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Core competencies for family and community nurses: A European e-Delphi study

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ABSTRACT

Aim: To identify the core competencies of family and community nurses.
Background: The European Union is facing common health challenges in the field of primary care, according to European health policies and the World Health Organization, which need to be addressed through better and innovative ways of working that require joint actions. There is evidence that 'Family and Community Nurses' play a key role in the field of primary care, but there is no agreement on which core competencies they are required to have.
Design: An e-Delphi study
Methods: A 4-round e-Delphi study was conducted from March to July 2018 as part of the Erasmus+ Project "EuropeaN curriculum for fAmily aNd Community nursE" (ENhANCE). A panel of 23 experts from 10 European countries were asked to approve, modify, or add items and then prioritize each skill.
Results: This e-Delphi, as part of the ENhANCE project, produced core 28 competencies, which were used by the "ENhANCE" partners to develop the European Core Curriculum for Family and Community Nurses. The ENhANCE partners ensured that the core competencies were consistent with World Health Organization recommendations, the European Skills/Competencies, Qualifications and Occupations (ESCO) and with the European Credit System for Vocational Education and Training (ECVET).
Conclusions: The results of this study will provide the basis for universities across Europe to develop their own post-graduate teaching programs with common educational goals for Family and Community Nurses and a cadre of nurse practitioners with transferrable skills across the continent.
Tweetable Abstract: This e-Delphi, as part of the ENhANCE project, produced 28 competencies for the European Core Curriculum for Family and Community Nurses.

1. Introduction

According to the 2014 EU publication "The European Union explained: Education, training, youth and sport" (European Union, 2014), the current global economic crisis is not the sole cause of unemployment, but also the skills gap. The "Strategic framework for European cooperation in education and training (European Training ET Framework, 2020)" suggests that EU policies in the fields of Vocational Education and Training should aim to close this gap by equipping people with the right skills for the jobs of today and tomorrow.

Two previous projects, (CARESS, 2015) CARESS (http://www.project-caress.eu/home/) and (CONSENSO, 2015) CONSENSO (https://www.alpine-space.eu/projects/consenso/en/home) confirmed that most of the nurses currently working in primary health care are not specialized in Family and Community Nursing even if they actually practice these roles and that national governments require guidance, time and funding for

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investing on new primary health care models. In this context, the ENhANCE project addresses these challenges by overcoming the skills mismatch concerning Family and Community Nurses.

2. Background

In 2018, according to the Eurostat report of 2019, in 28 European countries there were 101.1 million people over the age of 65 years–equal to almost one fifth (19.7%) of the entire population and in the next three decades it is estimated that the older population will be 149.2 million by 2050, equivalent to 28.5% of the entire population.

This increase in life expectancy is due to technological and medical advances, better general working and living conditions – so is in many ways a success of modern societies. However, an ageing population presents new challenges – especially for the families caring for older relatives. The situation is also compounded by reductions in the fertility rates in many European leading to a reduction of the working-age population (i.e., old-age dependency ratio) (EUROSTAT, 2019). This is resulting in smaller families who are less able to take care of older family members many of whom are living with chronic diseases, translating into an increase in social and health costs (EUROSTAT, 2019). These challenges generated by the ageing of the population, if promptly and adequately studied and analysed, can however turn into new opportunities for economic growth and well-being, through the creation of new goods and services more tailored to an older population, more and more often economically well off than the new generations (EUROSTAT, 2019). All this presupposes that the population ages in good health (WHO, 2015).

The "World Report on Aging and Health" (WHO, 2015) redefines the concept of ageing in a positive perspective, based on the notion of maintaining functional ability as a result of the combination of individuals' intrinsic capabilities and their environmental characteristics. Furthermore, the United Nations Convention on the Rights of Persons with Disabilities declares that any person with a functional limit has the right to live and be socially involved in his or her community, in complete safety, autonomy and comfort (United Nations, 2006). For this reason, the EU recommendations underline the importance of the role of the family and the community for the well-being of older people, emphasizing the need to invest in primary care, aimed at preventing frailties, promoting healthy lifestyles and early diagnosis (EUROSTAT, 2019).

