Building skills intelligence: evidence for action

11:00 – 12:00

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Building skills intelligence: evidence for action

- Key findings from the skills intelligence: *Dr Gemma Williams*, Research Fellow, European Observatory on Health Systems and Policies and *Prof. Ronald Batenburg*, Programme Leader, Nivel
- From competences matrices to training programmes: *Rolf Aslaksrud Kristiansen*, EUROMASC and *Carmen Fusilli*, ITS
- Training the professionals – Lessons learnt from the pilots: *Efstathia Koitsanou,* University of Thessaly and *Petra Ziegler,* WIAB
- Panel discussion

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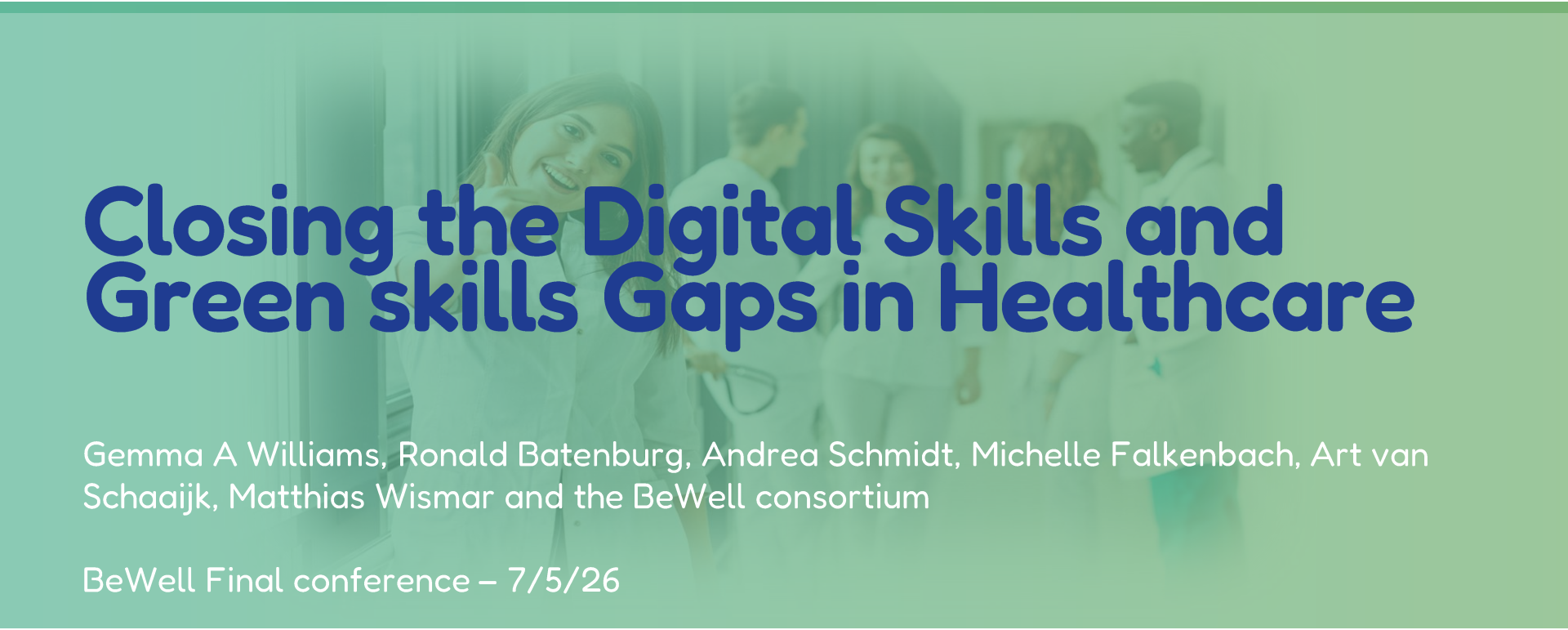

Closing the Digital Skills and Green skills Gaps in Healthcare

Gemma A Williams, Ronald Batenburg, Andrea Schmidt, Michelle Falkenbach, Art van Schaaijk, Matthias Wismar and the BeWell consortium

BeWell Final conference – 7/5/26

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Work Package 2 of the BeWell project: to undertake a skills intelligence mapping on digital and green skills needs

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By a research methodology based on mixed methods:

- Desk research
- Web search
- Surveys
- Scoping Review
- Focus Groups
- Expert consultations
- Interviews

Produce 'skills intelligence' by retrieving and mapping: Definitions of digital and green skills

- Future skills needs
- New roles
- Skills frameworks
- Up and reskilling initiatives
- Implementation Roadmaps

In order to:

- Inform all the BeWell activities /WPs

Specifically deliver:

- 2 Scoping reviews
- 1 online Skills monitor
- 2 Policy Briefs

Major outputs included two policy briefs and...

1

2

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.... the BeWell digital and green skills monitor

SKILL TOPIC	NUMBER OF TOTAL IDENTIFIED COURSES	MAIN TOPICS COVERED	LANGUAGES	PREDOMINANT DELIVERY MODEL
Digital skills and competencies	182	Telehealth, EHR, AI, cybersecurity, digital leadership, data analytics, informatics, digital transformation	BG, NL, EN, FR, DE, GR, IT, NO, PL, PT, RO, ES	Online; blended; some in-person
Green skills and competencies	60	Sustainable healthcare, carbon foot printing, circular strategies	BG, NL, EN, EE, DE, GR, IT, NO, RO	Online

Find Relevant Courses

The monitor helps health professionals identify available digital and green skills courses in Europe and elsewhere. It increases awareness of education and training opportunities

Comprehensive Overview

It includes life-long learning, continuous professional development and continuous medical development programmes, of courses that empower the digitalisation and ecologicalisation of the health sector

Regular updates

The monitor is updated regularly so that it can capture new courses, skills, and programmes for the health and care field focused on existing and emerging digital and green professions

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On Green Skills and the Policy brief

The Green Skills Policy brief main message – A climate-smart health and care workforce is central to improving health system resilience

- **Climate change is intensifying health risks**
- **Health systems contribute around 5% of GHG emissions globally**
- **Equipping the health and care workforce with 'green skills' can help health systems**
  - deal with the risks and (inequitable) health impacts of climate change
  - Improve health to reduce demand for care
  - change practice to reduce health systems' emissions
  - communicate risks and raise public and community awareness of the link between climate change and health

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What do we mean by ‘green skills’* and a ‘climate-smart workforce’?

climate-health literacy: “[…] recognize direct and indirect linkages between climate change and health, communicate risks, assess data, comprehend uncertainty, and make informed and responsible personal decisions or advocate for broader policies that protect health” (Limaye et al., 2020, p. 2185)

Examples of green skills (practical abilities)

