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Index

Introduction	3
Introduction to New and Emerging Occupational Profiles (NEOP) in BeWell.....	4
Competence vs Qualification matrix	8
The main characteristics of the EQF	8
Matrix development.....	10
ESCO	11
Method and Process for Selecting ESCO Qualifications for the BeWell NEOP Competence Submatrices.....	12
Assessment and validation criteria.....	13
Order of the sub matrices	16

Introduction

This document aims to respond to what was formulated in the BeWell application with the establishment of a common methodology for the design of qualifications and their corresponding recognition of non-formally and informally acquired competences as prior learning (VNIL/RPL)¹. The Competence matrices to be found in this document outlines the learning outcomes relevant for Health and Care Professionals related to New Emerging Occupational Profiles. While the learning outcomes are not directly linked to the traditional core competences of health and care professionals, they address the dynamic and evolving demands of the sector. As technological advancements, interdisciplinary roles, and innovative practices reshape the health and care landscape, these emerging profiles are becoming increasingly central to workforce development. The matrices have been designed to encompass a broad perspective, avoiding the limitation of targeting specific professions. Instead, the learning outcomes are crafted to be relevant and engaging for health and care professionals who are keen to adapt to emerging trends, embrace innovation, and address the evolving needs of patients and the health and care system.

The Competence Matrices have been developed through an analysis of available sources from educational institutions working in the partnership.

The Competence Matrices are developed in accordance with the principles of the European Qualifications Framework (EQF) and operationalised through the specifications of the European Credit system for Vocational Education and Training (ECVET) and through the implementation of the EQAVET² principles, the European Quality Assurance in Vocational Education and Training.

The EQF is operationally defined as a system of descriptors of qualifications based on learning outcomes, regardless of how or where these are achieved. The BeWell matrices may serve as a reference tool to compare the qualification levels of the different qualification systems. The intention is also to promote both lifelong learning and equal opportunities in the knowledge-based society, as well as the further integration of the European labour market, while respecting the diversity of national education systems, as well as sector-based involvement, as indicated above. With well-defined matrices of competences, future recognition of individual's prior learning as well as permeability and portability between different strands of health education and training will be facilitated.

One aspect of this is to strive for transparency across languages, training cultures and workplace requirements. This will on the one hand require comparable learning outcome descriptions, made valid through plurilingual versions of competence matrices and with reliable assessment procedures. The operational part of this will be VNIL/RPL procedures, where validation of non- and informally acquired skills and competences

¹ Validation of non-formal and informal learning/Recognition of Prior Learning

² https://employment-social-affairs.ec.europa.eu/policies-and-activities/skills-and-qualifications/working-together/eqavet-european-quality-assurance-vocational-education-and-training_en

can be assessed and made visible and with optional recognition of all types of prior learning. This will partly be obtained through use of the Skillsbank platform holding parallel matrices in partner languages and with a first level self-assessment option available. In the training programmes there will be different sets of quizzes defining the stepwise progression. Verification of participation and achievements as competence profiles and spider graphs reflecting an individual's performance will be issued and can serve as identification tools to help in the process of selecting programmes or learning experiences for further up- or reskilling.

For a full recognition of performance, competent bodies representing accredited systems must be involved. This can be at national or regional level, but with the BeWell system as a SQF structure with stakeholders and relevant training providers representing EHMA as an official organisation, certificates stating the learning outcomes achieved may also be issued.

Introduction to New and Emerging Occupational Profiles (NEOP) in BeWell³

Among the ambitions of the European Union is the challenging combination of two, partly contradictory, developments as expressed in the Digital Strategy⁴ and the European Green Deal⁵. Both are reflecting the growing significance of the ongoing transformation of environment, societies and economies. The BeWell project was already at the outset aligned with these Twin Transition ambitions⁶ with training programmes covering green and digital skills in the health sector.

The New and Emerging Occupational Profiles (NEOP) in the BeWell project refer to professional roles that have evolved in response to digitalisation, green transitions, and the changing needs of health and care systems. The development of the NEOPs comes partly as a response to the Twin Transition developments, partly to react to how technological developments are inviting different professions to a closer cooperation. In this context new occupational profiles are emerging, crossing previous borders and responding to requirements on optimisation of resources and streamlining managerial as well as operational procedures.

These new roles aim to address skill gaps, integrate new technologies, and enhance service delivery, ensuring that health and care professionals are prepared for the future.

