HCEU Competence Matrix ‘Professional Care’ – New ways for recognition and mobility of caregivers

Authors: HCEU project consortium

Co-funded by the Erasmus+ Programme of the European Union

www.project-hceu.eu
# Index

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing comparability – improving recognition</td>
<td>3</td>
</tr>
<tr>
<td>Recognition authorities and the free movement of workers</td>
<td>4</td>
</tr>
<tr>
<td>The Erasmus+ Project HCEU</td>
<td>6</td>
</tr>
<tr>
<td>The Vocational Qualification Transfer System (VQTS)-model</td>
<td>7</td>
</tr>
<tr>
<td>The Competence Development Matrix</td>
<td>7</td>
</tr>
<tr>
<td>Die HCEU Development Matrix ‘Professional Care’</td>
<td>8</td>
</tr>
<tr>
<td>Competence profiles in the HCEU Matrix ‘Professional Care’</td>
<td>11</td>
</tr>
<tr>
<td>Organisational profiles on the Competence Matrix “Professional Care”</td>
<td>12</td>
</tr>
<tr>
<td>Competence comparisons using the Virtual Matrix</td>
<td>12</td>
</tr>
<tr>
<td>Contact for queries and Project partners</td>
<td>14</td>
</tr>
</tbody>
</table>
Increasing comparability – improving recognition

Falling birth rates, an ageing population, and migration will all bring lasting changes to Europe. Demographic change is just one reason why so many sectors are suffering from a shortage of skilled workers. For many years, much of Europe has been suffering from a shortage of skilled workers in the health and care sectors. The movement of health care professionals both within Europe and into the European Union is vital if this shortage is to be resolved.

In the current system, academic and vocational qualifications are organised on a national basis, but there has long been a desire and need to create a transparent system for all European Union (EU) member states which, in addition to academic qualifications, would also provide comparability for vocational qualifications and certificates. Comparability goes hand-in-hand with the recognition of formally acquired professional qualifications within the EU and is a prerequisite for taking up skilled employment in another country. In view of the growing shortage of skilled workers, transparency and recognition are both vital factors for increasing labour mobility and enabling qualified people to take up employment in other EU countries.

The largest group of migrant workers in regulated professions in the European Economic Area¹ are professional caregivers². Although migration within Europe is generally permitted for all EU citizens, taking up an occupation depends on the regulations of the country where it is to be exercised. Access to jobs in the health care sector is regulated in all EEA countries. Administrative and legal provisions require applicants to provide proof of specific professional qualifications before they are allowed to work in this sector. At European level, the mutual recognition of qualifications in the health care professions is based on directives³, also known as recognition directives.

---

¹ The EEA consists of the EU member states and the EFTA states (European Free Trade Association)
³ Directives 2005/36/EC and Directive 2013/55/EU
Competence authorities and the free movement of workers

Over recent years, it has become clear that Europeans are exercising their right to free movement and that national borders are becoming less important to workers. The EU member states are still responsible for their own education systems and there are no plans to harmonise vocational training, but the Directive on the recognition of professional qualifications means that the member states have set up a system for the professional care sector that makes mutual trust with regard to vocational training programmes the outcome of mutual recognition. This significantly simplifies recognition in regulated professions within Europe. Regulated professions are those where formal proof of qualifications is required in order to be able to work in that profession, therefore recognition is required beforehand.

Germany’s Länder have their own recognition authorities, which check foreign academic and vocational qualifications against German requirements. These qualification recognition authorities make an important contribution to the labour market by ensuring that potential applicants meet German requirements so that they can work in Germany as qualified, trusted professionals.

Recognition processes take into account official requirements and individual circumstances. Although this process may be lengthy for applicants and it is sometimes difficult to provide the necessary formal evidence, it ensures that only professionals who comply with national requirements are admitted and that they can then exercise their professions to the full. This is also a quality criterion for professional caregiving, which is centred on people. Applicants are therefore required to meet the high quality and safety standards prescribed by law.

