

# **Generic competences for health and social care professionals working with older persons**

## ***Literature Review: A secondary analysis***

Author(s):

Prof Petrie Roodbol, Hanze University of Applied Sciences Groningen, the Netherlands  
Msc Bea Dijkman, Hanze University of Applied Sciences Groningen, the Netherlands  
Msc Niek Delfgou, Hanze University of Applied Sciences Groningen, the Netherlands  
Msc Johan van Wieren, Hanze University of Applied Sciences Groningen, the Netherlands  
Msc Linet Weening, Hanze University of Applied Sciences Groningen, the Netherlands  
Msc Carsten Mølgaard, University College of Northern Denmark  
Msc Karin Naldahl, University College of Northern Denmark  
Msc Inge Lange, University College of Northern Denmark  
Dr Irma Mikkonen, Savonia University of Applied Sciences Ltd, Kuopio, Finland  
Msc Maria Navarro Faculty of Health Sciences, University of Malta  
Msc Roberta Sammut, Faculty of Health Sciences, University of Malta  
Msc Anthony Scerri, Faculty of Health Sciences, University of Malta  
Dr Mirosława Felsmann, Faculty of Health Sciences, Nicolaus Copernicus University, Poland  
Dr Anna Andruskiewicz, Faculty of Health Sciences, Nicolaus Copernicus University, Poland  
Paulina Gyrkow, Faculty of Health Sciences, Nicolaus Copernicus University, Poland  
Dr Célia Soares, Department of Social Sciences and Humanities, School of Health Polytechnic Institute of Setubal, Portugal

January 2016

Project working group work package 3 ELLAN: Netherlands (Lead), Denmark, Finland, Malta, Poland and Portugal

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

## Table of Contents

1. Introduction .....	3
2. Studies in general.....	5
3. Generic Competences in the role of Expert.....	6
4. Generic Competences in the role of Communicator .....	7
5. Generic competences in the role of Collaborator.....	8
6. Generic competences in the role of scholar .....	10
7. Generic competences in the role of Health Advocate .....	10
8. Generic competences in the role of Manager (leader).....	11
9. Generic competences in the role of Professional .....	11
10. Discussion.....	12
11. Conclusion.....	13

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

## 1. Introduction

The number of older people in Europe increases and the demand for care and support is changing. The final goal of European Later Life Active Network (ELLAN) is the development of a competency profile for health- and social workers in the care and support for older people. A literature review was performed to ascertain what is already known of these competences and at which level of evidence. Therefore the following research question was composed: “For the care and support of older persons, which competences of health and social care professionals (nurses, physiotherapists, mouth hygienists, nutrition/dietician, social and occupational workers) related to the CanMEDs-roles are described in the scientific literature and grey literature (e.g. national reports )?”. CanMEDs is a framework that originally identified and described the abilities physicians require to effectively meet the health care needs of the people they serve. These abilities are grouped thematically under seven roles. A competent physician seamlessly integrates the competencies of all seven CanMEDs Roles. The CanMEDs Roles are Medical Expert (the integrating role) Communicator, Collaborator, Leader, Health Advocate, Scholar and Professional. The overarching goal of CanMEDs is to improve patient care. The CanMEDs model has been adapted around the world, both within and outside the health professions.

The literature review was one of the workpackages in the ELLAN project (WP3) with the contribution from 6 partner universities from different parts of Europe. The search was conducted in different languages: English, Danish, Swedish, Norwegian, Finnish, Hungarian, Dutch, Portuguese, Spanish, German and Polish. A total of 228 studies were found and displayed in different reports. The majority of these studies comprised of expert opinions and qualitative cross-sectional studies. Due to the original research question the competences identified were in general directed to a particular healthcare worker (e.g.. nurses) with a wide variety of competences in the different roles. However as the Portuguese team concluded, the preponderant competences emerging from this review are those of relational and interpersonal nature and are transversal to all professions under study (WP3 Overview of the main findings, Portugal).

The number of frail older people in Europe who live with multiple conditions is increasing. They require either health or social care or, very often, both. More integration of health and social care is recommended and specific competences built around older persons’ needs (Barker, 2014). Therefore we refined the original literature study WP3 to the generic competences of all the different health and social care professionals.

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

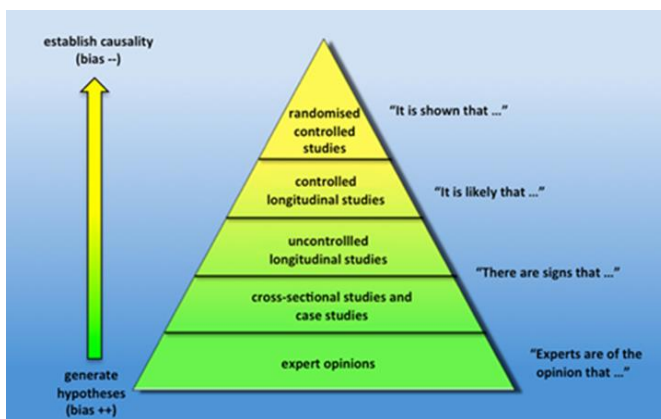
To get insight into these generic competences a *secondary* analysis was conducted under the original selected 228 articles mentioned in the reports of the WP3 review studies from the different countries. For the secondary analysis the research question was: “For the care and support of older persons, which generic competences of health and social care professionals (nurses, physiotherapists, mouth hygienists, nutrition/dietician, social and occupational workers) related to the CanMEDs-roles are described in the scientific literature and national reports (grey literature)?” The original search in the English literature (Dijkman and Roodbol, 2015) encompassed already the multidisciplinary approach next to the combination of CanMEDs roles with particular health and social care professionals.

All original included studies (228) were if possible reread for secondary analyses based on full text. In case of language barriers and / or the absence of papers we used only the received information of the original review. 38 papers were included in the final review to answer the research question: “For the care of older persons, which generic competences of health and social care professionals (nurses, physiotherapists, mouth hygienists, social and occupational workers) related to the CanMEDs-roles are described in the scientific literature and national reports (English, Danish, Swedish, Norwegian, Finnish, Dutch, Hungarian Portuguese, Spanish, German and Polish)?”.

Including criteria:

Attitude, knowledge and or skills of health and social care workers / multidisciplinary teams working with older persons 1997-2015.

The quality of publications was assessed according to the following model:



*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

## 2. Studies in general

The level of evidence of the included studies was mainly low (level four and five), however we also found six studies at level three and two at level one. The subjects linked to the different CanMEDs roles affected many divergent areas and we described these under the different roles in the next chapters. However, we also found studies which described a more or less complete competence profile for working with older persons. Witt et al. (2014)/12 identified and analyzed the necessary generic competencies in primary health care for attending to older adults in Brazil. An exploratory, descriptive, and quali-quantitative study was developed. Three rounds of the Delphi Technique were conducted with participants from primary health care services and a multidisciplinary committee. A consensus criterion of 70% was adopted. Twenty eight competencies were reached by consensus and were classified into twelve domains: clinical thinking, communication, assessment, technical skills, health promotion - risk reduction and disease prevention, illness and disease management, information and healthcare technology, ethics, health care systems and policy, providers of care, designer/manager/coordinator of care and member of a profession. These domains are in CanMEDs terms: expert, communicator, health advocate, professional.

The American Geriatrics Society set up the Partnership in ageing (PHA) Working group (2010)/19 developed the set '*multidisciplinary competencies in the Care of Older Adults at the Completion of the Entry-level Health Professional Degree*'; a baseline for geriatric and gerontology training in any healthcare discipline contributing to the care of older persons. The PHA consisted of ten different health disciplines (Dentistry, Medicine, Nursing, Nutrition, Occupational Therapy, Pharmacy, Physical Therapy, Physician Assistants, Psychology and Social Work). They identified six domains of competences: health promotion and safety, evaluation and assessment, care planning and coordination across the care spectrum (Including end-of-life care), interdisciplinary and team care, care giver support and healthcare systems and benefits. These domains are in accordance with the CanMEDs roles communicator, collaborator, health advocate, manager and professional (Appendix 1).