³ This introduction is based on the findings from **Milestone 14: Report on Emerging Occupational Profiles**, authored by Carmen Fusilli and Efstathia Koitsanou as part of the BeWell project (Fusilli & Koitsanou, 2024).

⁴ <https://eufordigital.eu/discover-eu/eu-digital-strategy/>

⁵ https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

⁶ European Commission: Joint Research Centre, Muench, S., Stoermer, E., Jensen, K., Asikainen, T. et al., *Towards a green & digital future – Key requirements for successful twin transitions in the European Union*, Publications Office of the European Union, 2022, <https://data.europa.eu/doi/10.2760/977331>

The BeWell NEOP training programmes in this way also invites to discussions of new perspectives on the organisation of the sector.

Definition and Selection of NEOP in BeWell

The identification and selection of NEOP within BeWell were informed by a structured research process, drawing on scoping reviews on digital and green skills, policy briefs, and stakeholder consultations. This process was guided by several key considerations:

- **Digital and Green Transitions in Health and care:** The increasing reliance on digital health solutions and the push for sustainability in health and care have created a demand for specialised roles focused on digital health implementation, data management, and environmentally sustainable practices.
- **Labour Market Needs and Skills Intelligence:** Workforce demand analyses have highlighted the need to bridge skill gaps in areas such as digital literacy, care coordination, health resilience, and emerging technologies like artificial intelligence (AI) and 3D bioprinting.
- **European Policy and Strategic Frameworks:** The selection aligns with EU policies, including the European Skills Agenda and the Pact for Skills, ensuring that the identified profiles support broader efforts in upskilling and reskilling the health and care workforce.

The key elements guiding the selection process included:

- a) The project proposal's initial identification of emerging topics relevant to digital and green transitions in health and care.
- b) Discussions and inputs from workshops (such as the event in Brussels) and the BeWell General Assembly, where industry and academic experts highlighted key trends and workforce needs.
- c) Findings from the first version of the BeWell Policy Brief, which identified gaps in current training provisions and areas requiring upskilling.
- d) The expertise and knowledge of project partners, who contributed through brainstorming and collaborative discussions during the General Assembly, ensuring that selected NEOPs align with industry trends and practical needs.

Each selected NEOP reflects a distinct but complementary area of development within the evolving healthcare landscape. For instance:

- **AI Considerations for General Practitioners:** Proposed based on growing relevance and need, particularly highlighted by the European Commission.
- **3D Modelling and Printing in Health and Care:** Included due to its mention in the project proposal and expanded to include VR applications, following insights from expert discussions.
- **Radiomics:** A rapidly emerging field where UNIBG has ongoing research, making it a suitable addition.
- **Transversal Skills:** Addressing broader competencies identified as critical by BBU.
- **Digital Patient Care:** Emphasized by UTH as a key emerging need in healthcare.

- **Green Skills and Sustainable Logistics in Healthcare organisations:** Foreseen in the project proposal and reinforced by stakeholder discussions led by FAGINN.

While these NEOPs are not necessarily interconnected, they collectively contribute to a future-ready healthcare workforce by addressing different technological and operational advancements.

Explanation of NEOP Interconnections

Although the NEOPs were chosen to address diverse themes, they share overarching goals in enhancing the sustainability, digitalisation, and efficiency of health and care systems. Their relationships can be understood as follows:

- **Digital Health Integration:** AI Considerations for GPs, Computer Networking in Health and Care, and Patient Education collectively enhance digital healthcare capabilities.
- **Advanced Medical Technologies:** Radiomics, 3D Printing, and XR Technologies Applied in Clinical Practice contribute to medical innovation and patient-specific treatments.
- **Sustainability and Logistics:** Green Skills and Sustainable Logistics in Healthcare organisations ensure that environmental considerations are incorporated into healthcare operations.
- **Patient-Centric Approaches:** Developing Resilience for Health Operators, Care Coordination, and Patient Education focus on improving patient outcomes through better communication and system coordination.

These categories illustrate how NEOPs complement one another by addressing different dimensions of healthcare transformation.

Identification of Skills for Each NEOP

The skills outlined in the competence matrix were identified through a combination of structured research and expert validation. The methodology involved:

- **Policy and Research Review:** Examination of EU policy documents, labour market analyses, and emerging technology reports to determine skill demands.
- **Stakeholder Consultations:** Input from healthcare professionals, educators, and policymakers through workshops and discussions.
- **Competence Mapping:** Aligning identified skills with the European Qualifications Framework (EQF) and ESCO to ensure relevance and standardisation.
- **Expert Contributions:** Drawing upon the expertise of project partners with specialised knowledge in the respective fields (e.g., AI, radiomics, sustainability).