- Explaining how heatwaves, air pollution or flooding affect health outcomes
- Applying low-carbon clinical practices (e.g. sustainable prescribing, rational use of resources)
- Identifying ways to reduce waste, energy and water use in health facilities
- Using climate and environmental data to support public health surveillance
- Communicating climate-related health risks to patients and communities
- Supporting prevention and preparedness for climate-related emergencies
- Advocating for health-protective climate mitigation and adaptation actions

*Green competencies will be explored in the next presentation

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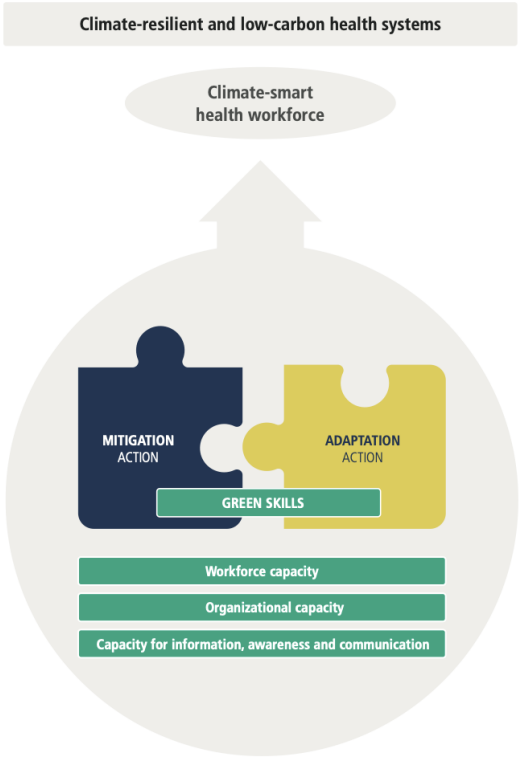
WHO has outlined three key objectives and capacities that define the development of a climate-smart health and care workforce



- **Workforce capacity (macro):**
  - Educate and train sufficient HCWs
  - (General) policies to support climate resilience and health promotion
- **Organizational capacity (meso):**
  - Help establish/train green teams within institutions to drive innovation and share best practices
  - Allow for co-designing (new) roles, tasks and profiles
- **Capacity for information, awareness and communication (micro / cross-cutting):**
  - Convey climate-related risks to (other) decision-makers, media and community leaders
  - Promote awareness within society for climate-health

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Finally: Green skills initiatives lag behind digital...

- Lack of knowledgeable educators to teach HCWs on climate and health matters
- Health systems under pressure due to workforce shortages, poor job quality, resource constraints
- Lack of long-term vision due to ongoing (current) challenges
- Lack of evidence, knowledge and awareness to support implementation of climate-smart practices

But certain countries lead the way

- Embedded within broader strategies:
  - Finland's Climate Change Adaption Plan; Irish Climate Change Adaption Plan for the Health Sector (2019-24); Net Zero legislation England; Netherland's Green Deal on sustainable Healthcare
  - Be Well competence matrix (focused on mitigation)
- Education and training courses:
  - Austria Competence Centre for Climate and Health; Germany's Planetary health Academy; UK Education for Sustainable Healthcare

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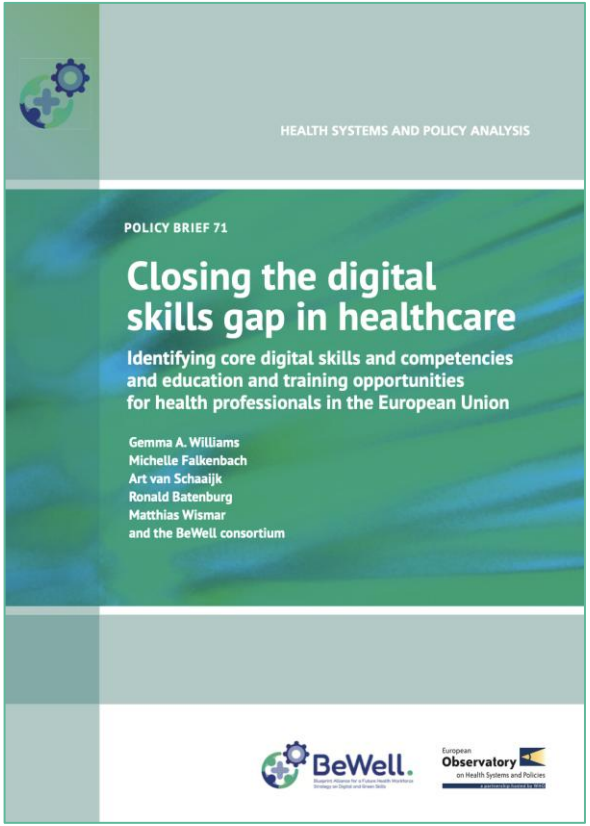
On Digital Skills and the Policy brief



The Digital Skills Policy brief main message – Digital technologies hold great potential to improve health and health systems if designed and used appropriately

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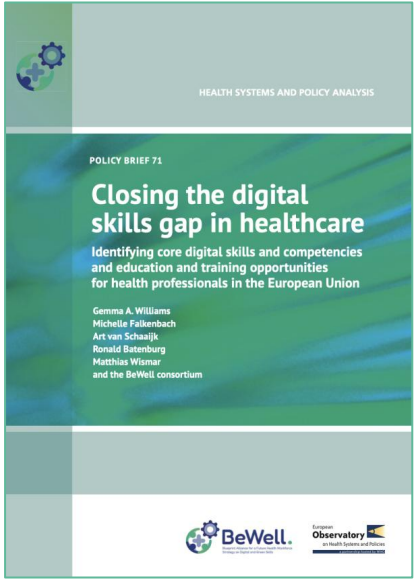

- Enable effective digital health technology uptake in ways that Improve **patient outcomes and working conditions**
- Build resilient health systems and support new ways of working
- Ensure use of digital health technologies is ethical and aligns with regulatory requirements
- Support implementation of the European Health Data Space

A 2019 OECD literature review* showed that between 30-70% of health professionals reported insufficient digital skills

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What do we mean by 'digital skills'*?

Skill Area	Examples of Digital Skills	Why It Matters
Core Digital Skills	Using computers, email, secure logins, file management	Enables day-to-day work and safe system access
Electronic Health Records (EHRs)	Recording notes, updating patient information, viewing care history	Ensures accurate, continuous, and safe patient care
Clinical Systems	Electronic prescribing, recording observations, accessing test results	Supports clinical decision-making and reduces errors
Digital Communication	Video consultations, secure messaging, virtual MDT meetings	Improves access to care and team collaboration
Patient Digital Support	Helping patients use portals, apps, or remote monitoring tools	Promotes patient engagement and self-management
Data & Information Use	Viewing dashboards, audits, basic data interpretation	Supports quality improvement and service planning
Digital Safety & Ethics	GDPR awareness, confidentiality, cyber security best practice	Protects patient data and professional standards
Role-Specific Digital Skills	Telehealth tools, assistive technology, clinical coding (basic)	Enhances specialist and advanced practice

*Competencies will be covered in the next presentation

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Digital technologies are creating a need for new healthcare roles

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Clinical Digital Roles

- Digital clinical leads
- Clinical support team members
- Clinical informatics specialists
- Digital clinical safety officers

Technical Support Roles

- Knowledge engineers
- Software engineers
- Health data analysts
- Biomedical engineers
- Cybersecurity experts

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Education and training opportunities in the EU have some gaps

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Some professional groups and advanced digital skills lacking

Gaps in training courses exist for some professional groups and at graduate level. Training in robotics, AI, and genomics is limited in most countries.