Taipale-Lehto and Bergman (2013)/23 stated that common competences and skills needed in the future work with older people according to different scenarios, sub-fields and professions are following: (1) skills in client-centered action and quality thinking, (2) interdisciplinarity and multiprofessionality (service coordination), (3) innovation skills (skills in developing one's own work), (4) ethical competence and accountability / responsibility, (5) holistic knowledge of human functions, (6) competence in multiculturalism, and (7) knowledge of guidelines, rules and legislation. These competences can be encompassed by the CanMEDs roles of expert, collaborator and professional with special attention to the multiculturalism and ethical competence and accountability.

The European Framework for Qualifications in Home Care Services for Older People EQUIP and EQUIPII (Salonen, 2009)/18 projects used online tools (a database and the Home Care Competence Test) in order to compare home care qualification requirements, training and good practices in Denmark, Estonia, Finland, Great Britain, the Netherlands, Spain, Bulgaria, Greece and Turkey. As part of this project, a report entitled 'Home Care for older people – Good practices, identified the

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

contents of home care work and occupational skills required for the care of older persons in the 21st century. Based mainly on Finnish research, they addressed three main domains, namely skills, knowledge and attitudes that are considered essential competencies for formal home care for older persons of which the content is comparable with the CanMEDs roles of expert, communicator, health advocate, manager and professional (Appendix 2).

Nederland and van Vliet (2009)/36 developed evidence based directions for health promotion for the care of the older persons in the European Union. They emphasized the empowerment of the elderly (health advocacy), health promotion by interdisciplinary working (collaborator), good (financial) management (manager) and evidence (professional).

### 3. Generic Competences in the role of Expert

The found required generic expertise in the role of expert is divers. Daniels et al. (2011)/14 conducted a literature review and held an expert meeting to describe and justify a primary care interdisciplinary program for community-dwelling frail older people aimed to prevent disability. The program seems promising for addressing the needs of frail older people for independent living and for targeting risk factors.

Annear et al. (2015)/15 conducted an online Delphi study to explore dementia knowledge in different health and social care professionals with three rounds of data collection. The Delphi experts identified 36 statements about dementia that they considered essential to understanding the condition. Statements about care for a person experiencing dementia and their care giver represented the largest response category. The study of Barbosa et al. (2015)/11 also focused on patients with dementia, but was confined to the role of scholar.

Bellelli et al. (2014)/10 did a cross-sectional study to examine the ability to recognize and manage delirium among Italian health providers caring for patients at risk. Generally, doctors and psychologists correctly defined delirium, while nurses and physiotherapists did not. Possible causes of delirium were under-assessed by half of doctors and by the majority of other professionals. The results emphasize the importance of training to improve knowledge of this relevant unmet medical need.

Three studies drew attention to the need for multidisciplinary team members working with older persons to use new technologies. Haux et al. (2014)/3 performed with a group researchers of different disciplines a five years research project to Ambient-assisted living (AAL) technologies in personal and home environments to gain insight of how and where to use AAL technologies for new environments of living and new forms of care. Barakat et al. (2013)/7 undertook a two-day collaborative workshop with academics across multiple disciplines with experience in working on funded research regarding the application and development of technologies to support older people about required skills for using technology. The findings revealed that health care professionals working in home care required a subset of composite skills as well as technology-specific competencies to develop the necessary aptitude in eHealth care. eHealth care technology skills must be instilled in health care professionals to ensure that technologies become integral components of future care delivery, especially to support older adults

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

to age in place. Reierman (2010)/27 pleaded for the requirement of new competences for the implementation of new technologies. These competences support the movement from care to more independence of older people.

Twomey et al.(2014)/5 discussed the role of elder abuse and the role of the different team members. Health professionals play a vital role in addressing elder abuse by identifying and reporting elder abuse and caring for survivors. However, most are unaware of the opportunities to work with allied professionals in elderly abuse intervention.

Vinge et al.(2007)/26 performed a systematic review to identify interventions that avoid inappropriate hospital admissions for older persons to prevent mental decline as complication of the hospitalization.

To conclude, the subjects of the generic competences in the role of expert were widely spread: prevention, disability, decline, delirium, dementia, abuse, and technology.

The other six roles support the Expert role. The Expert role is the integrating role.

#### 4. Generic Competences in the role of Communicator

In the role of Communicator we distinguished communication with patients and with colleagues. Sometimes the role of communicator and collaborator were difficult to distinguish. Almost all studies about collaboration involved communication among health and social care professionals as well.

Robinson et al. (2006)/17 gave 20 tips on how to communicate with older people based on literature, for example to take time, minimize visual and auditory distractions, sit face to face with the patient, don't underestimate the power of eye contact, listen without interrupting the patient. The Danish Aeldren Forum (2005)/28 stated that competencies needed for preventive home visits are a non-patronizing pedagogical planned communication, with an eye for the resources of the individual elderly citizen, structured but also flexible with a broad experience and knowledge of the social possibilities. They (AeldrenForum, 2008)/ 29 also gave an expert opinion about the importance of education in the use of appropriate communication with frail old people. Gatterer (2009)/35 stimulated intensively collaboration and communication for the care and cure for older persons. Fernandes (2013)/37 did a qualitative study to understand the nurse-elderly interaction that leads to successful ageing behaviors. The results are also applicable for other professionals, like the study of Marco et al.(2012)/38. They did a cross sectional study with a questionnaire to examine physiotherapists' relational skills. The authors stressed that professionals should be aware of their patients emotional states and recognize that professionals have a key role in emotional rehabilitation and support. It is suggested that psychological education of physiotherapists would positively contribute to recognising depressive states that may have significant consequences on therapy outcomes. Older persons need more attention from the physiotherapist due to their frail condition and it important to take time for explaining the treatment procedures to patients in order to improve their relationship and encourage elderly patients to express their problems also to develop therapeutic relationship.

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

Jepsen (2013)<sup>24</sup> performed a systematic literature review based on 8 papers selected from 3631 hits and showed the efficacy of systematic goal setting in daily rehabilitation.

Balogun et al. (2015)<sup>4</sup> showed increased communication (and collaboration) skills after inter- professional education.

Hickman (2015) <sup>6</sup> performed a systematic review of randomized controlled trials reporting acute care multidisciplinary team based interventions, to improve care outcomes for hospitalized older people. The tailoring of treatment, underpinned with clear communication strategies can reduce emergency department re-admission rates, mortality and functional decline of older people. Refining health professionals' roles and responsibilities within transition models is essential.

Based on these studies we can conclude that older people have specific communication needs and communication with older people requires special competencies. Communication among the different health and social care professionals is also important.

## 5. Generic competences in the role of Collaborator

Most included studies related to the role of collaborator and this stressed the importance of this role for the professionals in the support and care of older people. Taipale-Lehto and Bergman (2013)<sup>23</sup> defined the needs of future competencies of health and social professionals by declaring the basis of the benefits in the care of the elderly as follows: "The starting point of older people services is to enable physical, mental and social ability to function, independent and meaningful life, activity and participation as well as resources of older people. Older people services provide for wellbeing, health, ability to function as well as support for independent life. This will be enabled by multi-disciplinary competence and skills."

This is confirmed in the article of Halina Doroszkiewicz et al (2001)<sup>31</sup> The special needs of the community dwelling elderly and their compound could not be met without an implementation the geriatric team approach, as a model for interdisciplinary co-operation of practitioners with an appreciation of the community nurse as a leader of geriatric care.

Mazurek (2012)<sup>22</sup> claimed that the assessment of the needs and problems of the elderly is essential and defining the hierarchy as well as real possibilities of meeting them by a *broad* range of professionals.