To address these challenges, various reports of the World Health Organization(WHO, 1988, 2005) have underlined the need for new public health care new healthcare models (i.e., first-contact, accessible, continued, comprehensive and coordinated healthcare centers) that connect the people living in the community and the services of the health care system. Moreover, a needs analysis based on the existing research in the field and on international health reports and recommendations(WHO, 1988; WHO, 2005; Chłoń-Domińczak et al., 2014), had highlighted the need to invest in an innovative professional profile called the "Family and Community Nurse" (FCN), identified as the key health professional providing and co-ordinating care for individuals and their families in the community. Finally, other EU projects focusing on skills gaps in the health sector, such as the CONSENSO Project (CONSENSO, 2015) (www.alpine-space.eu/projects/consenso/en) and the CARESS (CARESS, 2015) Project (http://www.project-caress.eu), provide a strong evidence base and argument for the development of a new and consistent role for FCNs to address these gaps.

Driven by the above and in the absence of a standardized Professional Profile (PP) – by which we mean a "qualifying" component that describes the job requirements in terms of *core competencies* – for Family and Community Nurses (FCN) at the EU level, based on the WHO and EU recommendations, the ENhANCE project aimed to define a professional profile for the FCN. This professional profile will be competency-based and will serve as a baseline for the definition of a European, innovative, learning outcome-oriented modular Vocational Education and Training (VET) Curriculum for the FCN. In this way, the ENhANCE project targets a specific existing mismatch between the skills currently offered by nurses working in Primary Health Care and those actually demanded by both public health care institutions and private service providers when applying innovative healthcare models centered on PHC. Therefore, the overall aim of the ENhANCE project is to define a professional profile for the FCN, which would then form a European benchmark for the Vocational Education and Training (VET) of FCNs. This article describes the e-Delphi study – the results of which have already been referred to in Pozzi et al. (2021) – conducted within the framework of the ENhANCE project with the purpose to identify the FCN core competencies.

3. Methods

The Delphi technique is a research methodology used to achieve consensus concerning real-world knowledge solicited from experts on topics where no agreement previously existed (Hsu and Sandford, 2007). The Delphi method is based on the assumption that group opinion is more valid than individual opinion. Dalkey and Helmer (1963) describe it as a method to obtain the most reliable possible consensus from a group of experts through a series of questions with controlled feedback, organized in various rounds. At the end of each round the results are summarized so that they can be evaluated by the expert panel, thus enabling the 'systematic emergence of a concurrence of judgment/opinion' (McKenna, 1994 - p. 1222). The number of rounds usually ranges between two and four, depending on the complexity of the topic and the time available.

In the present study we adopted the e-Delphi technique, because it is quicker to implement and ensures higher response rates (Keeney et al., 2010). The Delphi technique does not use a random sample but a selected group of experts, defined as a group of 'informed individuals' (McKenna, 1994). For the present study, 34 European experts in family and community nursing (nursing academics, regulatory board members, nursing service directors and experts of family and community nursing) were identified by the Work Package 2 (WP2) partners. For this purpose, a template was specifically designed to collect information about the experts provided by the WP2 partners. Of the 34 invited experts on a voluntary basis, 23 accepted to participate in all the rounds of the e-Delphi study. The panel of experts were from 10 European countries (Belgium, Croatia, Germany, Greece, Italy, Slovenia, Spain, Sweden, Switzerland and UK), but were external to the project consortium partners. In fact, to ensure an objective evaluation, each expert did not know who the other experts were.

The characteristics of the expert panel are summarized in Table 1.

In preparation of Round 1 of the Study, a template was created (Annex 1) that each partner could use to:

Table 1
Characteristics of the panel of experts who responded to all of the rounds of the e-Delphi study on FCN Core Competencies.