Language Barriers

There is an overreliance on courses available only in English. This limits accessibility for many professionals.

Systematic approach for digital skills development

An absence of national/regional regulations or an authority designated as responsible for implementing education and training. No links to CPD or accreditation

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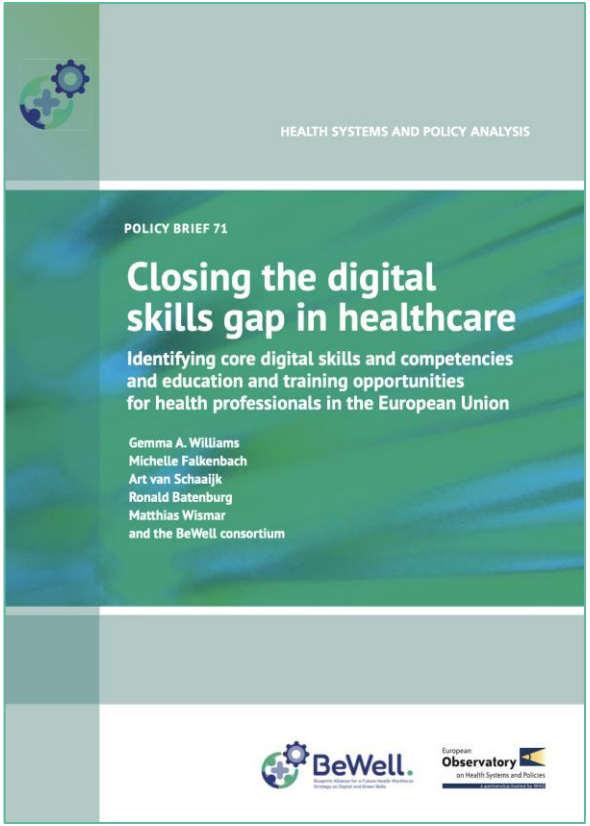
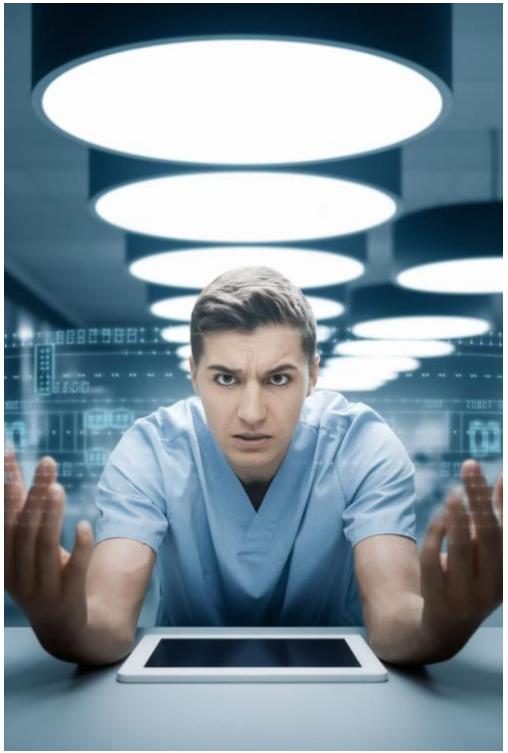
Common grounds for Green and Digital Upskilling and reskilling



The scoping review and focus groups discussions identified several barriers to up-and reskilling (both digital and green)



1

Macro Level

National policies and strategies, funding limitations, healthcare system structures and cross-sectoral working shape up-and-reskilling

2

Meso Level

Organisational culture, leadership priorities, and resource allocation affect individual opportunities. All shaped by macro level factors

3

Micro Level

Individual attitudes, motivation and time constraints impact up-and-reskilling. These are shaped by both macro and meso factors

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Some common elements of good practice country case studies

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On digital skills

Box 8: France has developed legislation to embed digital skills training in health curricula, based on five areas of competence

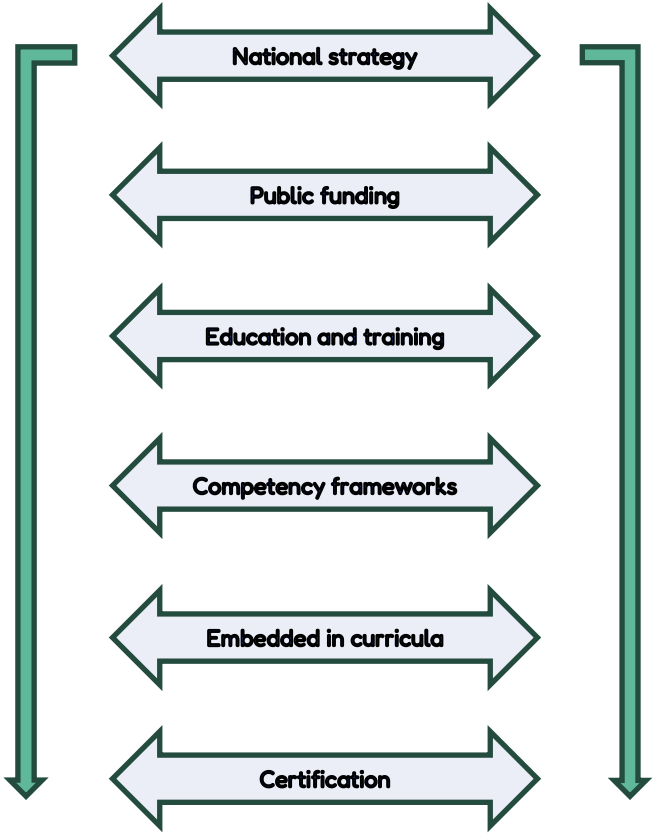
The French Digital Health Acceleration Strategy (SASN) 2021–2025 is a national plan that aims to guide the development of a digital health ecosystem in France, to make France a leader in eHealth, and to support the transition to more personalized, predictive and preventive medicine. A priority action of the strategy is to upgrade the skills of health care professionals.

To support upskilling efforts, a common digital skills framework for French health professionals has been developed, to guide the development of education and training courses and support the standardization of content. The framework has a total of two education and training courses attached to it, and contains 15 competencies, organized in five domains, each with specific hours of allocated training: health data (6 hours), cybersecurity (5 hours), communication (5 hours), digital health tools (6 hours) and telehealth (6 hours). It is foreseen that the framework will be updated regularly to remain relevant with the rapid pace of development of digital health technologies.

