages remain one of the most significant structural challenges facing healthcare systems in Europe. Many countries report persistent shortages of nurses, doctors and other health and care professionals, alongside difficulties in recruiting and retaining staff. These shortages are driven by a combination of factors, including demographic change, ageing populations, increased demand for services and the retirement of experienced professionals. In many cases, shortages are compounded by migration flows and uneven geographical distribution of the workforce[3]. Recent estimates indicate a shortage of approximately 1.2 million health and care professionals across the European Union, with evidence highlighting the need for multipronged strategies combining workforce planning, retention measures and skills development to address this challenge[4].

The consequences of these shortages are visible in the daily work environment of health and care professionals. **Staff shortages frequently translate into increased workloads, longer working hours and reduced flexibility in staffing arrangements.** Health and care professionals are often required to work extended shifts, cover for absent colleagues and manage increasing numbers of patients with complex care needs. Under such conditions, participation in training and professional development activities becomes difficult. Even when training opportunities are available, professionals may struggle to find time to engage with them alongside their clinical responsibilities. This creates a structural tension between the need to strengthen workforce skills and the operational demands placed on healthcare staff.

Time scarcity is therefore a central constraint that must be addressed when designing workforce development initiatives. Training programmes that require substantial time commitments outside working hours are unlikely to achieve large-scale participation. Instead, **learning opportunities must be designed to integrate more naturally into everyday work environments**, allowing professionals to develop new competencies without adding unsustainable pressures to already demanding roles.

Protected learning time

Ensuring **protected learning time is one of the most important enabling conditions for effective workforce upskilling and reskilling.** Health and care professionals need dedicated time within their work schedules to be set aside so that they can participate in training, reflect on new knowledge and apply new skills in practice. Protected learning time is widely recognised as a key mechanism for supporting continuous professional development in healthcare. Without explicit organisational commitment to allocate time for training, learning activities are often postponed or deprioritised in favour of immediate service delivery needs.

In practice, protected learning time can take several forms. Some organisations allocate specific hours within work schedules for professional development, while others integrate training activities into regular team meetings, clinical governance sessions or structured educational programmes. Flexible learning approaches such as modular training, micro-credentials and blended learning formats can also support participation in training by reducing the time required for traditional classroom-based courses. However, implementing protected learning time requires organisational planning and management support. Healthcare organisations must ensure that staffing arrangements enable professionals to undergo training without compromising patients' health outcomes. Implementing protected working time often requires careful workforce planning and, in some cases, additional staffing capacity to maintain service continuity.

[3] Health and care workforce in Europe: time to act. WHO Regional Office for Europe. Copenhagen, 2022.
[4] Health at a Glance: Europe 2024: State of Health in the EU Cycle. OECD/European Commission. OECD Publishing, Paris, 2024. https://doi.org/10.1787/b3704e14-en

Financing and sustainability of workforce development

Financing represents another critical enabling condition for the successful implementation of workforce skills strategies. Developing training programmes, digital learning platforms, certification systems and evaluation mechanisms requires sustained investment over time. In many healthcare systems, however, funding for workforce development remains fragmented across different institutions and programmes. Training budgets may be limited, short-term or dependent on project-based funding rather than embedded in long-term health system financing structures. This limitation can make it difficult to sustain training initiatives beyond pilot phases or initial implementation.

Long-term financial commitment is therefore essential to ensure that workforce development initiatives remain stable and scalable. This commitment includes funding not only for the development of training materials and programmes but also for the organisational structures needed to support continuous learning. These structures may include digital learning platforms, training coordination units, mentoring systems and evaluation frameworks.

Investment in workforce development should also be understood as a strategic component of health system resilience. Strengthening the skills and adaptability of the workforce contributes to improved service delivery, more effective use of technology and greater capacity to respond to emerging health challenges.

Digital infrastructure and organisational readiness

Digital transformation is increasingly shaping the organisation and delivery of health and care services. Electronic health records, telemedicine, data analytics and artificial intelligence are becoming integral components of healthcare systems. While these technologies offer significant opportunities to improve care delivery, their effective use depends on both technological infrastructure and workforce capabilities.

Evidence suggests that the uptake of digital health technologies often faces barriers related to infrastructure limitations, insufficient training and organisational factors. Successful digital transformation therefore requires a comprehensive approach that addresses not only technological deployment but also workforce skills, organisational workflows and leadership structures[5].

Access to functional digital infrastructure is a prerequisite for developing digital competencies across the workforce. Health and care professionals cannot effectively acquire digital skills if the technologies they are expected to use are not reliably available in their working environments. Variability in digital infrastructure across countries and healthcare organisations continues to influence the overall pace of digital transformation.

Organisational readiness also plays a significant role. Digital tools often require changes to clinical workflows, documentation practices and communication patterns within healthcare teams. **Training programmes must therefore be accompanied by organisational adjustments that enable professionals to incorporate digital tools into routine practice.** Crucially, health and care professionals should be actively involved in the design, selection and adaptation of digital tools, as this increases usability, relevance and acceptance, and reduces the risk of low uptake of both technologies and associated training.

[5] Accelerating the uptake of digital solutions by the health and care workforce in the WHO European Region. WHO Regional Office for Europe. Copenhagen, 2025.

Change management and leadership capacity

Large-scale workforce transformation requires effective leadership and change management at multiple levels of the health system. Introducing new competences, technologies and organisational processes inevitably alters established ways of working. Without adequate leadership and support, these changes may face resistance or fail to achieve their intended impact.