Total # of experts	N = 23
Gender	F = 14; M = 9
Mean age	Mean = 49.7 years
Seniority as RNs	Mean = 24 years
Years in current role	Mean = 9.6 years
Country (N)	Belgium (1); Croatia (2); Germany (1); Greece (2); Italy (9); Slovenia (2); Spain (2); Sweden (1); Switzerland (1); UK (2)
Current positions	15 = Academic educator2 = Nursing directors 2 = Ward managers 2 = Clinical nurses providing family and community care 1 = Academic researcher 1 = Member of the Regulatory Board of Nursing

a) identify European experts to invite to participate in the Delphi Study and
b) identify existing EU documents, existing curricula and scientific papers which could be helpful to prepare a provisional list of Family and Community Nursing core competencies to be then evaluated and amended by the panel of experts through the Delphi

A total of 27 documents were collected (see Annex 2) through this template and then compared with the competencies already described in the two "frameworks" of the WHO (WHO, 2000; WHO, 2012), thus defining the preliminary list of FCN core competencies to be included in Round 1 of the e-Delphi Study. In addition, we ensured that the FCN Professional Profile was informed by the WHO recommendations (WHO, 2000; WHO, 2005; WHO, 2012), the European Skills/Competencies, Qualifications and Occupations (ESCO, 2020) classification as to "nursing professionals" skills/competencies (given that a specific classification for FCN is not yet available) and its compliance with the European Credit System for Vocational Education and Training (ECVET) (ECVET, 2004) (http://www.ecvet-projects.eu/About/Default.aspx). After the core competencies were identified they were then classified according to the ESCO classification.

No ethical approval was required for this study because it was an e-Delphi study conducted with the voluntary participation of a panel of experts and did not involve actions that could potentially harm individuals or patients.

4. Results

In Round 1, the experts were invited to approve or modify the core competencies in Table 2 and to add any other missing core competencies in the list we had provided. The experts suggested to add another 23 core competencies. In Round 2, we asked the experts to agree, disagree or amend these additional competencies (Table 3).

Table 2
The list of 27 Core Competencies used to launch Round 1 of the Delphi Study.

1. Identify and assess the health status and health needs of individuals and families within the context of their cultures and communities.
2. Make decisions based on ethical principles.
3. Plan, initiate and provide care for families within their defined caseload.
4. Promote health in individuals, families and communities.
5. Apply knowledge of a variety of teaching and learning strategies with individuals, families and communities.
6. Use and evaluate different methods of communication.
7. Participate in disease prevention.
8. Coordinate and manage care, including that which they have delegated to other people and personnel.
9. Systematically document their practice.
10. Generate, manage and use clinical, research-based and statistical information (data) for planning care and prioritizing health- and illness-related activities.
11. Support and empower individuals and families to influence and participate in decisions concerning their health.
12. Set standards and evaluate the effectiveness of family health nursing activities.
13. Work independently and as members of a team.
14. Participate in the prioritization of health- and illness-related activities.
15. Manage change and act as agents for change.
16. Maintain professional relationships and a supportive collegiate role with colleagues.
17. Display evidence of a commitment to lifelong learning and continuing professional development.
18. Provide patient education and build a therapeutic relationship with the patient.
19. Managing and negotiating health care delivery systems.
20. Monitoring and ensuring the quality of health care practice.
21. Analytic assessment, cultural competence, program planning, and community dimensions of practice.
22. Financial planning and management.
23. Leadership and family and community policy development, implementation and evaluation.
24. Systems thinking, Public health Sciences.
25. Clinical care competencies and case management.
26. Community health assessment, interventions, mobilization.
27. Managing diversity and fostering inclusiveness

Table 3
The results of Round 2 of the Delphi Study - The 23 additional core competencies.