Various education and training courses have now been developed in line with this strategy, and legislation has been put into place to mandate implementation into the education of health professionals, including for: 12 professions in higher education by 2024–2025; social workers in 2026 and administrative personnel in 2026. It is planned that 100% of learners in the health sector will undertake digital health education and training by 2027. Specific funding has been allocated to support implementation, including (as of October 2023) EUR 122 million for 24 awards to universities to put in place digital health training programmes for students.

Efforts are also underway to incorporate digital skills education and training into every part of a health professional's training pathway, including via regular and direct hands-on training and feedback from professionals in the health and care and digital fields. A skills evaluation platform – PIX pro Santé – is also being developed to enable health professionals to evaluate and certify levels of digital competence against the five areas outlined above.

Sources: French Government (2021); EHTEL (2023).



On green skills

Box 6: Institutionalizing climate and health within the Austrian health sector

In 2022, Austria institutionalized its efforts to address climate change impacts on health and increase mitigation efforts within the health sector through the establishment of the Competence Centre for Climate and Health under the Austrian National Public Health Institute. This initiative, supported by the Federal Ministry of Social Affairs, Health, Care and Consumer Protection, has become a cornerstone for creating a climate-smart health and care workforce. The Centre was set up as part of a large-scale health promotion funding initiative following the COVID-19 pandemic, with the objective to strengthen public health initiatives, with an annual investment of €8 million between 2022 and 2024 (BMSGPK, 2024). In 2024, this funding was prolonged until 2029. A major strength of the Centre is its interdisciplinary expertise, encompassing a variety of fields such as public health, social sciences, (ecological) economics, epidemiology, meteorology, spatial planning, biology and political sciences. Additionally, the Centre has strong ties with Austria's national Health for Future movement, which spearheaded an Open Letter in 2023 advocating for the integration of climate-health literacy into the curricula for health and care workers. The letter was endorsed by 29 (applied) universities, health and care workforce representative groups, and other organizations within Austria's health and education sectors.

Since its creation, the Centre has contributed to building a climate-smart health and care workforce in Austria through the following activities:

- In 2023, a specialized course was introduced to support sustainability managers working in inpatient facilities, including hospitals and rehabilitation clinics, as well as old-age and nursing homes and pharmacies. This course is aligned with the national strategy for a climate-neutral healthcare system (Lichtenecker et al., 2024), and a national support programme on 'Climate Friendly Healthcare Facilities'.
- In 2024, a modular handbook on climate-health literacy in the healthcare workforce was published (Brugger et al., 2024a). Designed for integration into curricula, it targets both secondary and tertiary education programmes. The programme is aligned with the health national adaptation strategy (Schmidt et al., 2024).
- In 2024, a train-the-trainer course on climate-health literacy was launched, aimed at equipping educators responsible for teaching health and care workers in secondary or tertiary education.

Key Messages for both digital and green up-and-reskilling implementation

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Holistic vision and strategy, with clear political leadership

Digital upskilling requires proper technology implementation, platforms for coordination and clear designation of roles and accountability

Reforms to education and training systems at all levels

Starting with youth for new skills, embed digital health education and training in core curricula and professional training requirements , and linked to accreditation where systems exist

Competency framework development, with regular review

Developing national or regional competency frameworks where they do not yet exist can guide country-specific digital up-and-reskilling efforts .

Improved workforce planning and forecasting, recruitment and retention

Essential to address shortages, skill gaps, forecast future needs, and design targeted education and training initiatives

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BeWell. Top level leadership is key to digital up-and-reskilling

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Vision, strategy and funding for digital transformation

Digital health technologies need to be implemented properly and effects monitored to support proper implementation. Requires strategy, legislation, funding, technologies

Strong and future-looking education and training systems

Digital health education and training embedded in core curricula for basic and specialist education and training and in CPD requirements. Accreditation systems can help promote incentive for up-and-reskilling

Cross-sectoral cooperation and co-creation with HCPs

Collaboration between health and education sectors and stakeholder buy-in, especially from professional associations is vital. Health professionals should be involved in design and implementation of digital tools and education and training opportunities

Addressing wider workforce challenges

Shortages of health professionals, overwork and burnout limit time and motivation to undertake continuing education and training

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Organisations play a key role in supporting digital skills education and training

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Effective digital skill-building requires organisational leadership, designated funds for staff training, and accessible on-the-job learning

1

Organisational Leadership

Senior management must champion digital transformation and skills building

2

Strategic budget allocation

Dedicated resources to support ongoing skill development

3

Embedding learning in work and providing flexible training opportunities

Integrating digital skills into daily professional activities and creating time for education and training

4

Tailored education and training paths, tied to career development

Regular skills assessments, feedback mechanisms, and incentives for learning

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Individual motivation influences upskilling, but is shaped by external forces

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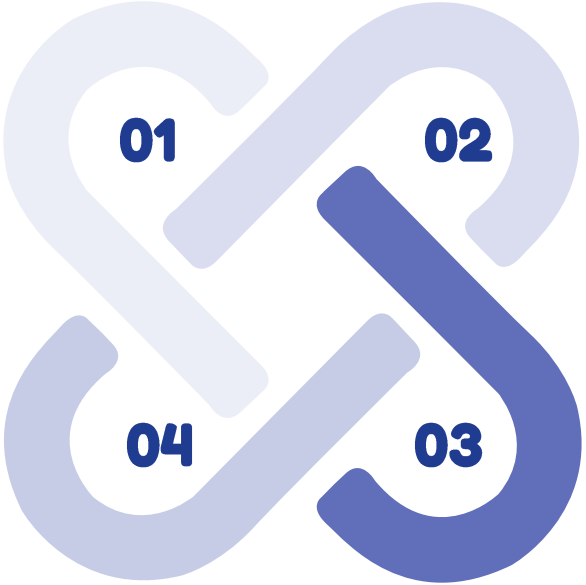
Attitudes & Concerns

Fear of job displacement or preference for traditional methods. Need practical training before roll-out and easy to use technologies that reduce admin burden

Incentives & time

Career incentives and certification can motivate engagement. But workloads and staff shortages remain the biggest barriers.



Access & availability

Health professionals need knowledge of available education and training, which should be free and available online, in national languages and accessible.

Basic digital literacy

Having good digital health literacy, with digital skills and competencies taught during basic training

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Understanding what we mean by digital health, digital skills and competencies

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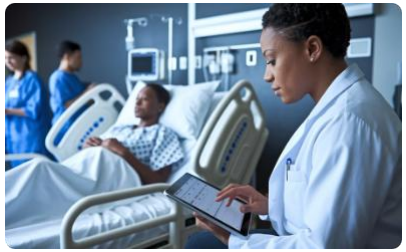

Digital Health

The use of technology to improve health services and outcomes

Encompasses **eHealth**; **mHealth** (**Big data and AI** diagnostics.