Healthcare leaders play a critical role in shaping organisational cultures that support continuous learning and innovation. Leaders who actively promote professional development and create supportive learning environments can significantly influence workforce engagement with training initiatives. **Change management strategies should therefore accompany the implementation of workforce development programmes.** These strategies may include structured communication with staff, involvement of health and care professionals in the design of training initiatives, and mechanisms to gather feedback and adapt programmes over time. Leadership development itself is also an important component of workforce skills strategies. Health managers and organisational leaders require specific competences to guide teams through periods of transformation, particularly in relation to transitions in digitalisation and sustainability.

Cultural and behavioural transformation

In addition to structural and organisational factors, **successful workforce development depends on broader cultural and behavioural change.** Integrating digital, green and core competencies into healthcare practice requires professionals to adopt new ways of working, collaborating and making decisions. For example, the integration of digital tools into clinical workflows often requires professionals to rethink established routines, develop new forms of communication with patients and colleagues, and engage with data-driven decision-making processes. Similarly, the adoption of environmentally sustainable practices in healthcare may involve reconsidering procurement choices, clinical procedures and organisational processes.

These changes extend beyond technical training. They require shifts in professional culture, organisational norms and individual behaviours. Workforce development initiatives should therefore incorporate elements that support reflective practice, interdisciplinary collaboration and adaptive learning. Embedding continuous learning within the culture of healthcare organisations can help support these transitions. When learning and innovation are viewed as integral components of professional practice rather than as additional tasks, workforce development becomes more sustainable and more closely aligned with everyday work.

Building realistic pathways for implementation

Recognising these enabling conditions is essential to ensure that workforce skills strategies remain realistic and implementable. Upskilling and reskilling initiatives must therefore be designed in ways that acknowledge the operational realities of healthcare systems and the constraints faced by health and care professionals.

Addressing these challenges requires coordinated action across multiple levels of the health system. Policymakers play a key role in establishing supportive policy frameworks and financing mechanisms. Healthcare organisations must create learning environments that support professional development and innovation. Education and training providers need to develop flexible and accessible learning pathways that accommodate the needs of a diverse workforce. This also requires the systematic integration of digital, green and core competences into initial education and training curricula, ensuring that these skills are embedded early in professional development rather than introduced only as additional or optional learning components later in professional careers.

When these elements are aligned, workforce development can move beyond isolated training programmes and become an embedded component of health system transformation. By addressing structural constraints and supporting the conditions needed for learning, health systems can strengthen the capacity of their workforce to adapt to evolving challenges and deliver high-quality health promotion, disease prevention and care.

3. Consultation insights – priorities and implementation realities

The development of the BeWell Skills Strategy was supported by an extensive consultation process designed to ensure that the framework reflects the realities of workforce development across the European health ecosystem. The Strategy was therefore developed through a phased and participatory approach aimed at progressively building ownership, legitimacy and practical feasibility. This approach also acknowledges that training needs and implementation conditions vary across countries, health systems and professional roles, requiring flexibility in how the Strategy is applied in different contexts.

An initial version of the Strategy was developed in June 2023 through internal consultation undertaken among the organisations participating in the BeWell project. This process brought together expertise from partners active across health system governance, education and training, digital health, public health, regional development and labour representation. The outcome of this first phase was an initial strategic framework identifying key competence domains, priority areas and preliminary assumptions regarding implementation.

The initial version of the Strategy was subsequently refined through a broader consultation process involving stakeholders from across the health ecosystem. This process combined an online public consultation with a series of targeted stakeholder workshops organised throughout the project. The consultation process extended over two and a half years and included periodic review points which allowed for the progressive refinement of the Strategy. In total, 765 contributions were collected from all the consultation activities, including responses to the online survey and inputs gathered during workshops and discussion sessions. These contributions came from multiple stakeholder groups, including health and care professionals, educators, health managers, and policymakers. Patient representatives and patient organisations also contributed to the consultation. Although the patient groups represented a smaller share of overall participants, their perspectives helped to broaden the understanding of workforce development in relation to health promotion, disease prevention, care quality and service delivery.

The targeted workshops enabled deeper discussion of the emerging findings and facilitated dialogue between stakeholders from health, education and policy domains. These exchanges helped validate the consultation results, clarify implementation challenges and refine the strategic priorities reflected in the final version of the Strategy.

The consultation aimed to capture three key dimensions of workforce development: perceived skills needs, structural barriers to training participation, and enabling conditions for implementation. Taken together, these inputs provide a grounded view of current training realities across the European health ecosystem.

Several consistent patterns emerged from this consultation process. **Digital competences appear to be the most immediate workforce training priority and the area where workforce demand, policy attention and training provision are most closely aligned**. **Sustainability-related competences are recognised as strategically important** by several stakeholder groups, particularly policymakers and system-level actors, **but perceptions vary across respondents and they remain unevenly embedded in training pathways and professional practice. Core competences are widely valued** across stakeholder groups **and are already more established within educational programmes.** Finally, structural constraints - particularly time pressures and workload intensity - represent the most significant barriers to expanding training initiatives.

These insights suggest that the central challenge facing health systems is not the identification of relevant competences, but the development of realistic pathways capable of integrating new skills into already stretched organisational and professional environments, including through their earlier integration into initial education and training systems.

3.1. Skills priorities emerging from the consultation

The consultation gathered perspectives from five main stakeholder groups: health and care professionals, educators and training providers, health managers, policymakers, and patient representatives. Each group interacts with workforce skills development from different institutional positions and therefore highlighted a variety of priorities and constraints.

Health and care professionals provided insight into the practical realities of training participation and skills application in clinical environments. Educators and training providers focused on curriculum design,

pedagogical approaches and the integration of new competences into existing training programmes. Health managers reflected organisational capacity and operational feasibility within healthcare institutions. Policymakers contributed system-level perspectives related to workforce planning, regulatory frameworks and long-term health system transformation. Patient representatives centred their focus on care quality, accessibility and responsiveness to patient needs.