1. Assess the social and economical context in which the patient lives.
2. Accountability, in terms of working responsibly and making decisions based on evidence and taking into account the preferences and values of the families and the community, and the resources available.
3. Perform a multidimensional nursing assessment.
4. Care management competencies, according to the national strategic framework for chronic conditions.
5. Know how to analyse the social-cultural context of the community in which you work.
6. Defining a nursing care plan based on the needs of individuals and their families.
7. Enhanced communication competence and therapeutic relationship building.
8. Patient safety role. Particularly in cognizance of the human factors.
9. Patient centered care, family inclusive practice.
10. Development of leadership skills to ensure clinical effectiveness.
11. Enhanced clinical decision-making skills.
12. Ability to negotiate, provide counseling, mediate, and manage groups.
13. Documentation and official certification in community and family nursing care. (e.g home health care).
14. Attract potential health agents in the community.
15. Monitoring chronic illness in the community.
16. Provision of advanced care in direct clinical care in the field of family and community care for people throughout their life cycle and for families in all stages, both in terms of their management and planning and development, according to the needs of the population and the demands of health services.
17. Public and community health competencies, related to the design of health education programs, epidemiological and environmental surveillance, and emergency and catastrophe situations.
18. Teaching individuals and families, as well as students and other professionals.
19. Use the best scientific evidence available, generate knowledge and disseminate the already existing knowledge.
20. Planning for disaster prevention and decreasing the hazards for public health
21. Disaster planning, management and coordination of the resources during a disaster.
22. Participation in disaster planning and policy development.
23. Work independently in disease prevention, health protection

In the revised list, we excluded the competencies that in Round 2 did not reach a consensus of at least 70%, as well as any overlapping competencies. Therefore, eight of the 23 additional competencies were removed, thus remaining 15 additional competencies, which added to the initial 27, produced a total of 42 competencies.

In Round 3, we asked the experts to rate each competency from 1 to 10 based on of their level of priority and at the end we asked for further comments on the new list of 42 core competencies (Table 4). In Round 3, the experts almost unanimously highlighted the excessive repetition and redundancy of the contents included in this list of 42 core competencies. After removing the competencies that with the lowest scores and condensing the remaining ones, the list was reduced to 27 core competencies.

In Round 4, we asked our experts to rate again the level of priority of each of these 27 core competencies, but this time knowing the mean scores provided by the other experts in Round 3. The final 27 core competencies that resulted from Round 4 are shown in Table 5. After sharing and discussing these 27 Core Competencies with all the ENHANCE Partners, it was unanimously agreed that an important factor was underlying the 27 core competencies listed above: e-health.

Since, eeHealth Network (2019) is widely recognized as a health priority for the near future, all the ENHANCE partners unanimously decided to include it as the 28th Core competency, by adding some words to describe where e-health is most needed: "Managing health promotion, education, treatment and monitoring supported by Information and Computer Technologies (e-Health)".

Therefore, at the end of the e-Delphi study, the Professional Profile included a total of 28 core competencies. Table 6 shows how the 28 core competencies fundamentally comply with the ESCO competencies for the 'Advanced Nurse Practitioner'.

Table 4
The list of 42 Core competencies used to launch in Round 3.