Knowledge

The outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices related to a field of study or work

Skills

The ability to apply knowledge and use know-how to complete tasks and solve problems. Can be cognitive or practical

Competencies

Demonstrated ability to use knowledge, know-how, experience and job-related, personal, social or methodological skills, in work or learning situations and in professional and per development

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Competences Matrices
=>
Training Programmes

Rolf Aslaksrud Kristiansen, EUROMASC and *Carmen Fusilli*, ITS

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Core **BeWell training framework** components

Competence matrices based on Learning Outcomes

Training provision with MOOC formats and Microcredentials

Assessments and certification

Databanks and repositories

(Skillsbank.eu and SkillsCourses.eu)

Multilingual functionality

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Framework with **Learning Outcomes matrices**

EQF/ECVET/EQAVET based

Europass compliant

ESCO compatible

Structured in matrices

Learning outcomes in logical units

Multilinguality for transparency and portability

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A multilingual matrix implementation in different perspectives:

- ❑ **Qualification and Competence Definitions**
- ❑ **MOOC and Microcredential developments**
- ❑ Assessment and Validation
- ❑ Certification and Recognition
- ❑ Interacting competence frameworks with Accreditation

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Key objectives of a multilingual matrix implementation:

A. Qualification and Competence Definitions

- ❑ Establishing matrices describing **learning outcomes**,
- ❑ at selected **EQF levels**,
- ❑ in **multilingual versions**,
- ❑ promoting **transparency**,
- ❑ making competences **valid** across institutions, countries and languages.

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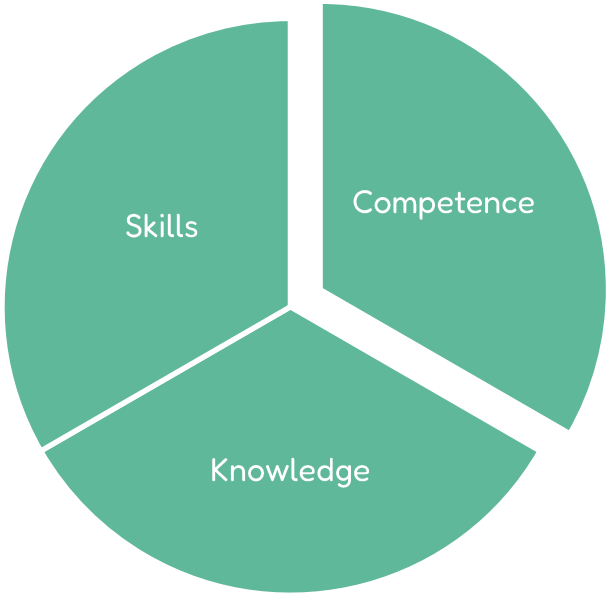
Learning Outcomes

The matrix components



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Competence:

*Defined as the "**demonstrated ability to use** **knowledge, know-how, experience and job-related, personal, social or methodological skills, in work or learning situations and in professional and personal development. Competence is not limited to cognitive elements (involving the use of theory, concepts or tacit knowledge); it also encompasses functional aspects – including technical skills – as well as interpersonal attributes (e.g. social or organisational skills) and ethical values.** (In the context of the revised European Qualifications Framework, competence is described in terms of responsibility and autonomy.)*

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Knowledge:

The outcome of the assimilation of information through learning.

Knowledge is the body of facts, principles, theories and practices that is related to a field of study or work. (In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual.)

Learning can be in-formal, non-formal or formal

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Skills:

The ability to apply knowledge and use know-how to complete tasks and solve problems. *(In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments.)*

Skills can also be tacit – "handheld" or "intuitive":

"You understand it when you see it"

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Matrix development «strategies»

Structure:

- ❑ Hierarchical – as a pyramidal approach
- ❑ Faceted – as connections with « logical familiarity» => Units of LOs

Process:

- ❑ Top-Down – from existing material, curricula etc.
- ❑ Bottom-up – from occupational requirements and work tasks
- ❑ Hybrid – an interactive mix

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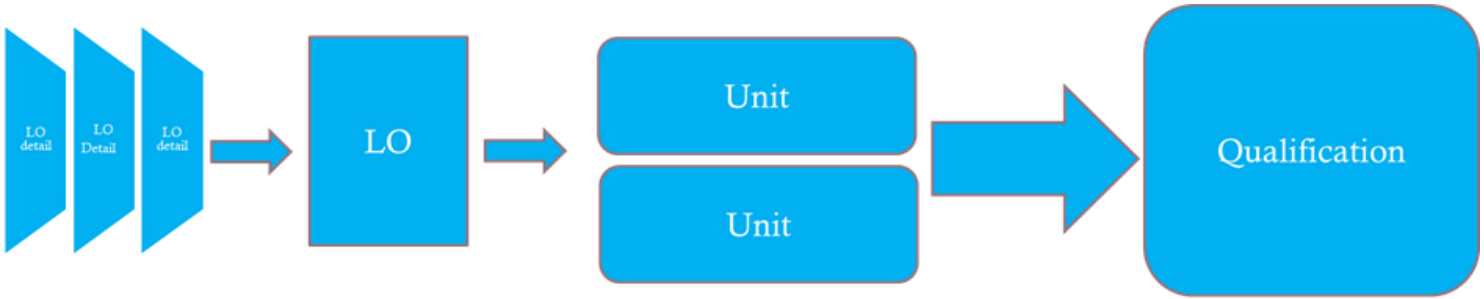
Bottom-up matrix construction

From LO elements through units to full qualification



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Co-funded by the Erasmus+ Programme of the European Union	**BeWell**	BeWell.
Generic Title of the Unit:	**U1 – Telehealth**	
Description:	**Telehealth is the distribution of health-related services and information via electronic information and telecommunication technologies. As well as an understanding of the main characteristics and requirements for implementing telemedicine services in a hospital setting**	
EQF Level:	**4-6**	

Learning Outcomes

BeWell U-1	Training Module Code	Competence (Autonomy and responsibility)	
		Knowledge	Skills
1.1 Different types of telehealth	TD08-M1	Is able to identify and assess different telehealth approaches in Europe	
		Knows different solutions to telehealth across Europe	Evaluates the rationale and possible benefits when implementing telehealth solution
		Knows the motivations and expected benefits of the development and adoption of telehealth	
1.2 Hardware and software technologies	TD08-M2	Is able to identify and implement appropriate technological solutions for telehealth	
		Understands how the different hardware and software technologies work for telehealth	Ensures service operability through the adoption of telecommunications standards and interoperability
		Knows the requirements for activating telehealth services	
		Understands that user privacy and data security protection should be included in a telehealth system	Selects and implements appropriate routines and procedures to bolster privacy protection and minimise cyber risks
1.3 Televisit	TD08-M3	Is able to balance advantages and disadvantages of different tools in televisiting	
		Knows the advantages and disadvantages of a televisit	Uses the correct tools to a televisit
		Knows the advantages and disadvantages of a teleconsultation	

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EQF Level:	4-6		
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Key Objectives of a multilingual matrix implementation:

A. Qualification and Competence Definitions:

B. Assessment and Validation: Establishing robust procedures to:

- ❑ assess
- ❑ validate
- ❑ recognise (prior) learning (VNIL/RPL),
- ❑ balance in-formal, non-formal and formal learning

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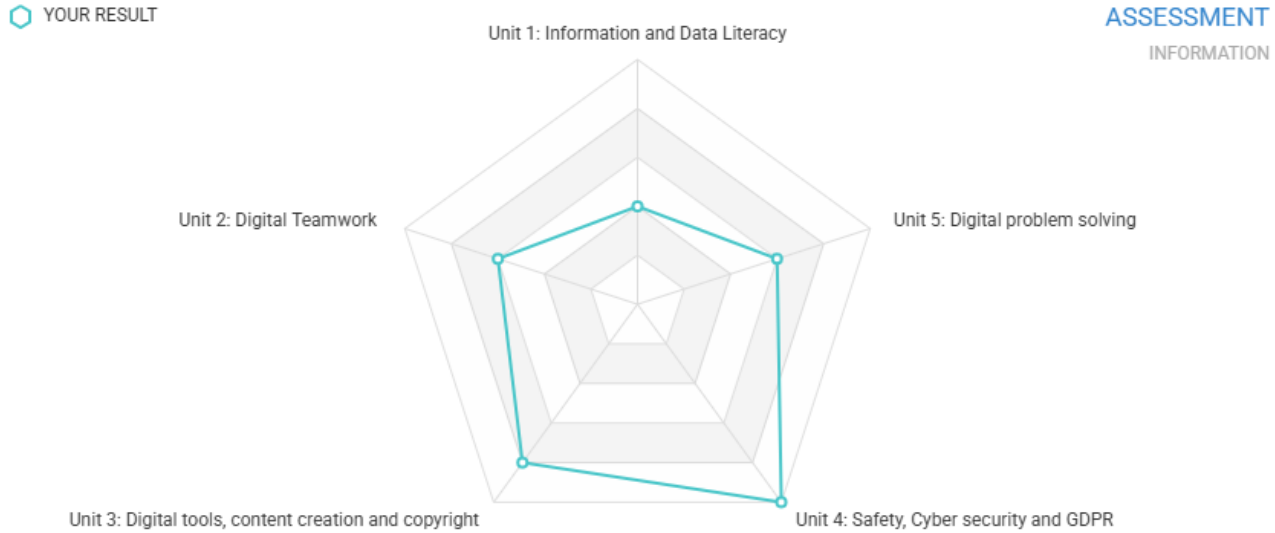
Digital competence matrix EQF 3/4

COMPLETION 100%



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BeWell e-learning courses

Enhancing the skills of the health and care workforce

MOOCs and Microcredentials

Available as OERs at SkillsCourses.eu

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Framework with **training programmes as MOOCs and Microcredentials**

EQF/ECVET/EQAVET based

Learning Outcome matrix oriented

Europass compliant

Structured as stackable credentials

Multilinguality for wide ranging portability

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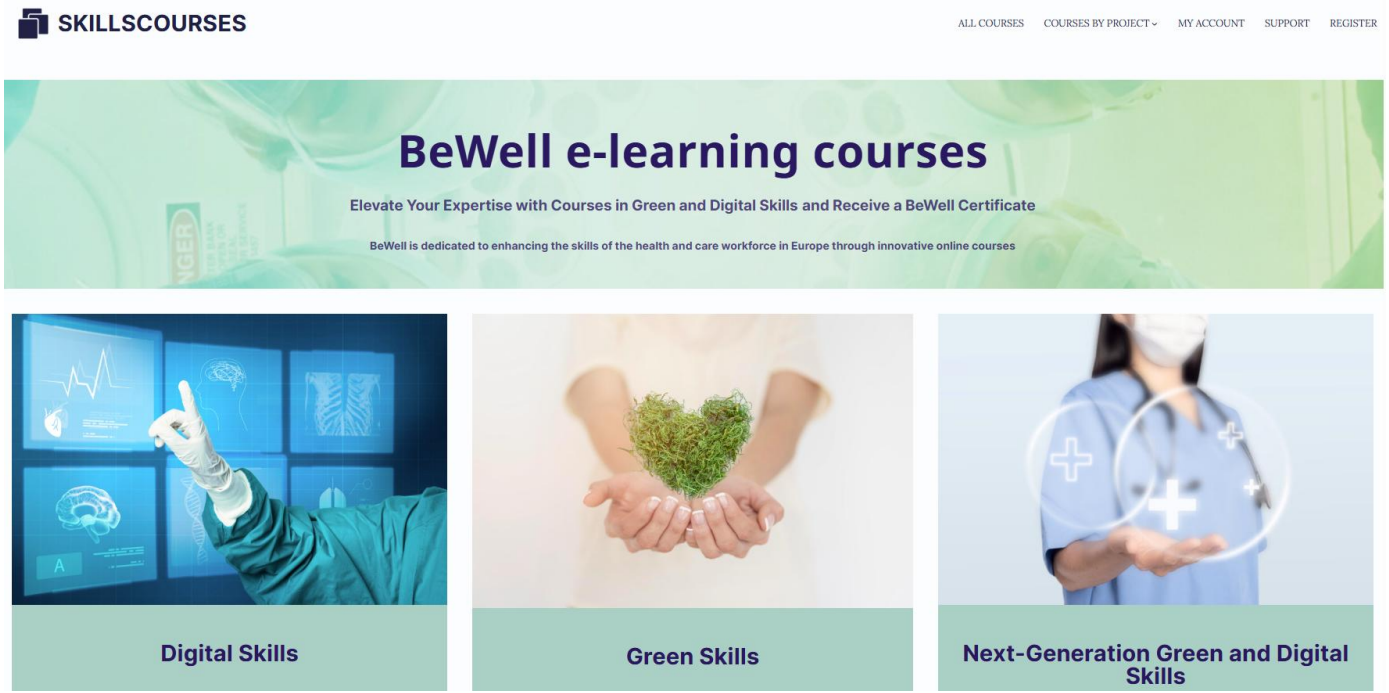

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Digital Skills

1. Increase Office and Google suite knowledge
2. Problem Solving and Digital Tools
3. General Data Protection Regulation (GDPR)
4. Cybersecurity for Healthcare Staff
5. Telemedicine
6. Telehealth – Televising and Telemonitoring
7. Healthcare ICT
8. PACS, e-file, RIS
9. Clinical Databases
10. Digital Skills for Nurses and Allied Healthcare Professionals
11. Basics of Data Analytics
12. Data Analytics with R

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Digital Skills courses

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4. Cybersecurity for Healthcare Staff

This course equips nurses, nursing assistants, and administrative staff with essential cybersecurity skills tailored to healthcare environments.
Key focus areas:

- *Fundamentals of cybersecurity and common threats (malware, phishing)*
- *GDPR compliance and data protection in healthcare*
- *Password management, email safety, and secure browsing*
- *Mobile device security and protecting professional data*
- *Recognising and responding to cyber incidents*

Objective: Provide healthcare staff with practical tools to protect sensitive health information and ensure safe digital practices in daily work.