Despite these different institutional positions, several converging priorities emerged across stakeholder groups. **Digital competences consistently appeared as the most immediate area for workforce development.** Health and care professionals identified digital health skills as a primary professional development need, particularly in relation to electronic health records, telemedicine, digital communication tools, artificial intelligence and cybersecurity. These priorities reflect the rapid digitalisation of healthcare systems and the growing integration of digital technologies into everyday clinical workflows.

Policymakers similarly emphasised digital competences as a priority for system-level investment. Strengthening digital literacy and digital health capabilities was viewed as essential for the implementation of wider policy initiatives, including data-driven health systems, integrated care models and cross-border digital health infrastructures. Educational institutions have already begun responding to this transformation. Digital competences are increasingly integrated into existing curricula and training programmes, although not yet to the same extent as traditional clinical skills. This indicates that institutional adaptation is underway but remains incomplete.

Sustainability-related competences occupy a more complex position in the workforce skills landscape. Policymakers consistently identify green skills as an important strategic priority, reflecting the growing policy attention given to environmentally sustainable and climate-resilient health systems. However, these priorities are not yet fully reflected in workforce perceptions or training pathways. Health and care professionals tended to rank green competences lower than digital or core competences in terms of their immediate professional development needs, and educational institutions report lower levels of curriculum integration. **These discrepancies reflect the relatively early stage of institutionalisation of sustainability competences in the health sector**. Environmental responsibilities are increasingly recognised in policy frameworks, but their translation into training systems and professional practice remains uneven.

Core and transversal competences emerged as a widely recognised priority across all stakeholder groups. Communication, teamwork, leadership and patient engagement were consistently highlighted as essential capabilities for effective collaboration in increasingly complex healthcare environments. Educators reported that these competences are already relatively well embedded in many health training programmes. These competences also play an enabling role in supporting the adoption of digital technologies and sustainability initiatives. Organisational culture, interdisciplinary collaboration and behavioural change are all critical for successful transformation, making core competences an important enabling condition for broader health system change.

3.2. Structural barriers to training participation

While strong support exists for expanding workforce skills development across all competence domains, the consultation also highlighted significant barriers to implementation. **Across stakeholder groups, the most frequently cited constraint is lack of time.**

Health and care professionals reported limited opportunities to participate in training activities due to heavy workloads and demanding schedules. Staff shortages, increasing service demand and the growing complexity of patient care often leave little flexibility in daily clinical operations. In many cases, professionals indicated that training opportunities exist but remain difficult to access in practice because participation requires time that is simply not available in already overloaded work schedules.

Health managers described a similar constraint from an organisational perspective. Releasing staff for training can be operationally difficult when healthcare organisations are already operating under tight staffing conditions. Training participation may require temporary staff replacement, reorganisation of shifts or the redistribution of clinical tasks among already stretched teams. As a result, even when organisations recognise the importance of workforce development, training activities may be postponed or limited in scale in order to maintain service continuity.

Educators and training providers highlighted additional constraints related to curriculum capacity. Training programmes for health and care professions already face pressure to integrate a wide range of competencies, including clinical skills, regulatory requirements and professional standards. Integrating new competence areas - particularly digital and sustainability-related skills - therefore requires careful balancing within existing curricula. However, this challenge should not be understood as a fixed limitation. Digital and sustainability competences are increasingly recognised as core components of professional practice and can be integrated into existing clinical teaching rather than treated as additional content. In many cases, the issue relates less to lack of space within curricula and more to the pace of curriculum adaptation and the need to update teaching approaches, streamline existing content and embed new competences across subjects.

The consultation also revealed that **organisational and cultural factors influence training participation.** In some settings, training may still be perceived as an additional activity rather than an integrated component of professional practice. When learning is treated as separate from routine work processes, participation becomes more difficult to sustain over time.

Taken together, these findings suggest that **the principal barrier to workforce upskilling is** not lack of interest or awareness, but **the structural capacity of healthcare systems to accommodate learning activities within everyday operations.** Training initiatives that rely primarily on additional courses delivered outside working hours are therefore unlikely to achieve large-scale uptake.

More effective approaches are likely to involve learning models that are integrated directly into professional workflows. These may include work-based learning, blended training formats, modular courses and organisational arrangements that allow protected time for professional development. **Embedding learning opportunities in the structure of healthcare work itself may represent one of the most important enabling conditions for large-scale workforce skills development.**

3.3. Governance perspectives and implications for implementation

The consultation also revealed important differences in perspective across governance levels. While stakeholders broadly agreed on the importance of digital, green and core competences, they emphasised different aspects of the skills agenda depending on their institutional role.

Health and care professionals focused primarily on practical feasibility and relevance to daily clinical work. Their responses emphasised issues such as access to training, time availability and alignment between training content and actual professional tasks. Educators and training providers focused on curriculum integration and pedagogical design, highlighting the challenge of embedding new competences in already dense training programmes. Health managers approach workforce development from an organisational perspective, emphasising staffing capacity, training costs and the operational feasibility of releasing staff for learning activities. Policymakers adopted a longer-term strategic perspective, focusing on workforce transformation, regulatory frameworks and the alignment of skills development with broader health system policy agendas.

Recognising these different perspectives is essential for effective implementation. Workforce development strategies must address not only skills priorities but also the institutional realities faced by the actors responsible for implementing them, while remaining adaptable to differences in national health systems, regulatory environments and professional roles.

Digital competences represent the most immediately actionable area for workforce development, given the alignment between workforce demand, policy priorities and institutional readiness. **Sustainability competences require a longer-term process of institutional integration** through policy frameworks, accreditation systems and organisational leadership. **Core competences support the adoption of both domains** by strengthening collaboration, communication and leadership in healthcare environments.