For instance, the skills associated with Training Programme (TP) 8 (**Radiomics**) were defined based on emerging trends in medical imaging and AI-assisted diagnostics, ensuring they align with practical applications in the healthcare sector. However, additional clarification has now been added to reinforce the rationale behind their inclusion.

By incorporating these insights, the BeWell NEOP Competence Matrix provides a comprehensive framework that aligns with the evolving needs of healthcare professionals and ensures a future-ready workforce.

NEOP in BeWell – in a future approach

The BeWell project has identified, categorised, and clustered training programmes and matrices according to their primary focus:

New Medical and Care Roles

These profiles focus on direct patient care, care coordination, and supporting health and care professionals in adapting to new challenges:

- **Digital Care Coordinator** – Managing patient care pathways and improving communication between multidisciplinary teams.
- **Developing Resilience for Health Operators** – Strengthening stress management, crisis preparedness, and mental well-being in health and care settings.
- **Digital Patient Education** – Equipping health and care professionals with skills to educate patients on managing their conditions.

Technical and Digital Health Roles

These roles support the implementation of digital health solutions, IT infrastructure, and regulatory compliance:

- **Medical Device (Regulation)** – Understanding and applying medical device regulations within health and care systems.
- **AI Considerations for General Practitioners** – Exploring the impact of AI on diagnosis, treatment, and patient management in general practice.
- **XR Technologies Applied in Clinical Practice** – Managing secure and efficient digital communication systems in health and care environments.

Future-Oriented Roles

These emerging roles focus on innovative health and care technologies and sustainable practices:

- **3D Modelling and Printing in Health and care** – Applying 3D printing technologies to medical applications, including bioprinting and prosthetics.
- **Radiomics** – Using AI and imaging analysis to enhance medical diagnostics and personalised treatment planning.
- **Sustainable Logistics in Healthcare organisations** – Integrating sustainability and waste reduction into health and care operations.

Having defined and integrated NEOP into competence matrices, BeWell ensures, as a first step, that training programmes remain aligned with future workforce needs, equipping health and care professionals with the skills necessary for a resilient, digital, and sustainable health and care ecosystem. The next step could be to further develop the clustered training programmes and matrices into consolidated study programmes. This could be developed as transnational and joint study programmes and, in line with the recently launched Union of Skills⁷, also contribute to the announced new European VET diplomas.

⁷ https://commission.europa.eu/topics/eu-competitiveness/union-skills_en

Competence vs Qualification matrix

Competence requirements are described through Learning Outcomes (LOs) logically organised in units (ULOs) which are constituting an occupational profile, defining a full professional qualification, or framing shorter courses and training programmes as microcredentials directly targeting expressed labour market needs.

The BeWell implementation has, however, been more focused on the shorter and separate training programmes and not full professional qualifications. The concept of a *qualification matrix* will therefore be more relevant when BeWell training programmes are integrated in or added to an existing qualification.

This will also be an adequate approach when sets of logically connected training programmes are aggregated into a new and formalised professional qualification which may be a future option, especially for the NEOP part of the BeWell portfolio.

Competence matrices will in the general BeWell context therefore be used as the common term when training programmes are defined, developed, implemented and learners are assessed.

The main characteristics of the EQF

The EQF represents a tremendous paradigm shift in education and training:

- On the one hand it defines qualifications according to levels, using a stepwise approach with descriptors according to each level's complexity and level of professionalism, responsibility, expertise and performance requirements.
- Secondly the EQF caters for Qualifications as such, with the capital Q, regardless of type of provision (traditional Vocational Education and Training, Higher Education studies or through work-based learning). This applies directly to the need for permeability and portability between flexible training pathways.
- Thirdly, there is a shift from input factors (study volume and length, number of curriculum pages etc) to a documentation of achieved learning outcomes.
- Finally, the use of learning outcomes as a documentation of obtained professional attainment, not only the intended outcomes and educational aims and objectives as found in traditional curricula, opens up for flexibility and portability of acquired competences according to performance criteria.

Learning outcomes may be defined as “statements of what a learner knows, understands and is able to do after completion of learning. In other words, Learning Outcomes determine the advancements of learning gained by a learner after a period of study or training, in terms of knowledge, skills and competences”⁸.