The procedures currently in place for the recognition of foreign qualifications focus on checking existing documents, which contain information on education and training completed in the country of origin, and official documents such as driving licences and work permits. However, the process of gaining a qualification can

Example: The shortage of nursing staff in Germany

The German Federal Employment Agency’s “whitelist” contains a number of health care occupations. Although the Federal Statistical Office has reported more than one million full-time positions in the care sector in the reporting year 2015, there is a shortage of workers. This has been highlighted for many years by the care sector itself and by studies carried out in this field. Now even politicians agree that the care provision situation has become unacceptable.

There is now a social consensus that, in addition to relieving the burden within the spectrum of nursing duties, the number of nurses has to be increased if current levels of care are to be maintained.

In the medical journal the Deutsches Ärzteblatt, Franz Wagner, President of the German Nursing Council, complains that Germany currently has 30,000 vacancies in the nursing and elderly care sector and that this is likely to rise to about 50,000 in the medium term. The German government currently estimates a shortage of 13,000 full-time staff, while Bonin et al. predict an average shortage of up to 260,000 nurses by 2025.

* The “whitelist” is compiled by the Federal Employment Agency and lists occupations where there is a shortage of skilled workers. There are staff shortages in these occupations in Germany, so there is a lack of skilled workers. Employers are encouraged to target skilled workers from other countries to fill the occupations on the whitelist.


2 For example, the European Professional Card (EPC) is an electronic procedure that makes recognition processes clear and easy to handle for individual applicants and places these processes directly in the hands of the relevant recognition authority. Of course, this is not the only way to gain official recognition through the relevant recognition authority.
vary widely (duration of training, different curricula, number of hours of theoretical and practical training, etc.), so recognition authorities are constantly faced with new challenges when they receive applications for recognition. A detailed examination of the information provided on the certificates and credentials makes it possible to identify similarities and differences relating to the particular occupation in each country, and hence determine whether or not the various requirements are equivalent.

Comparing different forms of education and training is made even more difficult when the range of duties performed by health care professionals in different countries is taken into account, which has a major impact on the particular qualification that has been acquired. Even in EU countries, and of course further afield, there are differences and similarities in how an occupation is carried out and the duties involved. The focus may be very different, for example with regard to the activities involved in general and medical nursing procedures.

In some countries, care is provided on the basis of independent research and detached from other health care professions, whereas in others it is increasingly viewed as a medical assistance activity. This is largely due to the different nature of health care systems and how care has been provided in the past.

However, there are some similarities in the way specific activities are carried out. If duties are performed by nursing staff, they require the use of similar materials and aids in the different countries, along with the specific skills required to carry out the activity. The European project HealthCareEurope uses this to support recognition authorities in their responsible role and to promote the mobility of health care professionals across borders.

Figure 2: Lack of comparability of qualifications across borders makes recognition of qualifications more difficult
The Erasmus+ Project HCEU

The recognition of health care qualifications across borders is imperative for the mobility of professionals in the European labour market, as these are regulated professions\(^1\), i.e. they cannot be pursued without a proven qualification. The European HealthCareEurope (HCEU) project tackled this challenge in a three-year project (September 2015 – August 2018). Ten European partners from Germany, Greece, Austria, Poland and Hungary joined forces to develop tools and methods for supporting the recognition of formal qualifications of health care professionals as part of improving the cross-border mobility of skilled workers. The HCEU Competence Matrix ’Professional Care’ was created as part of this project. It lies at the heart of all the aids and tools that have been developed and provides what is currently the most comprehensive tool for describing competences in the field of professional care on the European market.

The Competence Matrix describes the everyday work and work processes of professional caregivers and focuses on the competences that are necessary to meet the requirements of these work processes. At the same time, it dovetails with core requirements in the curricula of health care qualifications in the partner countries.

This approach is made possible by using the VQTS, the Vocational Qualification Transfer System. It is a method for describing the professional competences that are required and also competence development steps, in this way making it possible to map different qualification levels. In the HCEU project, the VQTS approach is supplemented by the operationalisation of the competence development steps with the help of the EQF descriptors, which are now widely used in European vocational education and training.

The HCEU Competence Matrix ’Professional Care’ offers numerous benefits by applying the tools developed as part of the project. A wide range of profiles can be presented in the matrix. For example, one such profile could be the level of competence attained through a particular qualification. This profile can then be compared with another profile (e.g. a qualification gained in another country) using the 3D matrix. When comparing two qualifications, the virtual matrix makes it easy to note competences that either exceed requirements or are lacking.