Effective implementation therefore depends on coordinated action across multiple levels of the health system, including by European institutions, national governments, healthcare organisations, education providers and professional communities.

4. Multi-level implementation pathways

The consultation conducted as part of the BeWell Skills Strategy confirms that workforce skills development cannot be addressed through isolated initiatives or by single institutional actors. The transformation of healthcare systems - driven by digitalisation, sustainability imperatives and evolving health promotion and care models - requires coordinated action across multiple governance levels.

While the competence architecture developed in the BeWell project provides a structured framework for identifying the skills required by the health and care workforce, **the consultation highlighted that implementation depends heavily on institutional conditions.** Stakeholders consistently emphasised structural barriers such as workforce shortages, limited time for training and organisational capacity constraints. These realities mean that successful workforce development strategies must embed learning opportunities within healthcare systems rather than relying exclusively on additional training initiatives.

The consultation also revealed that different actors emphasise different aspects of the skills agenda. Policy-makers focus primarily on long-term system transformation and regulatory frameworks. Health managers emphasise operational feasibility and workforce capacity. Educators highlight curriculum integration challenges and training design considerations. Health and care professionals stress the importance of relevance to clinical practice and accessible learning formats.

Addressing these differing perspectives requires a multi-level implementation approach. The following sections outline recommended actions across six governance levels: European institutions, national and regional authorities, healthcare organisations, education providers, individual professionals, and patient and civil society organisations. Together, these pathways aim to create the enabling conditions for large-scale and sustainable workforce upskilling.

4.1. European level – Enabling alignment and coordination

European institutions play a key role in shaping the strategic environment in which national health workforce policies, education systems and labour markets operate. While the organisation of health services and training remains primarily a national competence, EU-level frameworks increasingly influence workforce transformation through policy coordination, funding programmes and regulatory initiatives.

Several major European policy agendas directly intersect with the skills priorities addressed in the BeWell Strategy. The EHDS aims to enable secure cross-border use of health data, while broader regulatory developments such as the AI Act are shaping the use of data-driven technologies, together requiring significant digital literacy. The European Green Deal and related initiatives place increasing emphasis on sustainability across all sectors, including healthcare.

In parallel, European initiatives emphasise skills development, lifelong learning and the modernisation of professional education systems. These efforts are reflected in the **Union of Skills agenda**, including initiatives to expand the use of micro-credentials as flexible learning solutions and to reinforce the **Pact for Skills** to support workers in acquiring new competences. European initiatives are also increasingly addressing the portability and recognition of skills across Member States. Differences in training systems, documentation formats, terminology and assessment approaches can make it difficult for qualifications obtained in one country to be understood or recognised in another. The European Commission is currently preparing a **Skills Portability Initiative** aimed at improving transparency, recognition and digitalisation of skills and qualifications across the EU.

The consultation results suggest that European-level coordination can help accelerate skills development by aligning policy agendas, supporting knowledge exchange and facilitating cross-border learning. Stakeholders particularly highlighted the importance of common competence frameworks, shared learning resources and EU-funded training initiatives that can be adapted across Member States.

Recommended actions

European institutions could consider supporting workforce skills development through the following approaches:

- **Align health and care workforce skills initiatives with broader EU policy frameworks**, including the European Health Data Space, the European Green Deal and EU health and care workforce strategies.
- **Encourage the integration of digital, green and core competences into European qualification and skills frameworks**, including the European Qualifications Framework and relevant professional competence standards.
- **Strengthen funding support for workforce training programmes**, including through EU4Health, Erasmus+, Horizon Europe and the European Social Fund.
- **Promote cross-border cooperation and knowledge exchange**, particularly through European learning networks and shared digital learning platforms.
- **Facilitate mutual recognition and portability of skills and micro-credentials**, supporting mobility of health and care professionals across European health systems and aligning with emerging European initiatives aimed at improving transparency and recognition of competences.

Examples of existing European initiatives already contributing to this agenda include EU-funded training projects, cross-border learning initiatives and European competence frameworks supporting digital health and sustainability transitions.

European programmes supporting digital skills development

Recent European initiatives illustrate how coordinated programmes at EU level can accelerate workforce skills development. Several projects funded under EU programmes have developed large-scale training initiatives aimed at strengthening digital competences among health and care professionals. For example, the **TRANSiTION project** has provided modular continuous professional development on digital health tools, resilience and multidisciplinary cancer care for more than 10,000 professionals across 14 European countries. Similarly, **DDS-MAP** has developed microcredential-based digital training supported by innovative learning tools, including virtual and augmented reality environments designed to strengthen digital health competencies and workforce resilience.

Other initiatives demonstrate how specialised training programmes can address specific clinical and organisational needs. The **e-Hospital4Future project** focuses on supporting the digital transformation of hospitals through training in digital patient management, AI applications and data-driven clinical decision-making. The **H-PASS project** has developed a comprehensive digital skills ecosystem combining accredited training, train-the-trainer programmes and digital leadership modules aimed at strengthening the digital maturity of healthcare organisations. A common feature of these programmes is the use of accredited training formats, including micro-credentials and continuing professional development modules, combined with cross-border collaboration between universities, healthcare providers and professional associations.

These experiences demonstrate how European funding instruments can support large-scale workforce upskilling while enabling knowledge exchange across health systems. They also highlight the role that EU-level programmes can play in supporting the implementation of emerging competence frameworks and training models across multiple national contexts.

4.2. National and regional level – Embedding skills in governance

National and regional authorities play a central role in translating European policy priorities into concrete workforce development strategies. They are responsible for workforce planning, education system regulation, professional accreditation and health system governance.