⁸ Caspersen, J., de Lange, T., Prøitz, T.S., Solbrekke, T.D., Stensaker, B (2011): LEARNING ABOUT QUALITY – Perspectives on learning outcomes and their operationalisations and measurement. Oslo: Department of

In a nutshell the EQF may be seen as:

1. A meta-framework with 8 levels
2. A translation device between different qualification systems and their levels
3. Covering the entire range of qualifications from the basic level to the highest professional qualifications, academic as well as vocational
4. Facilitating the linking together and integration of different processes, initiatives and instruments
5. Learning outcomes are in focus – replacing previous input-based curricula as tools for qualification descriptions
6. Learning outcomes descriptors applied for each level
7. The learning outcomes are in general broken down into three dimensions: knowledge, skills and competence. The revised version of the EQF (2017) rephrased competence with “responsibility/autonomy” as a descriptor term for the ability of the learner to apply knowledge and skills autonomously and with responsibility, whereas the labour market orientation, in UNESCO/UNEVOC⁹ and ILO¹⁰ terms, is more often phrasing this as “Competence includes responsibility and autonomy required for competent performance in the workplace”, (documents/projectdocumentation/wcms_645065.pdf Gasskov, 2018, 6) in [UNESCO-UNEVOC TVETipedia Glossary](#). For similar reasons the term Competence will be used in this qualification matrix.

Matrix development

The three dimensions in BeWell workplace-oriented settings are defined in the matrix as below:

1. **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
2. **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)
3. **Competence:** Defined in Cedefop database on «Terminology of European education and training policy» 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 European Qualifications Framework, competence is described in terms of responsibility and autonomy.)

The learning outcomes are organised in logical units. Each of the units are composed as a collection of the learning outcomes belonging to a specific and well-defined part of the qualification.

The BeWell project has been developed in work packages targeting different dimensions of the project ambitions and goals. In particular, the preliminary work done on the training materials.

ESCO

ESCO is the multilingual classification of European Skills, Competences, Qualifications and Occupations. It identifies and categorises skills, competences, qualifications and occupations relevant for the EU labour market and education and training.

The ESCO skills pillar distinguishes between

- i) skill/competence concepts and
- ii) knowledge concepts by indicating the skill type.

There is however no distinction between skills and competences. Each of these concepts comes with one preferred term and a number of non-preferred terms in each of the 28 ESCO languages.

ESCO applies the same definition of "competence" as the European Qualification Framework. According to this "competence means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development." When seen together the main BeWell competence matrix of skills and competences and the corresponding NEOP submatrices will constitute a broad approach towards description and definition of competences in the health and care sector.

With ESCO as a "European multilingual classification of Skills, Competences and Occupations"¹¹ it ...

"...works as a dictionary, describing, identifying and classifying professional occupations and skills relevant for the EU labour market and education and training. Those concepts and the relationships between them can be understood by electronic systems, which allows different online platforms to use ESCO for services like matching jobseekers to jobs on the basis of their skills, suggesting trainings to people who want to reskill or upskill etc."

The primary aim of ESCO was to meet transparency challenges concerning free movement in the European labour market through the EURES¹² (EUropean Employment Services), but has now also been linked to interoperability part of the ELM¹³, the European Learning Model. ESCO has been an integrated option in Skillsbank since its first launch as ESCO v0: Released 23 October 2013.

Training programmes/MOOCs¹⁴ will be defined as microcredentials, meaning smaller training provisions/courses directly addressing workplace requirements. They should be stackable and building towards bigger entities, potentially as components in full qualification cycles. They may also be verified in multilingual versions and issued digitally as fake-proof portable documents according to the EDCI-standard.

¹¹ <https://esco.ec.europa.eu/en/about-esco/what-esco>

¹² https://eures.europa.eu/index_en

¹³ <https://europa.eu/europass/elm-browser/index.html>

¹⁴ Massive Open Online Courses

Method and Process for Selecting ESCO Qualifications for the BeWell NEOP Competence Submatrices

To ensure that each training programme (unit) in the BeWell NEOP competence framework aligns with established professional standards and industry-relevant skills, corresponding ESCO qualifications were systematically selected. The selection process followed these key steps:

1. Identifying Key Competencies for Each Unit

- The core competencies for each unit were identified based on the training programme material provided by the BeWell WP5 partners.
- These competencies were mapped to relevant skills and knowledge areas to guide the search for ESCO classifications.