The results of the research of Eloranta (2009)<sup>20</sup> showed that the care given by the specialists is sometimes contrary to the expectations of older people. The purpose of the study was to provide a perspective of older home care clients' resources as well as to describe social and health care collaboration in home care provision. Professional's took care-related decisions and actions on behalf of their clients even though the clients themselves stressed the importance of retaining their sense of life control and will. Clients had lower assessments than care professionals of the support provided for independence and the provision of physical, psychological and social care. Factors hindering or complicating multi-professional collaboration in supporting client resources included the difficulties that care professionals had in identifying the resources and threats to the resources, communication problems, the lack of clear goals as well as care professionals' contrasting views and ways of

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

working. The results of the research emphasize the importance of the development of collaboration in home care services. It is important to strengthen and support clients' expertise of their own life, to promote a more client-driven and goal-oriented approach to care provision, to clarify the roles and responsibilities of professional care providers and to improve methods of communication.

Kuusela (2009)/21 conducted a study on multi-disciplinary competences needed in home care of older people with as focus in inter-professional competence in supporting physical ability to function of older people. Supporting the physical functional capacity of older people was based on professionals' basic education, experience and tacit knowledge. From the viewpoint of collaborative competence the study revealed weaknesses in inter-professional collaboration and it seems that knowledge and skills of all actors were not exploited in supporting the physical functional capacity of older people. The study revealed the need for training in teamwork and work-based learning to integrate knowledge and skills in supporting the physical functional capacity of older people.

Janssen et al. (2015)/1 did a case study of multi-disciplinary cooperation between professionals in a geriatric team. Empowerment lead to improved linkages and improved insight into each other's tasks. On extra organizational level the commitment of the management of involved organizations should be improved just as the capacity of the team to influence (local) policy.

Yuasa et al. (2014/8) developed an assessment tool for interdisciplinary team meeting.

There were also studies which showed improved outcomes for older people if professionals collaborate.

Tomwey et al. (2014)/7 discusses the various roles of interdisciplinary members and the contribution of health care professionals in these teams working in cases of elder abuse and emphasized collaboration.

Asai et al. (2006)/23 performed a comparative study of older patients with a PEG (percutaneous endoscopic gastrostomy) and treated with multidisciplinary stroke rehabilitation and those with care as usual. Mortality rates of the patients with a PEG were significant lower treated by the multidisciplinary team. ADL scores of the stroke patients was significantly better.

Ament et al. (2015)/2 showed with a comparative study the added value of a geriatric nurse practitioner to diagnostic multidisciplinary facility for out- patients with cognitive disorders, on the quality of care. The results were improved GP concordance, increased rate of advice from the facility and reduced subjective burden on the informal caregiver.

Three studies showed the need for collaboration in dental care. Lewis et al.(2015)/16 promoted a multidisciplinary approach with doctors, nurses, care workers and dental professionals sharing responsibility for the four key processes of oral health screening, oral health care planning, daily oral hygiene and access to dental treatment. This also confirmed by Schaub (2008)/34 and Kalk (1999) / 33.

Collaboration is also important between the older people and health and social care professional to empower the older persons (see also the role health advocate). Jönsson (2013)/25 described health professionals' perceptions of patient involvement and their perception of the conditions for patient involvement in practice by qualitative interviews. Linked to empowerment is one of the examples of patient involvement, that the patients have a participatory and an active stance on treatment.

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

In conclusion: collaboration in the care and support for older people is absolutely necessary. The collaboration between patients and their families as well as interdisciplinary collaboration is one of the most frequently mentioned competencies.

## 6. Generic competences in the role of Scholar

Ten studies were related to the role of scholar. Barbosa et al. (2015)/11 assessed the effects of a psycho-educational intervention on direct care workers' person-centeredness. Two experimental facilities received a psycho-educational intervention comprising person-centered care competences and stress management skills; the other facilities received an education-only intervention. The findings of this pre test –post test study suggested that a psycho-educational intervention may increase care workers' person-centeredness. Balogun et al. (2015)/4 performed a cross sectional study to examine the effects of interprofessional geriatric education workshop for nursing and medical students with a focus on transitions in care. Students improved and demonstrated their knowledge of interprofessional communication and teamwork skills required in transitions of geriatric care. Introducing these concepts in medical and nursing training may help in fostering effective interprofessional communication and collaboration. The results of Bellelli et al. (2014)/ 10 who investigated the knowledge of professionals of correctly defined delirium emphasized the importance of training to improve knowledge of this relevant unmet medical need. The adequate use of (new) technologies to increase the possibilities for independent living of older people needs to be learned (Haux, et al. (2014)/3, Barakat et al. (2013)/7, Reierman (2010)/27). Norbye B. (2010)/30 showed with qualitative focus group interviews how blended learning contributed to reflective practice in community health care.

Au et al. (2015)/9 performed a 4-month longitudinal randomized controlled trial into whether telephone-delivered psycho-education combined with an enhanced behavioral activation (BA) module had a better effect on the well-being of Alzheimer's caregivers than psycho education alone. The group with enhanced BA had decreased levels of depressive symptoms. The expert opinion of the Danish Aeldreforum (2008)/29 mentioned the need of education of the use of appropriate communication with frail older people. Kuusela (2009)/21 indicated the necessity of training and learning of group work based on integration of knowledge and skills. The role of scholar is linked to a wide range of subjects like communication, reflective practice, the use of technologies, person centeredness, delirium, transition in care, communication and collaboration.

## 7. Generic competences in the role of Health Advocate

The studies that included the role of health advocate reflected this role directly and indirectly.

Jönsson (2013)/25 conducted qualitative interviews at three hospitals with the purpose of describing health professionals' *With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

perceptions of patient involvement and their perception of the conditions for patient involvement in practice. They divided a myriad of interpretations of the concepts and examples into five categories: patients are permanently informed about the disease and treatment b) The patient has a participatory and take an active stance on treatment, c) The patient is met with an individual and empathetic approach from health professionals, d) The patient is treated on the basis of their needs, desires and knowledge. e) Patient are trained to perform self-care.

Jansens (2015)/1 empowered health and social care workers on the health advocacy role.

The study of Au et al. (2015)/9 had as main subject the effect of the psycho-education by telephone but the final goal was the increase well-being of Alzheimer's care givers. The studies of Daniels et al. (2011)/14 to prevent disability, of Tomwey et al.(2014)/5 about elderly abuse and of Lewis (2015)/16 about the importance and improvement of dental care of older persons affected the role as health advocate as well.

## 8. Generic competences in the role of Manager (leader)

Only one study was explicitly focused on the role of manager (Leader). Halina Doroszkiewicz (2001)/31 focused in her study on the special needs of the community dwelling elderly and their compound social and medical requirements. These could only be met with an implementation of a geriatric team approach, as a model for interdisciplinary co-operation and practitioners with an appreciation of the community nurse as a leader of geriatric care.

## 9. Generic competences in the role of Professional

An example of the role of professional is the study of Katarzyna et al. (2012)/32. The main goal of the study, conducted within the multicenter ComPro project (Competence Profiles for Learning Supporters in Elderly Care) and funded by the Leonardo da Vinci Programme in 2006–2008, was to define the competences profile of a person responsible for the in-house education of professionals caring for the elderly persons in social care institutions. Expected competences varied between managers (organizational and communicational skills), care professionals (professional knowledge and job specific skills) and educators (social and didactical competences). The sole role of professional could not be identified from the included studies. The study of Norbye (2010)/30 proposed (by blended learning) the improvement of reflective practice, which affects the role of professional as well. The Danish Aeldreforum (2008)/29 included in her recommendation the use of ethics to meet the frail elderly citizens. Nederland and van Vliet (2009)/36 named explicitly the competence of research (evidence).

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

## 10. Discussion

To search for general competences we used the framework of the CanMEDs. The results provided evidence of competencies that underpin the different roles.