1. Identify and assess the health status and health needs of individuals and families within the context of their cultures and communities
2. Make decisions based on professional ethical standards
3. Plan, initiate, provide and assess nursing care to meet the needs of individuals, families, and the community within their scope of competence.
4. Promote health in individuals, families and communities.
5. Apply knowledge of a variety of teaching and learning strategies with individuals, families and communities for purposes of health promotion and patient safety.
6. Use and evaluate evidence-based methods of communication in relation to a specific context.
7. Communication competencies and therapeutic relationship building.
8. Disease prevention, health protection, rehabilitation, and treatment, and alleviate patient suffering even during end of life.
9. Coordinate and be accountable for managing nursing care, including that which they have delegated to other people and personnel in collaboration with the community healthcare team.
10. Accountability for the outcomes of nursing care in individuals, families and the community.
11. Systematically document and evaluate their own practice.
12. Generate, manage and use clinical, research-based and statistical information (data) for planning care and prioritizing health- and illness-related activities and assess nursing sensitive outcomes.
13. Advocate, support and empower individuals and families to influence and participate in decisions concerning their health and wellbeing.
14. Set standards and evaluate the effectiveness and impact of family and community health nursing activities.
15. Work independently and as members of a multidisciplinary team.
16. Participate in the prioritization of activities to address problems related to health and illness.
17. Manage change and act as agents for change to improve family and community nursing practice.
18. Maintain professional and interprofessional relationships and a supportive role with colleagues to ensure that professional standards are met.
19. Display evidence of a commitment to lifelong learning and continuing professional development.
20. Provide patient education and build a therapeutic relationship with patients and their families.
21. Negotiating family and community care delivery systems to improve health outcomes for patients and their families.
22. Monitoring and ensuring high quality family and community care practice.
23. Analytic assessment, cultural competence, program planning, and community dimensions of practice to pursue community health promotion goals together with the community multidisciplinary team.
24. Participate in financial planning and management together with the community healthcare team to promote community health.
25. Leadership and family and community policy development, implementation and evaluation for purposes of health promotion.
26. Knowledge of systems thinking in Public Health Sciences for community participatory Health Promotion and Prevention.
27. Family and community care competencies, clinical competencies and case management.
28. Community health needs assessment to implement appropriate clinical interventions and mobilization.
29. Managing diversity and fostering inclusiveness
30. Assess the social, cultural, and economical context in which the patient lives.
31. Perform a multidimensional nursing assessment.
32. Care management competencies.
33. Defining a nursing care plan based on the needs of individuals and their families.
34. Competencies to ensure patient safety.
35. Development of nurse leadership skills to ensure clinical and healthcare effectiveness and appropriateness.
36. Clinical and healthcare decision-making skills.
37. Ability to negotiate healthcare with patients and their families, with the multidisciplinary team and healthcare centers.
38. Facilitate contacts of patients and families with social support networks present in the same community.
39. Monitoring people affected by chronic and rare illnesses on one community in collaboration with other members of the multidisciplinary team.
40. Competencies to educate any member living in the same community, and as well as mentoring students and professionals of other disciplines to promote the health and wellbeing of the community.
41. Use the best scientific evidence available.
42. Work together with the multidisciplinary to prevent disease and promote and maintain health.

Table 5
The list of the final 27 Core competencies according to priority scores given in Round 4.

Core Competencies	Mean score
1. Use the best scientific evidence available.	9.61
2. Systematically document and evaluate their own practice.	9.28
3. Plan, implement and assess nursing care to meet the needs of individuals, families, and the community within their scope of competence.	9.23
4. Identify and assess the health status and health needs of individuals and families within the context of their cultures and communities.	9.14
5. Provide patient education and build a therapeutic relationship with patients, informal carers and their families.	9.14
6. Work together with the multidisciplinary team to prevent disease and promote and maintain health.	9.14
7. Apply educational strategies to promote health and safety of individuals and families.	8.95
8. Involve individuals and families in decisions concerning their own health and wellbeing.	8.95
9. Monitoring and providing long-term care to people affected by chronic and rare illnesses on one community in collaboration with other members of the multidisciplinary team.	8.95
10. Communication competencies based on evidence in relation to a specific context.	8.90
11. Promote health in individuals, families and communities.	8.85
12. Mentoring students to promote the health and wellbeing of the community.	8.85
13. Make decisions based on professional ethical standards.	8.76
14. Maintain professional and interprofessional relationships and a supportive role with colleagues to ensure that professional standards are met.	8.71
15. Multidimensional community health needs assessment to implement appropriate clinical interventions and care management.	8.71
16. Ability to negotiate healthcare with patients and their families, with the multidisciplinary team and healthcare centers.	8.66
17. Assess the social, cultural, and economical context in which the nurse's patient lives.	8.61
18. Coordinate and be accountable for attributing community healthcare activities to support workers.	8.57
19. Accountability for the outcomes of nursing care in individuals, families and the community.	8.57
20. Development of nurse leadership and decision-making skills to ensure clinical and healthcare effectiveness and appropriateness.	8.52
21. Alleviate patient suffering.	8.47
22. Participate in the prioritization of activities of the multidisciplinary team to address problems related to health and illness.	8.47
23. Set standards and evaluate the outcomes related to nursing activities in people's homes and in the community.	8.38
24. Managing diversity and fostering inclusiveness.	8.33
25. Analytic assessment, cultural competence, program planning, and community dimensions of practice to pursue community health promotion goals together with the community multidisciplinary team.	8.19
26. Manage change and act as agents for change to improve family and community nursing practice.	8.09
27. Leadership and development, implementation and evaluation of policies for the family and the community for purposes of health promotion.	8.09

5. Discussion

Increasing proportions of the European population are characterized by common public health priorities, mostly related to ageing, which include cardiovascular diseases, cancer and mental health disorders (EUROSTAT, 2019; ISTAT, 2019). Public health priorities also include unhealthy lifestyles and behaviors, health disparities caused by socio-economic differences within the population (WHO, 2015). Health priorities also include health prevention measures and targeted campaigns that promote health lifestyles and diets to counter widespread phenomena such as obesity, tobacco consumption, substance abuse, alcoholism and road safety (Palmer et al., 2018; Salam et al., 2016).