2. Keyword-Based Searching in the ESCO Database

- Keywords were selected directly from the training programme material, ensuring alignment with the intended learning outcomes. The keywords were chosen based on terminology commonly used in healthcare, logistics, artificial intelligence, and other specialized fields covered in the NEOP framework.
- These keywords were used to conduct targeted searches in the ESCO database.
- Where no suitable matches were found, broader terminology was used to explore related classifications.

3. Reviewing and Selecting Relevant ESCO Skills and Knowledge

- Search results were assessed to determine the best-fitting ESCO classifications for each unit.
- Both *knowledge-based* and *skill-based* classifications were considered.
- Alternative options were reviewed when multiple relevant classifications were available.

4. Validation and Refinement

- The selected ESCO qualifications were reviewed to ensure they accurately reflected the intended competencies.
- Where gaps were identified, the closest related ESCO classifications were chosen.

Assessment and validation criteria

The qualification matrix in this document outlines the learning outcomes that are seen as central to the green competences within the BeWell project. Learning outcomes are as the name suggests, descriptions of what a learner knows. Another important aspect of this, is how one can be sure that the learner actually has apprehended the learning outcomes in question. This is done through different forms of assessment and validation.

In BeWell, we are using a combination of formal assessment and validation of non-formal and informal learning. By formal assessment, we mean that the learners go through the training programmes created, get a certain score on their assessments, and based on the required score, are deemed to have achieved the relevant learning outcomes. In the matrix, each of the training programmes are linked to the relevant learning outcomes.

There is another way to go, which is through validation of non-formal and informal learning. Validation of skills gained through non-formal and informal learning is seen as increasingly important in Europe. It is now being recognized as a crucial part of skills policies and initiatives such as the European Skills Agenda, the European Area of Education, the reinforced Youth Guarantee, and the European Social Pillar Action Plan. Validation helps individuals to continue learning throughout their lives and across different institutions, industries, and countries. The need for upskilling and reskilling is also being recognized, with a growing emphasis on investing in skill development¹⁵.

As outlined in the European guidelines for validating non-formal and informal learning, this is a process where the individual has to be in the centre, and there can be no one-size-fits all. However, a set of guidelines, based on the work of Cedefop and adapted to the BeWell reality is one deliverable in this project. The full procedure for such a recognition will be included in the final results of the BeWell project as part of Work Package 4.

Assessment procedure and criteria for the BeWell NEOP Online Courses.

The BeWell Online Courses share a common framework for assessment while allowing flexibility for course-specific requirements. Each course follows a structured learning path with modules, lessons, and assessments, ensuring that participants acquire and demonstrate the necessary competencies.

While all courses incorporate quizzes with a minimum passing score of 75%, some courses also include self-assessments, reflection exercises, homework assignments, or final assessments to reinforce learning. A detailed explanation of the assessment procedure and criteria for each course is provided below.

¹⁵ Cedefop (2023). European guidelines for validating non-formal and informal learning. Luxembourg: Publications Office. Cedefop reference series; No 124.
<http://dx.doi.org/10.2801/389827>

For an overview of the full course structures, including modules, lessons, and assessment methods, please refer to the appendix of the matrix.

Assessment Criteria for Digital Care Coordinator

The **Digital Care Coordinator** training programme includes structured assessments to ensure learners engage with and comprehend key concepts.

- **Quizzes:** After each lesson, learners must complete a quiz, achieving a minimum passing score of **75%** to progress. These quizzes evaluate understanding of care coordination strategies and specialised applications.
- **Further Reading:** Each lesson is supplemented with further reading materials to deepen knowledge, though these are not assessed.

Assessment Criteria for Developing Resilience for Health Operators

The **Developing Resilience for Health Operators** training programme incorporates a combination of graded quizzes and ungraded reflective activities to enhance learning and practical application.

- **Quizzes:** Learners must complete a quiz at the end of each lesson, achieving a minimum passing score of **75%** to progress. These quizzes assess knowledge on stress management, critical thinking, and communication in healthcare settings.
- **Homework Assignments:** Open-ended questions encourage learners to apply concepts in their professional environment. These assignments are **not graded**, and responses are not submitted on the platform.
- **Repetition and Reflection Questions:** Similar to the **AI for General Practitioners** course, these open-ended questions prompt learners to reflect on key topics without requiring a formal response.