The wide variety of topics in all the included studies showed the complexity of care and support of older persons. Apparently there is a need for a number of different health and social caregivers to cover the total need of older persons and some studies show still unmet needs (Bellelli et al. (2014)/10, Eloranta (2009)/20, Taipale –Letho (2013)/23, Mazurek (2012)/22, Doroszkiewicz (2001)/31). The variety of required competences and domains is also confirmed by studies which presented a more or less complete competence profile, for example Witt et al. (2014)/12, PHA working group (2010)/19, Taipale-letho and Bergman (2013)/23, Salonen (2009)/18 and Nederland et al. (2009)/36. All the different CanMEDs roles are covered by the domains they mentioned except the role of Scholar. However we found ten studies which reflected this role. Multicultural competence (Taipale –Letho (2013)/23) is not explicitly described in the CanMEDs and needs to be added as it is an important competence in the care and support of older persons to understand and respect their background and for empathy. Recognition of elderly abuse (Twomey et al. (2014)/5) also needs to be added, because it is a hidden problem and a responsibility of all the health and social care workers. Ethical competence (Taipale – Letho (2013)/23) is a part of the CanMEDs role of Professional and accountability of the role of Health Advocate.

The problem of the great variety of health and social care and the need for different types of professional are in two studies solved with a new or specific type of healthcare worker. Ament et al. (2015)/2 showed the added value of a geriatric nurse practitioner. Doroszkiewicz (2001)/31 saw the community nurse as a leader of the geriatric multidisciplinary team.

The studies were conducted in a variety of settings e.g. (hospital: Jönsson, (2013)/25; Asai et al. (2006)/13; Hickman et al. (2015)/6) but the majority of the research is focused on primary care. Prevention was indirectly often affected (Daniels et al., (2011)/14, Vinge et al. (2007)/26, Hickman et al. (2015)/6; Kuusela (2009)/21).

The need of collaboration among all the different health and social care professionals is essential. The majority of included studies (18, including the complete included competence profiles) reflected this role. We did not find a study about a concrete division of tasks among the different healthcare workers, while one of the conditions under which multidisciplinary teams flourish is the insight in each other tasks (Janssen et al. (2015)/1). Yuasa et al. (2014)/8 developed an instrument to measure interdisciplinary team meetings but a clear definition of collaboration was not identified. Witt et al. (2014)/16 described the competence of collaboration in the field of provider of care as “recognizes the benefits of interdisciplinary team practice in care of older people.”

Collaboration is stimulated by interprofessional education (Balogun et al. (2015)/4; Barbosa et al. (2015)/11).

Collaboration is also needed with older persons themselves (and their families) to understand their wishes, shared decision and

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

patient centeredness (Barbosa et al. (2015)/11; Jepsen (2013)/24; Jönsson (2013)/25; Danish AeldrenForum (2005)/28; Elorante (2009)/20; Marco et al. (2012)/38). Older persons want to be independent (Taipale-Letho, (2013)/23) and need guidance instead of care (Reierman, (2010)/27). With Ambient-assisted living (AAL) technologies in personal and home (Haux et al. (2014)/ 5; Baraokat et al. (2013)/10; Reierman, (2010)/27 this can be improved. For health and social care professionals this means a new competence.

Next to collaboration communication is an important role. The communication with the older persons required special abilities / knowledge and understanding of older people's needs (Robinson et al. (2006)/17) but also communication among health and social support professionals is essential to understanding each other roles and to effective collaboration (Gatter (2009)/35)

Despite the fact that other competence profiles (Witt et al (2014)/12, PHA working group (2010)/19, Taipale-letho and Bergman (2013)/23, Salonen (2009)/18 and Nederland et al. (2009)/36 paid no attention to the role of scholar, we found ten studies that reflected this role. Attention must be paid to new technologies but also to the wishes of older people to live independently for as long as possible and to their desire for shared decision making (Jönsson, (2013)/25; Danish Aeldren Forum (2005)/28; Kuusela (2009)/21.)

Just a few studies focused on the roles of manager (leader) and professional, but these roles are mentioned or alluded to in the studies of complete profiles (Witt et al (2014)/12, PHA working group (2010)/19, Taipale-letho and Bergman (2013)/23, Salonen (2009)/18 and Nederland et al. (2009)/36.)

In general the level of / quality of evidence of the majority of the studies was low. There is a need for more studies that can underpin or support the required health and social care professionals' competences for working with older people. In addition, a complete picture of the expertise could help to provide an oversight of the need of older persons even if these needs are fully provided by the involved health and social care professionals.

This literature search is limited because of the choice to do a secondary analysis of all other WP3 literature studies. By language problems the original text could not always be read. A strong point is however the spread of research conducted across different countries and conducted using a wide spread of languages.

## 11. Conclusion

The care and support of older people is very complex. A multidisciplinary team approach is absolutely necessary. Collaboration and communication are essential competences to optimize the team approach but also to address the individual needs (including prevention and health advocacy) of older persons. Collaboration with the older person (or care giver) is important too. Sometimes communication with older people requires special skills. The CanMEDs roles offers a framework for the necessary competences. However, multicultural competences need to be added, and special attention must be paid at technological competences and the recognition of elderly abuse.

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

## References

	<b>Study</b>	<b>method and subject</b>	<b>Results</b>	<b>Level</b>	<b>CanMEDs role</b>
1	Health Policy, 2015, vol. 119 (1) pp. 1-8.  Working towards integrated community care for older people: empowering organizational features from a professional perspective.  Janssen et al.	A case study of multi-disciplinary cooperation between professionals in a geriatric team	On the inter organizational level are important improved linkages and insight into each other's tasks. On extra organizational level the commitment of the management of involved organizations should be improved just as the capacity of the team to influence (local) policy.	4	collaborator  health advocate
2	BMC Res Notes, 2015 vol. 8 pp. 217.  The benefit of a geriatric nurse practitioner in a multidisciplinary diagnostic service for people with cognitive disorders.  Ament et al.	(retrospective) Comparative study to the adding value of a geriatric nurse practitioner to diagnostic multidisciplinary facility for out- patients with cognitive disorders, on the quality of care	Improved GP concordance rate of the advice from the facility and reduce subjective burden of the informal caregiver.	3	collaborator
3	Inform Health Soc Care, 2014, vol. 39(3-4) pp. 166-87  Information and communication technologies for promoting and sustaining quality of life, health and self-sufficiency in ageing societies--outcomes of the Lower Saxony Research Network Design of Environments for Ageing (GAL). Haux et al.	A five years research project to Ambient-assisted living (AAL) technologies in personal and home environments.  Different study projects	how and where to use AAL technologies for new environments of living and new forms of care,		scholar,  communicator
4	QJM, 2015 vol. 108(6) pp. 465-	Cross sectional study to the effects of	Students improved and demonstrated their	4	collaborator

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

	71 Innovative interprofessional geriatric education for medical and nursing students: focus on transitions in care. Balogun et al.	interprofessional geriatric education workshop for nursing and medical students with a focus on transitions in care.	knowledge of interprofessional communication and teamwork skills required in transitions of geriatric care. Introducing these concepts in medical and nursing training may help in fostering effective interprofessional communication and collaboration.		scholar
5	Clin. Geriatr. Med. ,2014, vol. 30(4) pp. 881-95 Health professionals' roles and relationships with other agencies. Twomey et al.	Health professionals play a vital role in addressing elder abuse by identifying and reporting elder abuse and caring for survivors. However, most are unaware of the opportunities to work with allied professionals in elder abuse intervention.	This article discusses the various roles of interdisciplinary members and the contribution of health care professionals in these teams at elderly abuse.	5	collaborator expert health advocate
6	Arch Gerontol Geriatr, 2015, Multidisciplinary team interventions to optimize health outcomes for older people in acute care settings: A systematic review. Hickman et al.	Systematic review of randomized controlled trials reporting acute care multidisciplinary team based interventions, to improve care outcomes for hospitalized older people	The tailoring of treatment, underpinned with clear communication strategies can reduce emergency department re-admission rates, mortality and functional decline of older people. Refining health professionals roles and responsibilities within transition models is an essential	1	collaborator communicator
7	Med 2 0, vol. 2(2) pp. e10, 2013, eHealth Technology Competencies for Health Professionals Working in Home Care to Support Older Adults to Age in Place: Outcomes of a Two-Day Collaborative Workshop. Barakat et al.	A two-day collaborative workshop was undertaken with academics across multiple disciplines with experience in working on funded research regarding the application and development of technologies to support older people about required skills for using technology	The findings revealed that health care professionals working in home care require a subset of composite skills as well as technology-specific competencies to develop the necessary attitude in eHealth care. eHealth care technology skills must be instilled in health care professionals to ensure that technologies become integral components of future care delivery, especially to support older adults to age in place	5	eHealth care technology skill scholar
8	J Am GeriatrSoc, 2014, vol. 62(1) pp. 171-4	Development of an assessment tool for interdisciplinary team meetings and	The standardized patient (SP) and standardized interdisciplinary team meeting	4	collaborator