Another important health priority involves the lack of community services, especially for older people over the age of 80 and those

Table 6
The list of the final 28 Core competencies compared the ESCO competences concerning the "advanced nurse practitioner", equal to "head of community nursing"; "community team leader".

Core Competencies	ESCO classification of competencies
1. Use the best scientific evidence available.	• Apply health sciences • Conduct research in advanced nursing care • Develop advanced health promotion strategies • Implement scientific decision making in healthcare • Lead healthcare services changes • Lead research activities in
2. Systematically document and evaluate their own practice.	• Advise on healthcare users' informed consent • Adhere to organizational guidelines • Analyse the quality of care • Comply with legislation related to health care • Follow clinical guidelines • Manage information in health care • Use electronic health records in nursing
3. Plan, implement and assess nursing care to meet the needs of individuals, families, and the community within their scope of competence.	• Apply nursing care in long-term care • Apply person-centered care • Diagnose nursing care • Evaluate nursing care • Implement fundamentals of nursing • Implement nursing care • Organize home care for patients
4. Identify and assess the health status and health needs of individuals and families within the context of their cultures and communities.	• Interact with healthcare users • Listen actively • Perform health assessment • Plan advanced nursing care • Promote inclusion • Respond to changing situations in health care
5. Provide patient education and build a therapeutic relationship with patients, informal carers and their families.	• Develop a collaborative therapeutic relationship • Empathize with the healthcare user • Empower individuals, families and groups • Ensure safety of healthcare users • Provide health education
6. Work together with the multidisciplinary team to prevent disease and promote and maintain health.	• Advise on healthy lifestyles • Coordinate care • Educate on the prevention of illness • Work in multidisciplinary health teams
7. Apply educational strategies to promote health and safety of individuals and families.	• Deal with emergency care situations • Initiate life preserving measures • Advise on healthy lifestyles • Develop advanced health promotion strategies • Provide health education
8. Involve individuals and families in decisions concerning their own health and wellbeing.	• Empower individuals, families and groups • Make clinical decisions • Promote human rights
9. Monitoring and providing long-term care to people affected by chronic and rare illnesses on one community in collaboration with other members of the multidisciplinary team.	• Organize homecare for patients • Screen patients for disease risk factors • Work in multidisciplinary health teams
10. Communication competencies based on evidence in relation to a specific context.	• Apply context specific clinical competences • Interact with healthcare users • Listen actively
11. Promote health in individuals, families and communities.	• Respond to changing situations in healthcare • Provide health education • Provide nursing advice on healthcare • Educate on the prevention of illness • Develop advanced health promotion strategies • Advise on healthy lifestyles
12. Mentoring students to promote the health and wellbeing of the community.	• Mentor other health professionals • Participate in health personnel training • Promote a positive image of nursing
13. Make decisions based on professional ethical standards.	• Accept own accountability • Follow clinical guidelines
14. Maintain professional and interprofessional relationships and a supportive role with colleagues to ensure that professional standards are met.	• Follow clinical guidelines • Comply with quality standards related to healthcare practice
15. Multidimensional community health needs assessment to implement appropriate clinical interventions and care management.	• Apply context specific clinical competences • Apply sustainability principles in healthcare • Impact of social contexts on health • Provide treatment strategies for challenges to human health
16. Ability to negotiate healthcare with patients and their families, with the multidisciplinary team and healthcare centers.	• Work in a multidisciplinary team • Work in a multicultural environment in healthcare • Solve problems in healthcare • Interact with healthcare users
17. Assess the social, cultural, and economical context in which the nurse's patient lives.	• Work in a multicultural environment in healthcare • Impact of social contexts on health • Apply context specific clinical competences
18. Coordinate and be accountable for attributing community healthcare activities to support workers.	• Accept own accountability • Delegate activities • Develop plans related to the transfer of care
19. Accountability for the outcomes of nursing care in individuals, families and the community.	• Address problems critically • Accept own accountability • Impact of social contexts on health • Perform health assessment
20. Development of nurse leadership and decision-making skills to ensure clinical and healthcare effectiveness and appropriateness.	• Adopt leadership styles in healthcare • Apply organizational techniques • Clinical decision-making at advanced practice • Contribute to high level health strategic decisions
21. Alleviate patient suffering.	• Diagnose advanced nursing care • Prescribe medication • Implement nursing care • Apply person centered care
22. Participate in the prioritization of activities of the multidisciplinary team to address problems related to health and illness.	• Work in multidisciplinary health teams • Solve problems in healthcare • Respond to challenging situations in healthcare • Coordinate care
23. Set standards and evaluate the outcomes related to nursing activities in people's homes and in the community.	• Analyse the quality of care • Comply with quality standards related to healthcare practice • Evaluate nursing care
24. Managing diversity and fostering inclusiveness.	• Work in a multicultural environment in health care
25. Analytic assessment, cultural competence, program planning, and community dimensions of practice to pursue community health promotion goals	• Work in multidisciplinary health teams • Respond to challenging situations in healthcare