Assessment Criteria for Digital Patient Education

The **Digital Patient Education** training programme includes structured assessments to ensure learners engage with key concepts in patient education and digital teaching strategies.

- **Quizzes:** After each lesson, learners must complete a quiz with a minimum passing score of **75%** to progress. These quizzes assess understanding of the nurse's role in education, teaching methodologies, technology integration, and strategies for health promotion and disease prevention.

Assessment Criteria for Medical Devices Regulation

The **Medical Devices Regulation** training programme includes structured assessments to evaluate learners' understanding of regulatory and compliance requirements in the medical device sector.

- **Quizzes:** Each lesson concludes with a quiz to assess key learning outcomes. Learners must achieve a minimum passing score of **75%** to progress.

Assessment Criteria for AI for General Practitioners

The online training programme **AI for General Practitioners** incorporates both graded and ungraded assessment components to reinforce learning and self-reflection.

- **Quizzes:** Learners must complete a quiz after each lesson, achieving a minimum score of **75%** to progress. These quizzes assess comprehension of key concepts covered in the video lectures.
- **Repetition and Reflection Questions:** In **Module 2** and **Module 3**, learners encounter open-ended reflection questions designed to encourage deeper thinking about AI applications in general practice. These questions are **not graded** and do not require submitted responses.

Assessment Criteria for XR Technologies Applied in Clinical Practice

The **XR Technologies Applied in Clinical Practice** training programme employs a structured assessment approach to ensure learner proficiency:

- **Self-Assessments:** Each module begins with a self-assessment to help learners gauge their prior knowledge.
- **Quizzes:** Each lesson includes a **quiz, with a minimum passing score of 75%**, to assess comprehension of key concepts.
- **Final Assessments:** At the end of each module, learners complete a final assessment to reinforce and apply their knowledge.
- **Suggested Resources:** Additional reading materials are provided to deepen understanding.

Assessment Criteria for 3D Printing in Medicine

The **3D Printing in Medicine** training programme employs structured assessments to ensure learners gain a strong foundational understanding of 3D printing applications in healthcare.

- **Quizzes:** Each lesson concludes with a quiz that assesses comprehension of key topics. Learners must achieve a minimum passing score of **75%** to progress.
- **Suggested Resources for Further Reading:** While not graded, learners are encouraged to explore additional reading materials to deepen their knowledge.

Assessment Criteria for Radiomics

The **Radiomics** training programme evaluates learners through structured assessments designed to ensure comprehension of radiological imaging, AI-based image segmentation, and 3D model reconstruction.

- **Quizzes:** Each module contains quizzes to assess understanding of key concepts. Learners must achieve a **minimum passing score of 75%** to progress.

Assessment Criteria for Sustainable Logistics in Healthcare Organisations

The **Sustainable Logistics in Healthcare Organisations** training programme ensures learner comprehension through structured assessments:

- **Quizzes:** Each lesson includes a quiz to evaluate understanding of key topics. Learners must achieve a **minimum passing score of 75%** to proceed.

Order of the sub matrices

To provide a clear and structured view of the competencies within the BeWell NEOP Competence Matrix, the nine identified units have been organized into submatrices based on their thematic focus. While most units share similar EQF levels (5-6), a purely level-based classification would not fully reflect the logical connections between them. Instead, the submatrices follow a structured approach that groups related topics together, enhancing clarity and usability.

The submatrices are categorized as follows:

Patient-Centered and Care Coordination Roles – These training programs focus on direct patient interaction, care management, and resilience-building in healthcare settings.

1. **Digital Care Coordinator**
2. **Developing Resilience for Health Operators**
3. **Digital Patient Education**

Digital and Technical Health Roles – Covering regulatory frameworks, AI applications, and extended reality (XR) technologies, these training programmes support digital transformation in healthcare.

4. **Medical Device Regulation**
5. **AI Considerations for General Practitioners**
6. **XR Technologies Applied in Clinical Practice**

Emerging Technologies in Healthcare – This group highlights cutting-edge medical innovations, such as 3D printing and radiomics, which contribute to advanced diagnostics and treatment planning.

7. **3D Modelling and Printing in Health and Care**
8. **Radiomics**

Sustainability and Logistics – Addressing environmental considerations in healthcare, this training programme focuses on Sustainable Logistics in Healthcare organisations and waste management.

9. Sustainable Logistics in Healthcare organisations