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7. Healthcare ICT

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This course provides healthcare professionals, particularly medical technicians, with key competencies in health data digitization and the use of ICT systems in clinical practice.

Key focus areas:

- *Understanding Electronic Health Records (EHR) and their application*
- *Benefits of digitizing healthcare data for quality, efficiency, and access*
- *Managing clinical data through RIS/PACS systems*
- *Workflow of diagnostic images: from acquisition to storage and consultation*
- *System architecture: technical foundations, hardware and software*
- *Human resources, competencies, and infrastructure required for implementation*

Objective: Equip healthcare staff with practical digital skills to manage clinical data and diagnostic imaging systems effectively and securely.

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Green Skills

1. Green Skills for Frontline Nurses and Allied Healthcare Professionals
2. Pollution and Health
3. Health System and Environmental Health
4. Green Skills for the Health Sector

https://skillscourses.eu/bewell/bewell-green-skills/

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1. Green Skills for Frontline Nurses and Allied Healthcare Professionals

This course explores the role of planetary health within the EU policy context and its application in nursing practice.
It focuses on:

- *Planetary health education and interdisciplinary collaboration*
- *Integrating sustainability into daily nursing care*
- *Promoting healthy lifestyles (nutrition, physical activity)*
- *Addressing environmental health risks and crisis preparedness*
- *Ensuring sustainable quality of care*
- *Reducing healthcare's environmental footprint*
- *Strengthening advocacy, cooperation, and communication*

Objective: Empower nurses and healthcare professionals with green skills to promote health, protect the environment, and support sustainable, person-centred care.

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3. Health System and Environmental Health

This course explores how the Sustainable Development Goals (SDGs) can be applied in the health sector through a One Health approach. It highlights the deep connections between human health, environmental sustainability, and planetary health, using real-world case studies and best practices.

Key topics include:

- *Impacts of environmental contaminants and climate change on health*
- *Challenges like pollution, biodiversity loss, and inequalities*
- *Application of One Health and Planetary Health frameworks*
- *Design of health policies that promote environmental and public health*
- *A holistic view of health in its ecological and socio-economic context*

Objective: Equip health professionals with the tools to support resilient, healthy communities while advancing global sustainability goals.

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BeWell. Next-Generation Green and Digital Skills

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1. Digital Care Coordinator
2. Developing Resilience for Health Operators
3. Digital Patient Education
4. Medical Device (Regulation)
5. AI Considerations for General Practitioners
6. XR Technologies Applied in Clinical Practice
7. 3D Printing in Medicine
8. Radiomics
9. Sustainable Logistics in Healthcare organisations

https://skillscourses.eu/bewell/next-generation-digital-and-green-skills/

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2. Developing Resilience for Health Operators

This course provides health professionals with tools to thrive in demanding, high-pressure environments by strengthening both personal resilience and professional performance.

Key focus areas include:

- *Stress management at both individual and organizational levels*
- *Preventing burnout and promoting mental well-being*
- *Enhancing critical thinking for decision-making and adaptability*
- *Improving communication within teams and across the organization*
- *Fostering collaboration and reducing conflict in clinical settings*

Objective: Equip healthcare workers with the strategies and mindset needed to stay resilient, effective, and well, while delivering high-quality care.

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5. AI Considerations for General Practitioners

This course provides general practitioners with essential knowledge to understand and apply AI technologies in clinical settings, with a focus on accessibility, ethics, and real-world application.

Key focus areas:

- *Introduction to AI in healthcare: technologies, uses, ethics, and regulation*
- *Practical applications in general practice: diagnostic support, administration, and personalized care*
- *Challenges in AI adoption: trust, economic factors, and implementation strategies*

Objective: Equip GPs with the tools and insights to responsibly integrate AI into daily patient care and decision-making.

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Key Objectives of a multilingual matrix implementation:

A. **Qualification and Competence Definitions:**
B. **Assessment and Validation**

C. **Certification and Recognition:** Enabling certification based on
- ❑ microcredentials as well as
- ❑ full qualifications and degrees,
- ❑ aiding career pathways and
- ❑ supporting permeability across occupations and levels by
- ❑ learning outcome descriptions as an “exchange currency”.

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

Certificate of Completion

This is to certify that

has completed the course

Issued:

NUOVE TECNOLOGIE DELLA VITA ITS ACADEMY
Giuseppe Guglielmo Nardiello
President

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EHMA
European Health Management Association
Federica Margheri
Executive Director

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Thank you!

Contact:

www.bewell-project.eu

www.skillscourses.eu

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bewell-project.eu

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“Building skills intelligence: evidence for action”

Training the professionals – lessons learnt from the pilots

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The Piloting Journey

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PHASE 0
Needs Analysis

2022–2023

- Survey of the healthcare workforce
- Scoping reviews on digital & green skills
- Partner country consultations

PHASE 1
Pilot Testing

Feb – May 2024

- 10 digital skills courses
- 74 participants
- External evaluation questionnaires
- Platform: Skillsbank

PHASE 2
Official Pilot (Digital & Green)

Mar – May 2025

- 12 digital + 4 green skills courses
- Platform migrated to SkillsCourses
- 289 evaluation questionnaires

PHASE 3
Official Pilot (NEOP)

May – Dec 2025

- 9 NEOP courses
- Feedback on Green and Digital Skills
- 2,550 total enrolments
- 1,094 certificates
- 1,094 micro-credentials

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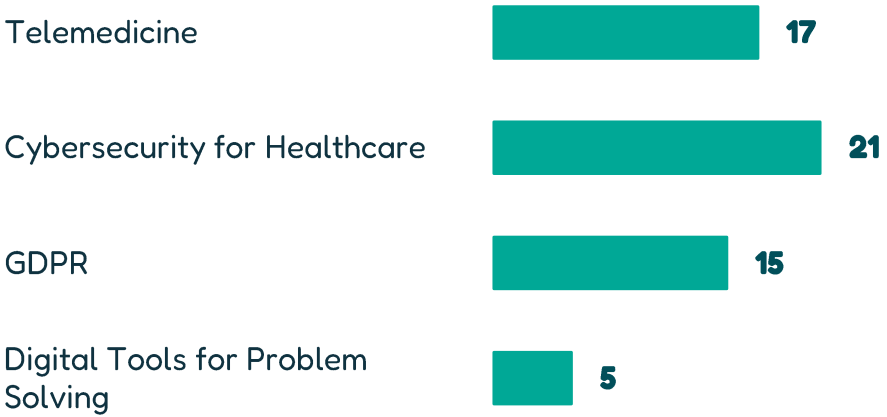
74
Participants