In light of this, the HCEU Competence Matrix ’Professional Care’ is a valuable tool for mapping and comparing existing qualifications, but also the individual competences of health care professionals across borders.

\(^1\) Cf. above in this brochure
The Vocational Qualification Transfer System (VQTS) model

In practice, comparing vocational qualifications from different countries poses many challenges, as each vocational education and training system (VET) has its own traditions and classifications. The VQTS model counters this lack of comparability by placing actual work processes at the centre of the comparison. It is assumed that it is possible to identify similarities in core tasks and work processes, despite differences in the design and implementation of vocational and educational training systems. For example, similar job profiles in different countries tend to use similar materials, technologies and processes. Therefore, it is easier to compare professional requirements and core work tasks (combined with the necessary professional competences for these) than it is to compare different VET programmes in two countries.

The VQTS model provides a “common language” for describing competences and their acquisition. It is a way of describing the competences that have been acquired in a training programme at national level. The model sees competence profiles as an illustration of the status quo in a person’s competence development, which is why it is very suitable for describing the acquisition of competences. The competence development matrix and competence profiles are core components of the VQTS model.

The Competence Development Matrix

Competence development matrices are intended to increase the transparency of competences and qualifications. The aim is to achieve a common understanding when comparing qualifications acquired in different countries.

---

1 The VQTS model was originally developed in the Leonardo da Vinci VQTS (Vocational Qualification Transfer System) project and developed further in the follow-up project VQTS II. For more details see also http://www.vocational-qualification.net/ (08.01.2016)
Developing VQTS competence matrices involves a number of aspects:

- It is necessary to identify the occupational field of the matrix and analyse associated occupational profiles and prior learning.
- A range of experts with practical experience in the field (e.g. educators, trainers, specialists) are involved in the development process. In order to give the matrix a transnational approach, these experts should come from different countries.
- It is necessary to identify competence areas and, if applicable, sub-areas of competence for the occupational field. To this end, core work processes are derived from the practical actions of workers in this field. Since curricula are constantly being restructured, they do not have to be mapped 1:1 in the competence areas. The number of competence areas and sub-areas varies depending on the particular occupation and tasks involved and on the complexity and spectrum of activities. The titles of competence areas and sub-areas are selected in such a way that they are understood by experts in the occupational field, even across geographical borders.
- Competence development is described using individual competence development steps for each competence area and sub-area. They are based on practical work processes and their implementation from the lowest professional competence level up to the highest competence level.

Competence development matrices are flexible instruments, since changes in the occupational fields can be easily adapted to the individual elements of the matrix. If activities in the occupational field change, elements can be added, replaced or restructured in the matrix.

The HCEU Competence Matrix ‘Professional Care’

The HCEU Matrix ‘Professional Care’ is the sum of two previously separate competence development matrices. The Elderly Care Matrix developed as part of the NoBoMa project was revalidated and combined with the Nursing Matrix created by HCEU to produce the Professional Care Matrix.

The Nursing Matrix was produced in line with the VQTS process:

- Detailed research and analysis of relevant publications on vocational education and training in the care sector and review of relevant results from EU projects (such as Tuning², Proper Chance³)
- Analysis of national professional profiles and job descriptions of nurses in the countries of the project partners (Germany, Greece, Austria, Poland, Hungary) as well as the United Kingdom, United States, New Zealand and Canada
- Interviews with nurses, representatives of vocational education and training and employer representatives, workshops with representatives of vocational education and training and of practical health care, nursing and geriatric care
- Definition of core work tasks and processes in professional care
- Breakdown of work processes into areas of competence areas and sub-areas. Each competence area comprises the competences that make it possible to carry out the work tasks in the corresponding work area
- Validation of the matrix in focus groups involving experts from Germany, Greece, Austria, Poland and Hungary.