The consultation highlighted that the integration of new competences into workforce development often depends on policy-level decisions related to training requirements, accreditation standards and financial incentives. Policy-makers participating in the consultation emphasised the importance of linking workforce skills development with broader health system transformation agendas. National strategies therefore represent a key mechanism for embedding digital and sustainability competences into long-term workforce planning.

Recommended actions

National and regional authorities could consider the following actions to support workforce skills development:

- **Integrate digital and sustainability competences into national health and care workforce strategies and workforce planning frameworks**.
- **Encourage curriculum and accreditation reforms that incorporate emerging competences**, particularly in digital health, sustainability and interdisciplinary collaboration.
- **Develop incentives supporting lifelong learning among health and care professionals**, including continuing professional development requirements and career advancement mechanisms.
- **Support the development of national competence frameworks aligned with European standards**, facilitating comparability and recognition of skills.
- **Establish monitoring mechanisms to track workforce skills development**, including national indicators related to training participation and competence acquisition.

These actions can help ensure that workforce skills development is embedded within broader health system governance structures rather than being treated as isolated training initiatives.

National coordination platforms supporting workforce capacity building and EU engagement

Some Member States have established structured coordination mechanisms to strengthen both the participation of regional health systems in European initiatives and the development of workforce capabilities needed to support health system transformation.

In Italy, the **Programma Mattone Internazionale Salute (ProMIS)** operates as a permanent coordination structure involving the Ministry of Health, Regions and Autonomous Provinces. In addition to supporting the internationalisation of the Italian health system, ProMIS plays an active role in strengthening workforce capabilities through targeted training and capacity-building activities.

Recent initiatives include the project "**La workforce al centro del rafforzamento dei servizi sanitari**", which aims to strengthen regional health systems through training, skills mapping and the development of multidisciplinary working models across areas such as mental health, gender-sensitive care and cancer screening. The programme combines multiple learning approaches including in-person training, webinars, e-learning modules, mentoring activities and communities of practice, supported by a dedicated digital learning platform for health and care professionals.

Through these activities, ProMIS supports the development of technical and core competences among health and social care professionals while strengthening collaboration among regional health authorities, national institutions and European partners.

This example illustrates how national coordination platforms can simultaneously support workforce development, strengthen institutional capacity and facilitate participation in European health policy and programme initiatives.

4.3. Organisational level – Operationalising skills in practice

Healthcare organisations represent the operational environment in which workforce competences are ultimately applied. Hospitals, primary care networks, public health institutes, long-term care facilities and other care providers are therefore central actors in the implementation of workforce skills strategies.

The consultation revealed that organisational constraints represent the most significant barrier to training participation. Health managers consistently emphasised workforce shortages, service delivery pressures and limited financial resources as obstacles to being able to release staff for training. Health and care professionals similarly reported that heavy workloads often prevent participation in additional training activities. As a result, training initiatives that require substantial time commitments outside working hours are unlikely to achieve widespread uptake. These findings suggest that effective workforce development strategies must prioritise training models that are integrated into professional practice rather than added on top of existing responsibilities.

Recommended actions

Healthcare organisations could consider implementing the following measures:

- **Establish protected learning time for staff**, ensuring that workforce development is recognised as a core organisational priority.
- **Adopt work-integrated learning approaches**, combining clinical practice with structured learning activities.
- **Promote blended learning formats**, including digital modules, simulation-based learning and on-the-job mentoring.
- **Integrate digital tools in ways that reduce administrative burden** rather than increasing workload.
- **Link skills development with career progression and retention strategies**, creating incentives for continuous professional development.

These approaches can help create organisational environments that support ongoing learning while maintaining service delivery capacity.

Competency-based workforce development in practice

The Integrated System of Competencies (ISC), implemented at IRCCS Istituto Romagnolo per lo Studio dei Tumori “Dino Amadori” in Emilia-Romagna, Italy, provides a structured organisational model for aligning workforce skills development with institutional priorities.

The system is based on a continuous cycle of competency mapping, assessment and targeted training. Health and care professionals undergo regular evaluations combining self-assessment, managerial assessment and structured dialogue, allowing organisations to identify skill gaps and define individual and team-based learning pathways. These are operationalised through Individual and Group Training Dossiers, linking workforce development directly to organisational needs.

The model integrates training across multiple domains, including technical competences, leadership, core skills, equity and inclusion, and health literacy. It is supported by continuous monitoring mechanisms, including performance reviews, process indicators and staff feedback, ensuring that training activities remain aligned with evolving service requirements.

Initially piloted in three operational units, the system was subsequently extended across the organisation following demonstrated improvements in training alignment, staff engagement and organisational performance. Participation in competency assessments increased significantly over time, alongside high implementation rates of planned training activities and sustained investment in professional development.

The ISC illustrates how healthcare organisations can move from *ad hoc* training provision to a structured, data-driven approach to workforce development. By integrating competence assessment, training design and organisational strategy, such models support continuous learning, strengthen workforce engagement and enhance the capacity of organisations to adapt to changing healthcare demands.

4.4. Education and training providers – Transforming curricula

Education and training institutions play a crucial role in preparing both current and future health and care professionals for evolving health and care environments. Universities, vocational education providers and continuing professional development organisations are responsible for designing and delivering training programmes aligned with emerging workforce needs.

The consultation revealed that many education providers have already begun integrating core competences into training programmes, while digital competences are increasingly incorporated into curricula. However, educators also highlighted challenges related to curriculum overload and the need to balance traditional clinical training with emerging skill requirements. Addressing these challenges requires flexible training models capable of adapting to rapidly changing competence needs.