(*continued on next page*)

Table 6 (*continued*)

Core Competencies	ESCO classification of competencies
together with the community multidisciplinary team.	• Adopt leadership styles in healthcare • Develop advanced health promotion strategies
26. Manage change and act as agents for change to improve family and community nursing practice.	• Lead healthcare services changes
27. Leadership and development, implementation and evaluation of policies for the family and the community for purposes of health promotion.	• Adopt leadership styles in healthcare • Implement policy in healthcare practices • Inform policy makers on health -related challenges.
28. Managing health promotion, education, treatment and monitoring supported by ICTs (e-Health)	• Use e-health and mobile health technologies • Have computer literacy • Prescribe advanced nursing care

suffering from chronic conditions, who have great difficulty accessing even the most basic healthcare services and therefore require home care services often on a 24/7 basis and in the long term. People affected by chronic conditions are the highest consumers of health resources (Miguélez-Chamorro and Ferrer-Arnedo, 2014; Blumenthal and Abrams, 2016) and due to the ageing of the population, this situation is bound to get worse with serious consequences for the health system. This is why it has now become a priority to train highly competent Family and Community Nurses (FCNs), who are in the privileged position to provide an effective and concrete response to the needs of this population through an ongoing process based on prevention and the promotion healthy behaviors, safety and self-care education. In addition to education, prevention, health promotion and nursing care FCNs will also have the role of facilitating contacts and interactions between patients, social-healthcare services and hospitals in a given community and also advocating for the needs of individuals and their families(WHO, 2012; WHO, 2000).

Therefore, FCN competencies defined at a European level should aim at improving the personalization of health care, quality of life, preventing disease and at reducing the number of accesses and avoid repeated accesses to emergency departments, outpatients' clinics, institutionalization and other health centers. The provision of personalized care involves the ability to find solutions that take into account the preferences and cultural values of individuals, their families and of the community and compatibly with their financial resources, which are often very limited.

FCNs are the health professionals who will play a key role in ensuring the continuum of care between people living in the community, the social support systems and the services provided by the health care system. This will also improve interactions and collaboration between health services and health professionals within the multi-professional team. In fact, effective teamwork is important to ensure an integrated approach for the management of chronic conditions, where FCNs can contribute to epidemiological control in a given community. Moreover, with the outbreak of the Covid-19 pandemic, we have learned how important it is to implement effective monitoring of the community, both for the risks of infection linked to communicable diseases and to effectively deal with chronic diseases (non-communicable diseases) (Viganò et al., 2020).