---

1 e.g. Benner 2012, EFN 2015
2 www.ash-berlin.eu/hal/freedocs/210/Pflegeausbildung_in_Europa.pdf (31.10.2016)
The existing Elderly Care and Nursing Matrices were combined by experts to produce the Professional Care Matrix. This was based on the fact that many EU states do not distinguish between nursing and elderly care and that there is a massive overlap between the two professions.

This new matrix was enhanced and validated via further expert workshops in the partner countries and through numerous expert discussions and working groups. The validation process consists of comparing the contents of the matrix with existing curricula in the partner countries and repeatedly checking the contents against actual nursing processes in partner country institutions. As a result, the HCEU Matrix ‘Professional Care’ is representative of the entire field of professional care, irrespective of specific national contexts.

Ten competence areas (CA = competence area, TCA = transversal competence area) were identified and worked on for the occupational field ‘professional care’. The competence areas shown in blue in Figure 5 contain definable occupational activities from the corresponding fields of activity, while the transversal competence areas highlighted in green comprise overlapping competences that are also used in the various areas marked in blue.

Figure 6 shows an excerpt from competence area 4 “Creating and maintaining a healthy and safe environment”, in the HCEU Competence Matrix ‘Professional Care’. The left-hand column names the sub-areas of competence. Each row describes the steps in the competence development process. From left to right, the process is shown from the lowest to the highest level of development that professional caregivers can go through in the course of their careers. The process of competence development varies in the different competence areas and sub-areas, so there are different amounts of competence development steps.

---

1 In Germany, for example, ‘generalised training’ is currently being introduced. The same curriculum will be studied for two-thirds of the study period, and it will only be possible to specialise in medical nursing or elderly nursing during the final third of the course.
In order to further operationalise the HCEU Matrix ‘Professional Care’, five competence areas were broken down further and backed up with learning outcomes. Descriptors from the European Qualifications Framework (EQF) drawn on, which are also used in national qualifications frameworks.

- Identification of necessary competences for specific tasks
- Description of learning outcomes from the perspective of the competence holder
- Use of (one) active verb in each case to describe learning outcomes
- Use of simple, clear and intelligible language
- Avoidance of ambiguity
- It should be possible to identify, verify and assess learning outcomes
- Learning outcomes should relate to the context (and, where appropriate, be illustrated by examples)
- Manageable number of learning outcomes (their quantity should correspond to the requirements of the respective profile).

The above-mentioned general requirements for formulating learning outcomes were supplemented by additional contentsions within the framework of HCEU:

- Research and analysis of different vocational curricula of the partner countries
- Integration of nursing science publications into the development of learning outcomes
- Integration of the transnational approach in HCEU through continuous filling with learning outcomes from professional activities in all partner countries

Figure 6: Excerpt from the competence development matrix ‘Professional Care’

In order to further operationalise the HCEU Matrix ‘Professional Care’, five competence areas were broken down further and backed up with learning outcomes. Descriptors from the European Qualifications Framework (EQF) drawn on, which are also used in national qualifications frameworks.

- Identification of necessary competences for specific tasks
- Description of learning outcomes from the perspective of the competence holder
- Use of (one) active verb in each case to describe learning outcomes
- Use of simple, clear and intelligible language
- Avoidance of ambiguity
- It should be possible to identify, verify and assess learning outcomes
- Learning outcomes should relate to the context (and, where appropriate, be illustrated by examples)
- Manageable number of learning outcomes (their quantity should correspond to the requirements of the respective profile).

The above-mentioned general requirements for formulating learning outcomes were supplemented by additional contentsions within the framework of HCEU:

- Research and analysis of different vocational curricula of the partner countries
- Integration of nursing science publications into the development of learning outcomes
- Integration of the transnational approach in HCEU through continuous filling with learning outcomes from professional activities in all partner countries

Figure 7: Operationalisation of the HCEU matrix ‘Professional Care’ based on learning outcomes

1 A complete overview of the curricula can be found in the Research Report on the HCEU project p. 79ff.
2 The focus was on requirements for professional caregivers in various settings and the latest research findings on carrying out professional tasks. For example, for the competence area CA.A, theoretical texts were sought out; for CA.2, indications and contraindications for the installation of stomach probes were considered.
3 The complete matrix of learning outcomes represents a summary of the competences required by professional caregivers in all partner countries. This means that learning outcomes can also be valid for individual countries involved in the project.
Interviews with nurses, representatives of vocational education and training and employer representatives, workshops with representatives of vocational education and training and of practical health care, nursing and geriatric care

Validation of the learning outcomes in focus groups of experts from Germany, Greece, Austria, Poland and Hungary.