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

	Standardized patient and standardized interdisciplinary team meeting: validation of a new performance-based assessment tool. Yuasa et al.	standardized patient	(SIDTM), consisting of two stations, was developed.		
9	Clin Inter Aging, 2015, vol. 10 pp. 611-9 Behavioral activation for dementia caregivers: scheduling pleasant events and enhancing communications. Au et al.	A 4-month longitudinal randomized controlled trial whether telephone-delivered psychoeducation combined with an enhanced behavioral activation (BA) module had a better effect on the well-being of Alzheimer's caregivers than psychoeducation alone.	The group with enhanced BA had decreased levels of depressive symptoms.	1	health advocate scholar
10	Int Psycho geriatr, 2014, vol. 26(12) pp. 2093-102 Recognition and management of delirium among doctors, nurses, physiotherapists, and psychologists: an Italian survey. Bellelli et al.	Cross-sectional study to the ability to recognize and manage delirium among Italian health providers caring for patients at risk.	Generally, doctors and psychologists correctly defined delirium, while nurses and physiotherapists did not possible causes of delirium were under-assessed by half of doctors and by the majority of other professionals  The results emphasize the importance of training to improve knowledge of this relevant unmet medical need.	4	scholar
11	Dementia (London), 2015, Person-centeredness in direct care workers caring for residents with dementia: Effects of a psycho-educational intervention. Barbosa et al.	A control preposttest assessed the effects of a psycho-educational intervention on direct care workers' person-centeredness during morning care to residents with dementia. Two experimental facilities received a psycho-educational intervention comprising person-centered care competences and stress management skills; the other facilities received an education-only intervention	The findings suggest that a psycho-educational intervention may increase care workers' person-centeredness.	3	scholar expert

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

12	Rev Esc Enferm USP, 2014, vol. 48(6) pp. 1020-5 Professional competencies in primary health care for attending to older adults. Witt et al.	To identify and analyze the necessary competencies in primary health care for attending to older adults. An exploratory, descriptive, and quali-quantitative study was developed. Three rounds of the Delphi Technique were conducted with participants from primary health care services and a multidisciplinary committee.	A consensus criterion of 70% was adopted. Twenty eight competencies were reached by consensus and were classified into twelve domains.	4	All
13	Nihon Ronen IgakkaiZasshi, 2006, vol. 43(6) pp. 726-9 The role of a multidisciplinary approach in geriatric care and rehabilitation from the acute to the chronic stage. Asai et al.	Comparative study of older patients with a PEG (percutaneous endoscopic gastrostomy) and with stroke rehabilitation treated multidisciplinary and care as usual	Mortality rates of the patients with a PEG were significant lower treated by the multidisciplinary team. ADL scores of the stroke patients was significant better.	3	collaborator
14	ClinRehabil, 2011, vol. 25(11) pp. 963-74 A disability prevention program for community-dwelling frail older persons. Daniels et al.	Literature reviews and an expert meeting to describe and justify a primary care interdisciplinary program for community-dwelling frail older people aimed to prevent disability.	The disability-prevention program seems promising for addressing the needs of frail older people for independent living and for targeting risk factors.	4	Expert health advocate
15	BMC Geriatr, 2015, vol. 15 pp. 5 What should we know about dementia in the 21st century? A Delphi consensus study. Annear et al.	An online Delphi study expert opinion concerning dementia knowledge with three rounds of data collection.	The Delphi experts identified 36 statements about dementia that they considered essential to understanding the condition. Statements about care for a person experiencing dementia and their care giver represented the largest response category.	4	Expert
16	Aust Dent J, 2015, vol. 60 Suppl 1 pp. 95-105 Improving the oral health of frail and functionally dependent elderly.	Opinion about dental care	it promotes a multidisciplinary approach with doctors, nurses, care workers and dental professionals sharing responsibility for the four key processes of oral health screening, oral health care planning, daily	5	Expert

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

	Lewis et al.		oral hygiene and access to dental treatment		
17	Fam.Pract.Manag.,2006, Sep (73-78) Improving Communication With Older Patients: Tips From the Literature Robinson et al.	Based on literature 20 tips how to communicate with older people	Take time, Minimize visual and auditory distractions, Sit face to face with the patient, Don't underestimate the power of eye contact. Listen without interrupting the patient	4	communicator
18	Contents of Home Care work and occupational skill requirements for older persons care in the 21 <sup>st</sup> century Home Care For Older People - Good Practices and Education in Six European Countries EQUIP 2007-2009. Turku University of Applied Sciences, 2009, K. Salonen	Identification of best practices with online tools to compare home care qualification requirements, training and good practices in Denmark, Estonia, Finland, Great Britain, the Netherlands and Spain.	As part of this project, a report entitled 'Home Care for older people – Good practices, identified the contents of home care work and occupational skills required for the care of older persons in the 21 <sup>st</sup> century. Based mainly on Finnish research, the following report addressed three main domains, namely skills, knowledge and attitudes that are considered essential competencies for formal home care for older persons.	4	All
19	Multidisciplinary competences in the Care of Older Adults at the Completion of the Entry-level Health Professional Degree, 2010, PHA/AGS, United States American Geriatrics Society partnership in ageing (PHA) Working group	Development of multidisciplinary competencies in the Care of Older Adults at the Completion of the Entry-level Health Professional Degree' with 10 different disciplines!	Identification of six generic domains: Health Promotion and Safety, Evaluation and Assessment, Care Planning and Coordination across the Care Spectrum (Including End-of-Life Care), Interdisciplinary and Team care, Care giver support and Healthcare Systems and Benefits.	5	communicator, collaborator manager health advocate professional
20	Supporting older people' independent living at home through social and health care collaboration, 2009, Dissertation, University of Turku, Turku. Eloranta S.	Expectation of Elderly of the type of care they need	The collaboration between patients and their families as well as interdisciplinary collaboration is one of the most frequently mentioned competencies	?	collaborator

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

21	Moniammatillinenosaaminenkoti hoidossaolevienikäihmistenfyysis entoimintakyvyntukemisessakoti hoidenammatihenkilöidenkuva mana, 2009, Master's Thesis. University of Turku, Turku. Kuusela	Research concerning interdisciplinary competencies in the social care of the elderly.	Indication of the necessity of training and learning of group work based on integration of knowledge and skills..	5	Collaborator Expert (functioning)
22	Gerontol, 2012, tom 20, nr 1, 1–7 Needs assessment of elderly patients based on the Camberwell Assessment of Need for the Elderly Gerontol Mazurek J. et al.	Research concerning assessment	Essential is the assessment of the needs and problems of the elderly and defining the hierarchy as well as real possibilities of meeting them.	4,5	Communicator
23	Vanhuspalveluiden osaamistarveraportti. Opetushallitus raportit ja selvitykset 2013:14.(Finnish National Board of Education). Helsinki. Taipale-Lehto U & Bergman T	Priority of the most import and criteria in the care for elderly	Older people services provide for wellbeing, health, ability to function as well as support for independent life for older people. This will be enabled bymulti- disciplinary competence and skills.	4,5	Collaborator
24	Klinisk retningslinje om systematisk anvendt målsætning i rehabilitering til borgere +65 år, med behov for hjælp til personlig pleje og/eller praktisk hjælp i hverdagen. Clinical Guideline - systematical use of goal setting in rehabilitation for people +65 years old, in need of assistance with personal care and/or	Systematic literature review based on 8 papers selected from 3631 hits with as aim is to examine whether there exists sufficient evidence for the efficacy of systematic goal setting of this to be recommended in daily rehabilitation.	Rehabilitation at home, targeted citizens +65, in need of personal care and / or practical assistance should include systematic objectives, which are collaboration between citizens and professionals.	3	Communicator Collaborator