54
Questionnaires collected

10
Digital skills courses tested

Most Attended Courses



Key Issues Identified

- The platform (Skillsbank) too complex, sign-up process deterred participants
- Only English available at launch; other languages added mid-pilot
- No automated questionnaire trigger after 2 modules completed
- No password reset functionality for users
- Videos too long; need shorter, varied formats

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The Official Pilot (March – December 2025)
Three Training Tracks

bewell-project.eu

12 Courses

Digital Skills

- GDPR
- Cybersecurity
- Telemedicine
- Telehealth
- Healthcare ICT
- PACS / RIS
- Office & Google Suite
- Clinical Databases
- Data Analytics with R
- Problem Solving & Digital Tools
- Digital Skills for Nurses & Allied HCPs
- Basics of data analytics

4 Courses

Green Skills

- Green Skills for Frontline Nurses & Allied HCPs
- Green Skills for the Health Sector
- Health System & Environmental Health
- Pollution and Health

9 Courses

New Emerging Occupational Profiles

- 3D Printing in Medicine
- AI for General Practitioners
- Digital Care Coordination
- Digital Patient Education
- Resilience for Health Operators
- Medical Devices Regulation
- XR in Clinical Practice
- Sustainable Logistics in Healthcare
- Radiomics

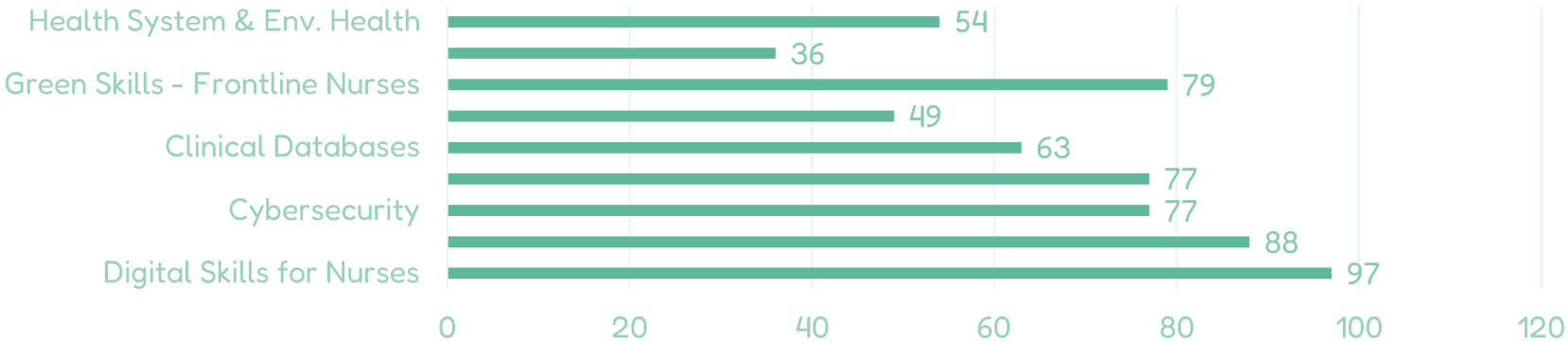
BeWell.

Pilot Results at a Glance

bewell-project.eu

2,550	1,094	94.4%	42.9%
Total Enrolments	Certificates Issued	Average Grade	Completion Rate

Top Courses by Completions



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BeWell. Competences Acquired & Micro-Credentials

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Competence Framework (EQF 4–7)

Knowledge

Facts, principles, theories aligned with each course's matrix unit

Skills

Cognitive & practical application in healthcare digital/green contexts

Competence

Demonstrated ability to use knowledge in work situations (EQF)

Minimum passing score: 75% | Validated via quizzes, self-assessments & reflective exercises

Micro-Credentials

1,094	Micro-credentials issued
1,094	Certificates
12	ICN-accredited courses (ICNEC)
7	Languages supported

Aligned with: Council Recommendation on European Approach to Micro-credentials (2022) · EQF · ESCO · ECVET

Key Lessons Learned

01

Platform Accessibility is Non-Negotiable

The switch from Skillsbank to SkillsCourses was pivotal. Technical barriers dramatically reduce engagement regardless of content quality. Seamless sign-up and multilingual support are prerequisites.

02

Stakeholder-Centric Design Drives Relevance

Courses derived directly from workforce needs surveys attracted the highest completion rates. Telemedicine, Cybersecurity, and Frontline Nurses' courses resonated most strongly.

03

Modular & Flexible Delivery Enhances Engagement

Short videos (<8 min), transcripts, quizzes, and varied formats accommodate healthcare professionals' demanding schedules and diverse learning preferences.

04

Micro-Credentials & Accreditation Add Tangible Value

ICN accreditation (ICNEC) significantly incentivised participation. Portable, EQF-referenced micro-credentials bridge the gap between training and formal recognition.

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Key Lessons Learned

05

Continuous Feedback Loops Enable Iterative Improvement

The two-phase approach transformed weaknesses into strengths. 95% of participants would recommend the programme to colleagues; 97% rated materials as comprehensive and useful.

06

Targeted Dissemination Drives Completion

Variation in completion rates (Data Analytics with R: 6.1% vs Radiomics: 78.8%) underscores that proactive outreach and clear prerequisite guidance are essential.

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Recommendations for Future Iterations

Outreach & Dissemination

- Targeted campaigns for lower-uptake courses (e.g. AI for GPs, Data Analytics with R)
- Strengthen partnerships with hospitals and professional associations to reach more professionals for reskilling
- Embed BeWell in institutional staff development plans

Learner Support & Structure

- Clear prerequisite guidance for advanced courses
- Curated learning pathways (e.g. 'Digital Health Lead' bundles)
- Moderated peer forums and community of practice

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Recommendations for Future Iterations

Recognition & Portability

- Seek accreditation beyond nursing (medical, admin, health technology)
- Align with European Digital Credentials for Learning (EDC)
- Advocate for integration into national qualifications frameworks

Content & Delivery

- Formal review cycle for content updates aligned with tech & regulatory changes
- Add real-world clinical examples, workshops and case studies
- Expand subtitles and translations to all partner languages

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Conclusions

Training the Professionals – What the BeWell Pilots Tell Us

- The BeWell pilots exceeded targets: 2,550 enrolments and 1,094 certificates against a goal of 900, with a 94.4% average grade across all courses.
- Digital Skills courses attracted the highest engagement; Digital Skills for Nurses & Allied HCPs (97 completions) and Cybersecurity (77) led uptake.
- Green Skills demonstrated a growing institutional commitment to sustainability in clinical practice.
- NEOP courses confirmed demand for resilience, immersive technologies (XR, 3D Printing) and regulatory knowledge in the emerging health workforce.
- Engage more professionals to participate in the NEOP Courses
- The iterative two-phase approach, learning from failure to build success, is a model for future EU-funded VET and HEI training pilots.
- Micro-credentials aligned with EQF/ESCO/ECVET provide portable, recognised evidence of competence that bridges training and formal qualifications.

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Thank you!

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