Recommended actions

Education providers could consider the following approaches:

- **Integrate digital and sustainability competences into existing curricula**, ensuring that these skills are embedded within clinical training rather than delivered as standalone modules.
- **Develop modular training formats and micro-credentials**, allowing professionals to acquire specific competences throughout their careers.
- **Promote interdisciplinary learning environments**, reflecting the collaborative nature of contemporary healthcare systems.
- **Strengthen partnerships with healthcare organisations**, ensuring that training programmes reflect real-world workforce needs.
- **Expand practice-based learning models**, including simulation training, clinical placements and problem-based learning approaches.

These strategies can help ensure that education systems remain responsive to evolving healthcare system needs while maintaining high professional standards.

Integrating digital and sustainability competences in primary care training

Primary care organisations across Europe are developing practical tools and training initiatives that support the development of digital and sustainability competences among health and care professionals.

For example, the Institute of General Practice at the University of Freiburg, Germany has developed digital learning tools that support communication and digital practice transformation, including the **tala-med Cardio App**, available in multiple languages, and the **train-a-med platform**, designed to support digital training for health and care professionals. These tools aim to strengthen the use of digital technologies in clinical practice and support communication between professionals and patients.

In the area of environmental sustainability, in Germany, several initiatives are helping healthcare organisations assess and reduce their environmental footprint. Examples include tools such as the **Cafoges Calculator** and the **Klimeg Calculator**, which allow healthcare providers to measure the carbon impact of healthcare delivery and identify opportunities for more sustainable practices. These tools support the development of sustainability-related competences within healthcare organisations.

Training initiatives which focus on greener healthcare are also emerging in several European countries. In the Netherlands, for example, programmes such as the **Green Care Academy** provide training and practical resources to support health and care professionals in integrating sustainability principles into clinical practice and healthcare organisation.

These examples illustrate how practical tools, training programmes and digital platforms can support the development of both digital and green competences in real-life healthcare settings. Such initiatives demonstrate the potential for integrating sustainability and digital transformation into workforce training while remaining closely connected to clinical practice.

4.5. Health and care professionals – Engaging in lifelong learning

Health and care professionals themselves are central actors in workforce transformation. Continuous learning is essential for maintaining professional competence in environments characterised by rapid technological change, evolving treatment approaches and increasing system complexity.

The consultation showed that health and care professionals recognise the importance of ongoing training, particularly in digital health and interdisciplinary collaboration. However, participation in training activities is often constrained by limited time availability and competing professional responsibilities. Supporting professionals in engaging with lifelong learning therefore requires accessible, flexible training opportunities aligned with professional practice.

Recommended actions

Health and care professionals could consider the following approaches:

- **Use competence frameworks**, such as those developed in the BeWell project, **to assess individual skills development needs.**
- **Engage in structured professional development pathways,** including accredited training programmes and micro-credential courses.
- **Participate in collaborative learning environments,** including peer learning, communities of practice and interdisciplinary training initiatives.
- **Contribute to feedback mechanisms and evaluation processes,** helping to continuously improve training programmes and learning resources.

These actions can support professionals in maintaining and expanding their competences while contributing to broader workforce transformation.

Embedding continuous professional development in workforce practice: lessons from nursing systems across Europe

Experiences from nursing systems across Europe illustrate how the implementation of continuous professional development (CPD) depends on the alignment between regulatory frameworks, organisational support and workforce capacity.

Across countries, different implementation models coexist. In some contexts, CPD is linked to licence renewal and supported through structured credit systems and national frameworks. In others, participation is voluntary and largely dependent on employer support or individual initiative. These variations demonstrate that formal requirements alone are not sufficient to ensure uptake.

Where CPD is more effectively embedded, several enabling conditions can be observed in practice:

- the provision of protected time for training within working hours;
- the integration of CPD into workforce planning and organisational strategies;
- the use of flexible delivery formats, including online and work-based learning;
- the involvement of professional bodies in accrediting and guiding training pathways.

Conversely, where these conditions are absent, participation is significantly constrained by workforce shortages, time pressures and limited financial support, often resulting in training being undertaken outside working hours or not at all.

These experiences highlight that effective implementation of lifelong learning requires coordinated action across policy, organisational and professional levels. Embedding training within working conditions and service delivery structures is essential to ensure that skills development is both accessible and sustainable in practice.

Source: **EFN Report on Continuous Professional Development (CDP)**. EFN. Brussels, 2025

4.6. Patient and civil society organisations – Strengthening accountability

Patient organisations and civil society actors play an important role in shaping the broader social expectations placed on health systems. Their perspectives provide valuable insight into the real-world impact of workforce skills development on care quality, accessibility and equity.

The consultation highlighted that patient representatives particularly value competences related to communication, patient engagement and culturally responsive care. These competences are critical for ensuring that workforce transformation ultimately translates into improved patient experiences and outcomes. Patient organisations can therefore contribute to workforce development by helping ensure that training initiatives continue to be aligned with patient needs and societal expectations.

Recommended actions

Patient and civil society organisations could consider the following contributions:

- **Participate in the co-design of training priorities and competence frameworks,** ensuring that patient perspectives are integrated into workforce development strategies.
- **Support monitoring of training outcomes and their impact on quality health outcomes,** particularly in areas such as communication, accessibility and patient safety.
- **Promote awareness of digital inclusion and digital health equity,** helping ensure that digital transformation benefits all patient groups.
- **Advocate for sustainability and for responsible healthcare practices,** reinforcing the importance of environmental responsibility in health systems.

Through these contributions, patient and civil society organisations can strengthen accountability mechanisms and ensure that workforce development remains aligned with broader societal priorities.