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

	practical help in every day's life, 2013, Birgitte G. Jepsen				
25	Sundhedsprofessionelles forståelser af patientinddragelse. A health professional understanding of involvement of the patient. 2013 Alexandra Jönsson,	Qualitative interviews at three hospitals: The purpose of this study is to describe health professionals' perceptions of patient involvement and their perception of the conditions for patient involvement in practice.	Division of empowerment/ involvement in five main categories of understanding: a) patients are permanently informed about the disease and treatment b) The patient has a participatory and take an active stance on treatment c) The patient is meet with an individual and empathetic approach from health professionals d) The patient is treated on the basis of their needs, desires and knowledge e ) Patient are trained to perform self care	4	health advocate
26	Uhensigtsmæssige indlæggelser : muligheder og perspektiver for kommunerne [Online]. [Kbh.]: FOKUS. 2007.  Vinge, S. & Buch, M.S Available at: <a href="http://www.kora.dk/media/763514/dsi-2071.pdf">http://www.kora.dk/media/763514/dsi-2071.pdf</a>	Systematic literature review based on studies in Danish healthcare system 1977-2005. Qualitative interviews with 10 cross professional healthcare persons (doctors, nurses, occupational therapists etc.) involved in hospital admission and re-admission. This study examines possibilities and perspectives for developing new ways to avoid inappropriate hospital admission for old people.	The culture and healthcare professional identity has to changes from social awareness to (more) health awareness in the homecare systems in Danish municipalities	3	Expert, identity
27	Sundheds personalet skal erobre velfærdsteknologien. Health professionals should conquer welfare technology. 2010. Reierman J.	To discuss what kind of knowledge and competencies is needed for health professionals in order to implement new technology	Working with welfare technology within health- and primary care, demands new skills, knowledge and competencies for the health professionals. These competencies challenge the knowledge within the traditional health care professions, by moving the focus from care to guidance.	5	Expert technology

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

			The importance of healthcare educations to implement technology competencies in their curriculum is stressed.		
28	Forebyggende hjemmebesøg. Preventive home visits.2005 Danish Aeldreforum	Expert opinion for advice and inspiration based on practice and evidence on how to plan and implement preventive home visits.	Needed competencies a non-patronizing pedagogical planned communication, with an eye for the resources of the individual elderly citizen, structured but also flexible with a broad experience and knowledge of the social possibilities	5	communicator
29	Ældreomsorg: holdninger, omgangstone & etik Age care: attitudes, tone of communication and ethics. 2008 Danish Aeldreforum	Expert opinion about education of the frail older people To inspire and strengthen the many good will's in Danish health and social care, uniting professional insights and skills with fundamental humanity	Comments on the non-material quality of public health and social care for the elderly. This encompasses the attitudes, use of language, and ethics that the healthcare professionals meet the frail elderly citizens.	5	Communicator professional
30	Kan blende learningbidra til refleksivpraksis? 2010, Can blending learning contribute to reflective. Norbye B.	Qualitative focus group interviews How does blended learning contribute to reflective practice in community health care	Blended learning has made it possible to reflect on own practice and is a flexible way to stimulate learning.	4	Professional scholar
31	Community nurse as a chance of repair of geriatric health care system. 2001,Borgis - MedycynaRodzinna 3-4/ s. 155-158 Community nurse as a chance of repair of geriatric health care system Halina Doroszkiewicz,	Greying” of the Polish population, reforms of the health care system and an expressed dissatisfaction of society, as well as health professionals, are the symptoms of failure, which justifies the debate on possible resources.	The paper is focused on the special needs of the community dwelling elderly and their compound social and medical requirements. These could not be met without an implementation the geriatric team approach, as a model for interdisciplinary co-operation practitioners with an appreciation of the community nurse as a leader of geriatric care	5	Collaborator Manager
32	Competence Profiles Assessment for Learning Supporters in	Competence Profiles Assessment for Learning Supporters in Elderly Care -	Development of an selfassessment tool for persons responsible for in-job education of	4	Professional

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

	Elderly Care - presentation of ComPro project. 2012 Czasopismo: Zesz. Nauk. Ochr. Zdr., Zdr. Publ. Zarz Katarzyna Szczerbińska, Roman Topór-Mądry, Barbara Niedzwiedzka	presentation of ComPro project by the multicenter study conducted in the framework of a European ComPro project (Competence Profiles for Learning Supporters in Elderly Care) funded by Leonardo da Vinici	professionals caring for older persons in social care institutions. In order to help them recognize the deficit competencies the in-job educators should be specially trained to effectively detect professionals' educational needs.		
33	Geriatrische tandheelkunde. Problematiek van ouder worden en mondgezondheid. 1999 Houten/Diegem: Bohn Stafleu van Loghum Baat, C. de. Kalk, W.		Multidisciplinary team discussions are important for good mouth care. Do not forget the care assistants	5	Collaborator
34	Samenwerken in de mondzorg. Houten: BohnStafleu van Loghum, 2008, Schaub, R.M.H. (Red).		Older persons meet several health professionals. It is important to collaborate- also in mouth care	5	Collaborator Expert
35	Kommunikation und Interaktion mit Patienten Aspekte des therapeutischen Beziehungsaufbaus. Pflegepraxis, October 2009, Volume 10 Issue, 10, pp 24-30 Gerald Gatter		Intensively multidisciplinary communication and collaboration are needed for the care and cure older people. Each conversation has a diagnostic, motivational and therapeutic goal.	5	Collaborator communicator
36	Gezond en wel ouder worden Evidence-based richtlijnen voor gezondheidsbevordering. Maart 2009 (Evidence based directives for healthy ageing for European Union) Trudi Nederland Katja	Identification of best practices in Europe about healthy ageing	Based on best practices 16 directives were developed for healthy ageing. Important roles are health advocacy (empowerment) interdisciplinary communication, research (evidence)	4	Communicator Collaborator Health advocate professional

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

	van VliT				
37	Successful aging - the nurse-aged person interaction process in primary health care  Biomedical and Biopharmaceutical Research., 10 (2), 151-162, 2013, Fernandes, M.	Understanding the nurse-elderly interaction process that leads to successful aging behaviours/ Qualitative study; Grounded theory analysis method.  Observation, Interviews	Successful aging	4	Communicator, scholar
38	Attitudes of the rehabilitation physicians and physical therapists in the treatment of the elderly patient, 2012, Fisioterapia, Vol. 22 (1), pp. 42-56 Marco, J. C., Menéndez, S. & Moreno, M	Focussed on the attitude of rehabilitation physicians and physical therapist towards older patients by a survey – cross sectional	The authors stressed that professionals should be aware of their patients emotional states and recognize that professionals have a key role in emotional rehabilitation and support. Older persons need more attention than younger persons because of their frail condition	4	Communicator