Learning outcomes

The European Commission has defined learning outcomes (e.g. in the European Qualifications Framework – EQF) as follows:

- Competences: These are defined as the proven ability to use knowledge and skills and are described in terms of responsibility and autonomy. HCEU refers to a holistic understanding of competence as an integrated and multi-layered combination of cognitive, functional and social dimensions.
- Skills: This means the ability to apply knowledge and know-how to carry out tasks and solve problems. The EQF distinguishes between cognitive and practical skills.
- Knowledge: This means 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 work or study. In the EQF, knowledge is described as theoretical and/or factual.

Competence profiles in the HCEU Matrix ‘Professional Care’

Competence profiles in the HCEU Matrix ‘Professional Care’ The main practical benefits of competence development matrices are derived from their ability to present different competence profiles (e.g. in relation to individual learners or qualifications). Such profiles include specific competence developments that have been or are to be completed. As a result, profiles appear as specific superimpositions on the overall matrix.

Vocational education and training programmes aim to develop specific competences and learning outcomes and are intended to enable participants to carry out skilled tasks in their daily work. But experience and competences that have been learnt on the job can also be mapped on a competence matrix in the form of organisational profiles.

Skills obtained are verified by certificates† that are issued to the learner after completing courses and passing exams. It is assumed that the qualification includes the curricular requirements that underpin the measure and enables participants to undertake the tasks that they have learnt to carry out based on this curriculum. However, organisational profiles do not show the learning outcomes of individuals but illustrate the kinds of competences that are regularly demonstrated by people who hold the underlying qualification.

Figure 8: Competence development matrix with organisational profile and individual profile, additional profile types can be created, e.g. a recognition profile.

† Certificates include proof of having completed educational activities in the broadest sense. For example, professional certificates, bachelor's certificates and so on are all included in the term certificate.
Further competence profiles on matrices are conceivable: for example, individual profiles that describe the competences of individuals and include experiential learning may be placed on matrices that have already been developed. Employers can project the required competences onto competence matrices within the framework of job descriptions (employer needs profile) and training providers can map competences to be acquired in their qualification measures.

Organisational profiles on the HCEU Competence Matrix ‘Professional Care’

The HCEU project has developed organisational profiles for the main nursing qualifications for all partner countries at registered nurse level, i.e. the most widespread nursing qualification. In addition, competence profiles have been developed for qualifications gained in Albania, the Philippines and Ukraine.

Organisational profiles have to be created according to a set formula:

- Provision of the Competence Matrix ‘Professional Care’ in the language of the country concerned
- Determining the nursing qualification for which the organisational profile is to be developed
- Recruiting experts for the survey (e.g. experienced, practising health care professionals, leading specialists from nursing and care institutions, practical instructors and staff in charge of the induction of new employees), related occupational groups for external assessment (e.g. doctors)
- Survey of practical skills of workers with the corresponding qualification (in terms of content, this determines where, on average, health care professionals with the qualification being examined are mapped in the competence
- Statistical comparison of results and application of defined thresholds
- Expert discussions to review and revise the results of the survey
- Creation of Curriculum Background Information, which provides information on curricular requirements for the organisational profile being examined and thus the (national) training programme for attaining the qualification in question.

Organisational profiles reflect the average competence development steps and learning outcomes achieved by the health care professionals included in this profile on the HCEU Competence Matrix ‘Professional Care’. If a health care professional with a degree in their country of origin wants to take up a job in another country, the profile comparison via the matrix provides a quick overview of the areas in which competences have to be developed or post-qualified, but also shows competences that exceed the requirements.

Competence comparisons using the Virtual Matrix

The easiest way of comparing competences is to use the Virtual Matrix, which was created as part of the HECU project, available at: https://project-hceu.eu/index.php?id=266. A tutorial is also available on how to use it. Visit our website! You’ll be amazed by all the fascinating possibilities that the new Virtual Matrix can offer. The HCEU Competence Matrix ‘Professional Care’ contains a cube that can be rotated and swivelled in all directions. All the competence areas and associated learning outcomes are displayed on the cube.