In fact, the 28th competency regarding e-health was introduced precisely to provide family and community nurses with the digital skills to address and enhance interaction and collaboration between health services and the members of the multiprofessional team in the community, ensuring also a more effective monitoring of the community (eHealth Network Multiannual Work Program 2018–2021) (Hussey et al., 2015). Through e-health competency, FCNs in will also be able to empower and educate individuals, families and communities how to access information online and make a better of use telehealth services to improve health and treatment results and promote a better quality of life (Peate, 2013; Rutledge et al., 2017). Moreover, digital literacy has also been described as one of the key elements for a more sustainable healthcare system (eHealth Network Multiannual Work Program 2018–2021).

A strength of this e-Delphi study is that the experts involved, in addition to being from 10 different European countries, had different cultural backgrounds and experiences and included nursing academics, regulatory board members, nursing service directors and experts of family and community nursing and this enabled to produce a more comprehensive and exhaustive list of core competences. It is evident that each "core competency" includes a set of performance domains and required behavioral standards, which FCNs must possess to perform a set of activities at an acceptable level of proficiency.

Considering the high level of complexity of family and community care and the level of professional autonomy and leadership FCNs are required to possess and master, their curriculum necessarily needs to be at a postgraduate level, which in terms of EQF (European Qualifications Framework) standards, is equal to level 7, to ensure that outcomes for individuals, families and the community are effectively achieved. The competencies linked to EQF 7 have been associated with those of the 'Specialist Nurse', although the roles and practice of specialist nurses remain unclear in terms of certification and regulation across Europe (Dury et al., 2014).

In the framework of the ENhANCE Project, the e-Delphi study involved a participatory and deductive approach (bottom up) to ensure that the core competencies for FCNs actually reflected current requirements in terms of knowledge, skills and competencies. In fact, the European ENhANCE project has the dual aim of designing a European curriculum and defining a professional profile for the Family and Community Nurse (FCN), which could be used as a model to develop national curricula for FCNs, based on a common set of core competencies (ENHANCE, 2018). The outcomes of this European project could also give new political impulse to the process of recognition and regulation of the "Specialist Nurse in Family and Community Care" across Europe.

Through the identification of the FCN Core Competencies, the ENhANCE project has taken a first important step forward towards the definition of a European Professional Profile of the Family and Community Nurse. Due to the extremely varying socio-economic contexts in Europe and to the great differences across and within countries in the way nurses currently provide family and community care, much still needs to be done to ensure equal high-quality standards of FCN care across Europe.

6. Limitations

Of the 34 invited experts on a voluntary basis, 23 participated in all of the rounds of the e-Delphi study, who were unevenly distributed across Europe, because about 56% (n = 13) were from Southern Europe (Italy, Greece and Spain), 22% (n = 5) from Central Europe (Croatia, Slovenia and Switzerland) and another 22% from Northern Europe (Belgium, Germany, Sweden and UK) and the results of the Delphi study might have been characterized by a stronger influence of the health care systems and cultures of Southern European countries. In addition, also the level of expertize could have been unevenly distributed but to ensure a high response rate for the successful completion of the Delphi study we had to consider the level of subjective motivation of the experts in playing an active role. Finally, in Round 4 when the experts were aware of the ratings of other experts, they could have felt the "subtle pressure to conform with group ratings" (Witkin and Altschuld, 1995, p. 188).

7. Conclusions

This work will help universities across Europe to develop high quality FCN programs, which will also provide a cadre of practitioners

who will have transferrable skills across the continent and form a network of professionals specifically trained to support families and community care for their older population with increasing chronic conditions and comorbidities.

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Author's contributions

AB, FP, GA, GC, MZ, and LS made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data. AB, GA, RW, and MH were involved in drafting the manuscript or revising it critically for important intellectual content. AB, FP, GA, RW, MH, GC, MZ, and LS gave final approval of the version to be published. Each author participated sufficiently in the work to take public responsibility for appropriate portions of the content. AB, FP, GA, RW, MH, GC, MZ, and LS agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Conflict of Interest statement

Roger Watson, one of our authors, is the Editor in Chief of Nurse Education in Practice.

There is no other conflict of interest.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.nepr.2022.103296.

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