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

## References

1. Janssen, BM; Snoeren, MW; Van Regenmortel, T; Abma, TA. Working towards integrated community care for older people: empowering organisational features from a professional perspective Health Policy, (2015), vol. 119(1) pp. 1-8
2. Ament, BH; Wolfs, CA; Kempen, GI; Ambergen, T; Verhey, FR; De Vugt, ME The benefit of a geriatric nurse practitioner in a multidisciplinary diagnostic service for people with cognitive disorders. BMC Res Notes, (2015), vol. 8 pp. 217
3. Haux, R; Hein, A; Kolb, G; Künemund, H; Eichelberg, M; Appell, JE; Appelrath, HJ; Bartsch, C; Bauer, JM; Becker, M; Bente, P; Bitzer, J; Boll, S; Büsching, F; Dasenbrock, L; Deparade, R; Depner, D; Elbers, K; Fachinger, U; Felber, J; Feldwieser, F; Forberg, A; Gietzelt, M; Goetze, S; Gövercin, M; Helmer, A; Herzke, T; Hesselmann, T; Heuten, W; Huber, R; Hülsken-Giesler, M; Jacobs, G; Kalbe, E; Kerling, A; Klingeberg, T; Költzsch, Y; Lammel-Polchau, C; Ludwig, W; Marschollek, M; Martens, B; Meis, M; Meyer, EM; Meyer, J; Meyer ZuSchwabedissen, H; Moritz, N; Müller, H; Nebel, W; Neyer, FJ; Okken, PK; Rahe, J; Remmers, H; Rölker-Denker, L; Schilling, M; Schöpke, B; Schröder, J; Schulze, GC; Schulze, M; Siltmann, S; Song, B; Spehr, J; Steen, EE; Steinhagen-Thiessen, E; Tanschus, NM; Tegtbur, U; Thiel, A; Thoben, W; van Hengel, P; Wabnik, S; Wegel, S; Wilken, O; Winkelbach, S; Wist, T; Wolf, KH; Wolf, L; Zokoll-van der Laan, M.,(2014), Information and communication technologies for promoting and sustaining quality of life, health and self-sufficiency in ageing societies--outcomes of the Lower Saxony Research Network Design of Environments for Ageing (GAL). Information and communication technologies for promoting and sustaining quality of life, health and self-sufficiency in ageing societies--outcomes of the Lower Saxony Research Network Design of Environments for Ageing (GAL). Inform Health Soc Care, vol. 39(3-4) pp. 166-87
4. Balogun, SA; Rose K,; Thomas S,; Owen, J. Brashers V. (2015), Innovative interprofessional geriatric education for medical and nursing students; focus on transitions of care. QLM, 2015, vol. 108(6) pp. 465-71
5. Twomey, MS; Weber, C. (2014). Health professionals' roles and relationships with other agencies. Clin. Geriatr. Med., vol. 30(4) pp. 881-9
6. Hickman, LD; Phillips, JL; Newton, PJ; Halcomb, EJ; Al Abed, N; Davidson, PM, (2015), Multidisciplinary team interventions to optimize health outcomes for older people in acute care settings: A systematic review. Arch Gerontol Geriatr,
7. Barakat, A; Woolrych, RD; Sixsmith, A; Kearns, WD; Kort, HS, (2013), eHealth Technology Competencies for Health Professionals Working in Home Care to Support Older Adults to Age in Place: Outcomes of a Two-Day Collaborative Workshop Med 2 0, vol. 2(2)

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

8. Yuasa, M; Nagoshi, M; Oshiro-Wong, C; Tin, M; Wen, A; Masaki, K Standardized patient and standardized interdisciplinary team meeting: validation of a new performance-based assessment tool. (2014). J Am Geriatr Soc, vol. 62(1) pp. 171-4
9. Au, A; Gallagher-Thompson, D; Wong, MK; Leung, J; Chan, WC; Chan, CC; Lu, HJ; Lai, MK; Chan, K Behavioral activation for dementia caregivers: scheduling pleasant events and enhancing communications. (2015), Clin Interv Aging, vol. 10 pp. 611-9
10. Bellelli, G; Morandi, A; Zanetti, E; Bozzini, M; Lucchi, E; Terrasi, M; Trabucchi, M. (2014). Recognition and management of delirium among doctors, nurses, physiotherapists, and psychologists: an Italian survey. Int Psychogeriatr, vol. 26(12) pp. 2093-102
11. Barbosa, A; Nolan, M; Sousa, L; Figueiredo, D, (2015), Person-centredness in direct care workers caring for residents with dementia: Effects of a psycho-educational intervention. Dementia (London)
12. Witt, RR; Roos, Mde O; Carvalho, NM; Silva, AM; Rodrigues, CD; Santos, (2014), MTPProfessional competencies in primary health care for attending to older adults Rev Esc Enferm USP, vol. 48(6) pp. 1020-5
13. Asai, K; Sakurai, Y, (2006), The role of a multidisciplinary approach in geriatric care and rehabilitation from the acute to the chronic stage Nihon Ronen Igakkai Zasshi, vol. 43(6) pp. 726-9
14. Daniels, R; van Rossum, E; Metzelthin, S; Sipers, W; Habets, H; Hobma, S; van den Heuvel, W; de Witte, L. (2011), A disability prevention programme for community-dwelling frail older persons. ClinRehabil, vol. 25(11) pp. 963-74
15. Annear, MJ; Toye, C; McInerney, F; Eccleston, C; Tranter, B; Elliott, KE; Robinson, Ahat, (2015), should we know about dementia in the 21st century? A Delphi consensus study. BMC Geriatr, 2015 vol. 15 pp. 5BMC Geriatr, vol. 15 pp. 5
16. Lewis, A; Wallace, J; Deutsch, A; King, P., (2015), Improving the oral health of frail and functionally dependent elderly. Aust Dent J, vol. 60 Suppl 1 pp. 95-105
17. Robinson,T; White,G.; Houchins, J.Improving Communication, (2006), With Older Patients: Tips From the Literature Fam PractManag. Sep;13(8):73-78

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

18. Salonen K., (2009) Contents of Home Care work and occupational skill requirements for older persons care in the 21<sup>st</sup> century Home Care For Older People - Good Practices and Education in Six European Countries EQUIP 2007-2009. Turku University of Applied Sciences
19. American Geriatrics Society Partnership in ageing (PHA) Working group (2010) Multidisciplinary competences in the Care of Older Adults at the Completion of the Entry-level Health Professional Degree', PHA/AGS, United States
20. Eloranta, S. (2009). Supporting older people's independent living at home through social and health care collaboration. Dissertation, University of Turku, Turku.
21. Kuusela, M. (2009). Moniammatillinen osaaminen kotihoidossa olevien ikäihmisten fyysisen toimintakyvyn tukemisessa kotihoidon ammattihenkilöiden kuvaamana. Master's Thesis. University of Turku, Turku.
22. Mazurek, J. Rymaszewska, J.(2012). Needs assessment of elderly patients based on the Camberwell Assessment of Need for the Elderly. Gerontol.Po.l 2012 tom 20, nr 1, 1–7
23. Taipale-Lehto U & Bergman T. (2013). Vanhuspalveluiden osaamistarveraportti. Opetushallitus raportit ja selvitykset 2013:14. (Finnish National Board of Education). Helsinki
24. Jepsen, B.G. et al.(2013). Klinisk retningslinje om systematisk anvendt målsætning i rehabilitering til borgere +65 år, med behov for hjælp til personlig pleje og/eller praktisk hjælp i hverdagen (Online): Center for Kliniske Retningslinjer.
25. Alexandra Jönsson,(2013). Sundhedsprofessionelles forståelser af patientinddragelse.A health professional understanding of involvement of the patient
26. Vinge, S. & Buch, M.S., 2007. U hensigtsmæssige indlæggelser : muligheder og perspektiver for kommunerne [Online]. [Kbh.]: FOKUS.  
Available at: <http://www.kora.dk/media/763514/dsi-2071.pdf> [Accessed 30-06-2014].
27. Reierman J. (2010) .DK. Sundheds personalet skal erobre velfærdsteknologien. Health professionals should conquer welfare technology.
28. Danish Aeldreforum. (2005). DK. Forebyggendehjemmebesøg. Preventive home visits