5. Indicative implementation benchmarks

The BeWell Skills Strategy aims to support the progressive development of digital, green, and core competences across the European health and care workforce. While the Strategy proposes implementation pathways across governance levels, the translation of these pathways into practice will inevitably vary across health systems, institutions and professional contexts. Differences in health system organisation, workforce composition, levels of digital maturity and professional roles mean that training needs and implementation priorities are not uniform across countries or across categories of health and care professionals.

The benchmarks are therefore designed to be adaptable and applicable across diverse contexts rather than prescriptive or standardised. For this reason, the Strategy does not propose binding targets or mandatory indicators. Instead, it introduces a limited set of indicative implementation benchmarks intended to signal a direction of travel and support reflection on progress. These benchmarks are aligned with broader aspirational commitments developed within the Pact for Skills Large-Scale Partnership for the Health Ecosystem, which promotes the aim that by 2030, 10% of the health and care workforce participates annually in digital upskilling activities and 8% in green skills development[6]. These ambitions are intended to guide collective action and signal the scale of transformation required, while remaining non-binding and adaptable to national and sectoral contexts.

These benchmarks serve three main purposes:

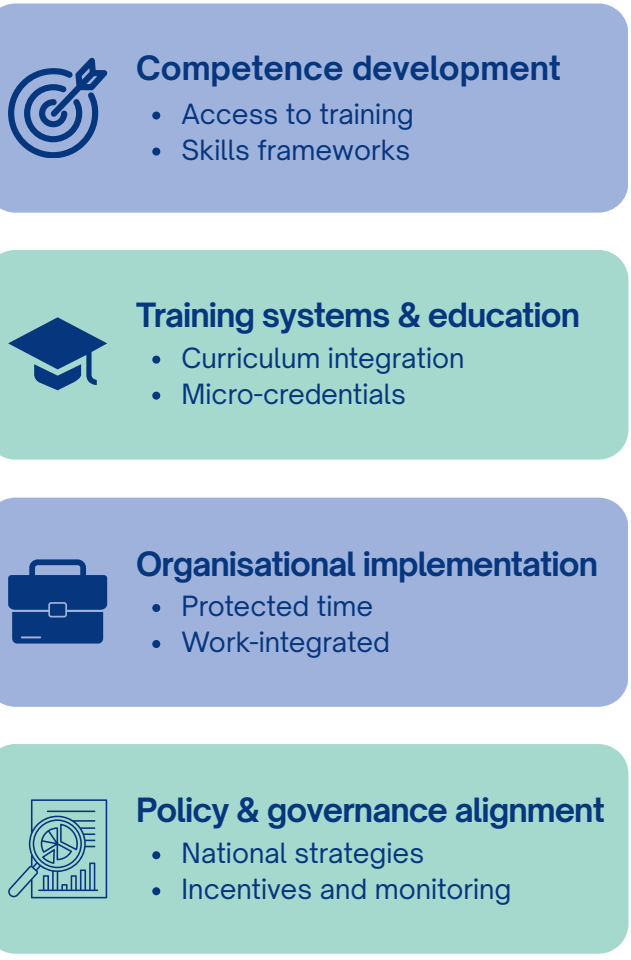
- Help stakeholders assess whether enabling conditions for skills development are improving.
- Encourage alignment between policy, organisational practice and education systems.
- Provide an initial reference point for future initiatives aimed at implementing the Strategy.

The benchmarks are therefore supportive and illustrative, rather than prescriptive. They are intended to complement existing monitoring frameworks at European, national or organisational level and can be adapted to different contexts.

The benchmarks are organised across four complementary dimensions:

1. Competence development
2. Training systems and education
3. Organisational implementation
4. Policy and governance alignment

Together, these dimensions reflect the multi-level nature of workforce skills development and recognise that strengthening workforce competences depends not only on training opportunities but also on organisational and policy conditions that enable professionals to learn and apply new competences.



[6] Large Scale Partnership for the Health Ecosystem - Partnership Manifesto. BeWell project. Brussels, 2022.

5.1. Benchmarks related to competence development

At the core of the BeWell Skills Strategy is the progressive development of digital, green and core competences among health and care professionals. **Indicative benchmarks in this area relate primarily to offering access to training and competence development opportunities,** rather than to measuring individual skills.

Examples of indicative progress signals include:

- Increasing availability of structured training programmes addressing digital health competences, including data literacy, digital tools and telehealth.
- Progressive integration of environmental sustainability and planetary health concepts within professional development programmes.
- Progressive use of mechanisms to recognise prior and informally acquired competences, supporting flexible and individualised upskilling pathways.
- Recognition of core competences such as communication, interdisciplinary collaboration and leadership as core components of professional training.

Another possible indicator of progress is the increasing use of competence frameworks or matrices that allow professionals and organisations to identify skills gaps and plan learning pathways.

The BeWell competence architecture and associated matrices provide one possible reference framework that can support such self-assessment and planning processes.

5.2. Benchmarks related to training systems and education

Training systems and education providers play a central role in **embedding new competences into the abilities of the health and care workforce**.

Progress in this area may be reflected through:

- The integration of digital health and sustainability competences into health education curricula, including undergraduate, postgraduate and vocational education programmes.
- The development of modular training formats, such as micro-credentials or short learning units that can be integrated into continuing professional development.
- Increased availability of flexible learning formats, including blended learning and work-integrated training.
- Alignment of training programmes and micro-credentials with European qualification frameworks, supporting transparency, portability and recognition of learning outcomes across countries.
- Strengthened collaboration between education providers, healthcare organisations and professional bodies to ensure training programmes respond to workforce needs.

Another important indicator of progress is the alignment of training programmes with emerging competence frameworks and the recognition of learning outcomes across different educational pathways.

These developments can help create clearer learning trajectories and support lifelong learning across the health and care workforce.