---

1 In the partner countries, this is usually a bachelor’s degree, but in Germany it is a vocational qualification.
2 The professional experience of the experts interviewed in the project ranged from 2 to 35 years across all partner countries.
3 Participants represented management functions in outpatient, day-care and inpatient care facilities that provide general and/or medical nursing services.
4 The threshold for achieving a certain qualification level was set at 80% compliance. In the HCEU partner countries, vocational qualification measures from a minimum of 60% compliance with these requirements to a maximum of 80% compliance with these requirements lead to passing vocational qualification measures.
5 For compliance between 60% and 80%, a new group of experts was consulted and the results within these areas examined and assessed to find out what relevance the underlying competences have with regard to the exercise of the profession and whether compliance values below 80% may nevertheless lead to the acceptance of the corresponding competence development steps and learning outcomes as part of the organisational profile. Results below 60% lead to exclusion from the organisational profile.
Comparing organisational profiles

Learning outcomes acquired via different routes but which are required to carry out practical tasks can be compared via the organisational profiles. Superimposing them reveals individual deviations that can be mapped on the matrix.

When comparing the organisational profiles of different national training programmes, the different qualification levels are revealed (e.g. assistant’s qualification vs. bachelor’s degree). Superimposing international organisational profiles reveals the differences in the competences of people who gained their qualifications in different countries. As a rule, overlaps and differences in the form of “surplus” learning outcomes and “lacking” learning outcomes can be found on both sides.

You can also find a tabular representation of the matrix on the HCEU project website. When the learning outcomes identified in the project are added to the pure matrix, the result is a document that runs to almost 100 pages. You can find this on the project website. However, this table is difficult to use in practice, especially for making comparisons.

That’s why the project has created a 3D solution called the Virtual Matrix. Making comparisons is quick and easy with this new tool. The entire matrix or individual competence areas can be displayed and compared with existing organisational profiles. This quickly shows which competences belong to a particular qualification level. But the real advantage of the Virtual Matrix is that it makes it possible to compare different organisational profiles.

It is particularly effective when comparing international qualifications and their associated competences, as it is possible to identify competence gaps and surpluses. This in turn makes it possible to quickly determine the training needs of health care professionals who migrate to the target country and to set priorities for the recognition process.

The Virtual Matrix was presented for the first time at the HCEU closing conference. The international participants were impressed: “It’s an incredible way of presenting the outcomes”, and “It’s brilliant, I’m totally amazed.” These are just two of the many examples of consistently outstanding feedback received from those who attended the conference. Representatives of a German registration authority even expressed the hope that recognition procedures could be accelerated by using the HCEU Competence Matrix ‘Professional Care’ and the Virtual Matrix.
More Information

The HCEU project website at www.project-hceu.eu provides detailed information about the project itself and its outcomes. Please contact us if you need more information about how to use the matrix in a particular context.

Contact for queries

Judith Albinus
DEKRA Akademie GmbH
B2 Business Development International
Rudolfstr. 9
10245 Berlin
Tel.: +49.30.290080-240
Phone: judith.albinus@dekra.com
www.dekra-akademie.de

Project partners

• DEKRA Akademie GmbH, DE
• Verein für internationale Jugendarbeit, DE
• Technische Universität Dresden, DE
• 3s research laboratoy, AT
• DEKRA Akademie EPE, HE
• TEI-A, HE
• DEKRA Akademie Kft., HU
• Interpersonnel Polska, PL
• Jagiellonian University, PL
• Polish Nurses Association, PL

The project is also supported by the following associate partners

• IMC University of Applied Science Krems, AT
• School of Nursing at Soochow University, CN
• Nizhyn Gogol State University, UA
For further information please contact:
Judith Albinus
DEKRA Akademie GmbH
B2 Business Development International
Rudolfstr. 9 • 10245 Berlin
Phone: +49.30.290080-240
judith.albinus@dekra.com
www.dekra-akademie.de