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

29. Danish AeldreForum. (2008). DK. Ældreomsorg: holdninger, omgangstone&etik Age care: attitudes, tone of communication and ethics
30. Norbye B. (2010) NO. Kan blende learning bidra til refleksiv praksis? Can blending learning contribute to reflective.
31. Halina Doroszkiewicz, Barbara Bień (2001). Gerontologii Klinicznej i Społecznej Akademii Medycznej w Białymstoku Community nurse as a chance of repair of geriatric health care system. Borgis - MedycynaRodzinna 3-4, 155-158
32. Katarzyna E. Szczerbińska , Roman Topór-Mądry, Barbara Niedźwiedzka (2012) Competence profile of an in-house educator of professionals providing elderly care (ComPro project) Czasopismo: Zesz. Nauk. Ochr. Zdr., Zdr. Publ. Zarz.
33. Baat, C. de., Kalk, W. (Red). (1999). Geriatrische tandheelkunde. Problematiek van ouder worden en mondgezondheid.
34. Schaub, R.M.H. (Red). (2008). Samenwerken in de mondzorg. Houten: BohnStafleu van Loghum.6.
35. Gerald Gatterer. (2009). Kommunikation und Interaktion mit Patienten Aspekte des therapeutischen Beziehungsaufbaus. Pflegepraxis, October, Volume 10 Issue, 10, pp 24-30
36. Trudi Nederland and Katja van Vliet (2009) Gezond en wel ouder worden Evidence based richtlijnen gezondheidsbevordering. Healthy ageing'evidence based directions fort the European Union.
37. Fernandes, M. J. S. R. S. (2013) Successful aging - the nurse-aged person interaction process in primary health care Biomedical and Biopharmaceutical Research., 10 (2), 151-162
38. Marco, J. C., Menéndez, S. & Moreno, M. (2012) Attitudes of the rehabilitation physicians and physical therapists in the treatment of the elderly patient Fisioterapia, Vol. 22 (1). pp. 42-56

Barker Kate (2014) Commission on the future of Health and Social Care in England. A new settlement for Health and Social Care London WIG OAN King's Fund

Frank JR, Snell L, Sherbino J, editors. Can Meds 2015 Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada.

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

## Appendix 1. Multidisciplinary or core competences in the Care of Older Adults at the Completion of the Entry level of Health Professional Degree

Domains		Role (CanMEDs)
<b>Domain 1: Health Promotion and Safety</b>		5
1	Advocate to older adults and their caregivers interventions and behaviours that promote physical and mental health, nutrition, function, safety, social interactions, independence, and quality of life.	
2	Identify and inform older adults and their caregivers about evidence-based approaches to screening, immunizations, health promotion, and disease prevention.	
3	Assess specific risks and barriers to older adult safety, including falls, elder mistreatment, and other risks in community, home, and care environments.	
4	Recognize the principles and practices of safe, appropriate, and effective medication use in older adults.	
5	Apply knowledge of the indications and contraindications for, risks of, and alternatives to the use of physical and pharmacological restraints with older adults.	
<b>Domain 2: Evaluation and Assessment</b>		2,6
1	Define the purpose and components of an interdisciplinary, comprehensive geriatric assessment and the roles individual disciplines play in conducting and interpreting a comprehensive geriatric assessment.	
2	Apply knowledge of the biological, physical, cognitive, psychological, and social changes commonly associated with aging.	
3	Choose, administer, and interpret a validated and reliable tool/instrument appropriate for use with a given older adult to assess: a) cognition, b) mood, c) physical function, d) nutrition, and e) pain.	
4	Demonstrate knowledge of the signs and symptoms of delirium and whom to notify if an older adult exhibits these signs and symptoms.	
5	Develop verbal and nonverbal communication strategies to overcome potential sensory, language, and cognitive limitations in older adults.	

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

<b>Domain 3: Care Planning and Coordination Across the Care Spectrum (Including End-of-Life Care)</b>		<b>7</b>
<b>1</b>	Develop treatment plans based on best evidence and one person-centred and directed care goals.	
<b>2</b>	Evaluate clinical situations where standard treatment recommendations, based on best evidence, should be modified with regard to older adults' preferences and treatment/care goals, life expectancy, co-morbid conditions, and/or functional status.	
<b>3</b>	Develop advanced care plans based on older adults' preferences and treatment/care goals, and their physical, psychological, social, and spiritual needs.	
<b>4</b>	Recognize the need for continuity of treatment and communication across the spectrum of services and during transitions between care settings, utilizing information technology where appropriate and available.	
<b>Domain 4: Interdisciplinary and Team Care</b>		<b>3</b>
<b>1</b>	Distinguish among, refer to, and/or consult with any of the multiple healthcare professionals who work with older adults, to achieve positive outcomes.	
<b>2</b>	Communicate and collaborate with older adults, their caregivers, healthcare professionals, and direct-care workers to incorporate discipline-specific information into overall team care planning and implementation.	
<b>Domain 5: Caregiver Support</b>		<b>2,5</b>
<b>1</b>	Assess caregiver knowledge and expectations of the impact of advanced age and disease on health needs, risks, and the unique manifestations and treatment of health conditions.	
<b>2</b>	Assist caregivers to identify, access, and utilize specialized products, professional services, and support groups that can assist with care-giving responsibilities and reduce caregiver burden.	
<b>3</b>	Accurately identify clinical situations where life expectancy, functional status, patient preference or go Know how to access and explain the availability and effectiveness of resources for older adults and caregivers that help them meet personal goals, maximize function, maintain independence, and live in their preferred and/or least restrictive environment.	
<b>4</b>	Evaluate the continued appropriateness of care plans and services based on older adults' and caregivers' changes in age, health status, and function; assist caregivers in altering plans and actions as needed.	

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

<b>Domain 6: Healthcare Systems and Benefits</b>		<b>5</b>
<b>1</b>	Serve as an advocate for older adults and caregivers within various healthcare systems and settings.	
<b>2</b>	Know how to access, and share with older adults and their caregivers, information about the healthcare benefits of programs such as Medicare, Medicaid, Veterans' services, Social Security, and other public programs.	
<b>3</b>	Provide information to older adults and their caregivers about the continuum of long-term care services and supports – such as community resources, home care, assisted living facilities, hospitals, nursing facilities, sub-acute care facilities, and hospice care	

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

## Appendix 2. European Framework for Qualifications in Home Care Services for Older People

Home care work contents and skills	Knowledge areas	Personal attributes
<p>A. Basic Care tasks nursing (geriatric nursing) medical know-how (provision of medicinal products) care work (nutrition, hygiene, errands) evaluation of health (ability to function) and its maintenance</p> <p>B. Tasks supporting basic care home care tasks other home care skills</p>	<p>Client –specific knowledge pertaining to the older persons person</p> <p>Knowledge related to the maintenance of health and functional abilities of the older persons person and rehabilitation</p> <p>Knowledge related to the older person’s immediate environment and the services available</p> <p>Knowledge about professional ethics</p>	<p>Interest in working with older persons</p> <p>social (interpersonal skills) e.g. communication skills</p> <p>Observational skills</p> <p>organisational skills</p> <p>Decision-making and problem solving skills</p>

(Adapted from Salonen, 2009)

On a similar note, the *European Framework for Qualifications in Home Care Services for Older people EQUIP and EQUIPII project* sought to develop online tools (a database and the Home Care Competence Test) in order to compare home care qualification requirements, training and good practices in Denmark, Estonia, Finland, Great Britain, the Netherlands and Spain. Eventually, this was extended to Bulgaria, Greece and Turkey. As part of this project, a report entitled ‘Home Care for older people – Good practices, identified the contents of home care work and occupational skills required for the care of older persons in the 21<sup>st</sup> century. Based mainly on Finnish research, the following report addresses three main domains, namely skills, knowledge and attitudes that are considered essential competencies for formal home care for older persons. Table 2 summarises these three domains.

*With the support of the Lifelong Learning Programme of the European Union. This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*