5.3. Benchmarks related to organisational implementation

Health and care organisations play a critical role in translating training into practical changes. In many contexts, one of the main barriers to workforce upskilling is not the absence of training opportunities but the difficulty of integrating learning into daily work routines.

Indicative benchmarks at organisational level therefore **focus on enabling conditions that support participation in training and the application of new competences**. Examples include:

- The introduction of protected learning time for health and care professionals.
- The integration of skills development objectives within organisational strategies or workforce plans.
- The adoption of work-integrated learning approaches, enabling professionals to develop competences while delivering care.
- The establishment of internal structures or roles that support digital transformation, sustainability initiatives or interdisciplinary collaboration.

Organisations may also demonstrate progress through the systematic use of readiness assessment tools, including digital maturity or sustainability frameworks, to identify priorities for action.

These organisational changes are particularly important to ensure that new skills do not simply add additional burdens to the workforce but contribute to providing improved working conditions, innovation and quality of care.

5.4. Benchmarks related to policy and governance

Finally, workforce skills development requires supportive policy and governance environments. Progress at either national or regional level may therefore be reflected in:

- The integration of workforce skills priorities within national health and care workforce strategies or planning processes.
- The alignment of skills initiatives with broader digital health, sustainability and health system transformation policies.
- The development of incentive mechanisms that encourage participation in lifelong learning.
- The development of policy measures ensuring equitable access to training opportunities, including for professionals in under-resourced settings, remote areas or with limited digital literacy.
- The establishment of monitoring approaches that allow policymakers to track the evolution of workforce competences.

In addition, participation in European initiatives, collaborative networks and knowledge exchange platforms can contribute to strengthening national and regional capacities for workforce development.

Such cooperation can help ensure that learning from innovative practices, pilot initiatives and training programmes is shared across health systems.

5.5. Benchmarks as a foundation for future implementation

The benchmarks presented in this chapter are not intended to constitute a comprehensive monitoring framework. Rather, they provide a light reference structure that can help stakeholders reflect on the implementation of the Strategy.

Over time, these benchmarks could support the development of more structured implementation initiatives. For example, they may inform:

- Pilot projects aimed at testing implementation approaches.
- Collaborative initiatives between education providers and healthcare organisations.
- Policy dialogues on workforce development at European, national or regional level.

The development process of the Strategy has already contributed to strengthening alignment across stakeholders and increasing awareness of the need for integrated competence development. Through consultations, collaborative work and pilot discussions, the project has supported the emergence of shared priorities and has informed ongoing initiatives in training design, curriculum development and organisational approaches to skills development. While large-scale implementation remains a future step, these early developments indicate that progress is already underway.

In this sense, the benchmarks serve as an initial foundation for future action. They signal the types of progress that may indicate that health systems are moving towards a workforce that is better equipped to support digital transformation, environmental sustainability and high-quality patient-centred care.

Conclusion – From framework to action

The transformation of health and care systems across Europe requires a workforce equipped with the competences needed to navigate rapid technological change, environmental challenges and evolving models of care. Digital technologies are increasingly embedded in healthcare delivery, sustainability considerations are becoming central to the organisation of services, and new models of care require stronger collaboration across professions and sectors. In this context, strengthening the skills of the health and care workforce is no longer a peripheral issue but a structural condition for the resilience and sustainability of health systems.

The BeWell Skills Strategy contributes to this agenda by proposing an integrated and implementation-oriented approach to workforce development. The Strategy builds on the extensive work carried out within the BeWell project, including the development of competence matrices, skills intelligence analyses, training development and piloting, and stakeholder consultations. Together, these outputs provide an evidence-based foundation for identifying the competences required for the future health and care workforce and the conditions necessary to support their development.

A central contribution of the Strategy lies in the articulation of a structured competence architecture integrating digital, green and core competences. These three domains are increasingly interdependent in practice. Digital technologies can support more efficient and sustainable care delivery, while sustainability goals require new forms of collaboration, organisational change and leadership. Core competences such as communication, teamwork and adaptability are therefore essential enabling factors for both digital and green transformation.

At the same time, the Strategy recognises that competence frameworks alone are not sufficient to generate change. Skills development depends on a set of enabling conditions that span policy, organisational and educational contexts. Workforce shortages, time constraints, financing limitations and varying levels of digital infrastructure can all influence the feasibility of training initiatives. Addressing these structural realities is therefore a critical component of any realistic skills strategy.

For this reason, the Strategy emphasises the importance of multi-level implementation pathways. The development of new competences requires coordinated action across European institutions, national and regional authorities, healthcare organisations, education providers and professional communities. Each of these actors plays a distinct role in enabling workforce development, from shaping policy frameworks and funding mechanisms to integrating new competences into curricula and daily professional practice.

Rather than proposing prescriptive targets, the Strategy introduces a set of indicative benchmarks intended to signal a direction of travel. These benchmarks aim to support reflection on progress and provide a reference point for future implementation initiatives. The BeWell Skills Strategy is therefore intended to serve as a reference framework for policymakers, health organisations, education providers and professional communities seeking to strengthen workforce competences in a rapidly evolving health ecosystem. It provides a structured approach that can inform future initiatives, guide investments in training and support collaboration across sectors and governance levels.

Looking forward, the Strategy should be understood as a launchpad for further action. Its implementation will depend on continued collaboration between stakeholders and on the development of initiatives capable of translating the proposed pathways into concrete programmes and policies. In this sense, the work initiated through the BeWell project represents an important step in a longer process of workforce transformation. By providing a shared framework and common reference points, the Strategy aims to contribute to the collective effort required to equip Europe's health and care workforce with the competences needed to support resilient, sustainable and patient-centred health systems.

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