

CAPAGE

**Promoting academic and professional excellence in health care
to meet the challenges of aging in Sri Lanka**

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Framework on core competences for physiotherapists and nurses working with older adults in Sri Lanka

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Abstract

Background- The population of Sri Lanka (SL) is rapidly aging, and there is a growing demand for healthcare (HC) professionals skilled in older adult's care. Nurses and physiotherapists play a crucial role in advancing the health and well-being of older adults. The CAPAGE project "Promoting academic and professional excellence in health care to meet the challenges of aging in Sri Lanka (SL)" is a transnational European Union co-funded project which main goal is to enhance professional competences of health care (HC) professionals, specifically physiotherapists and nurses, working with older adults in SL.

Aim- The main objective of this study is to create a framework of core competences for physiotherapists and nurses working with older adults in SL.

Methods- Based on a recent literature review and a focus group analysis with expert, a competences framework will identify knowledge and skill-based competences required for health care professionals, specifically for physiotherapists and nurses, working with elderly.

Results- Main competences identified were: high-quality standards and team leadership (leader/expert); patient-centered practice, effective communication (communicator); interprofessional effective team collaboration and shared decision-making process (collaborator); coordination of care and healthcare management (organizer); health promotion, wellness and well-being (health and welfare advocate); evidence-based practice and lifelong learning and continuous professional development (scholar); professional and ethical standards and multi-dimensional approach and best practices (professional).

Conclusion- This framework on competences can enable us to update and improve knowledge, know-how, skills and mainly the conceptual approach in care and management of older adults, considering specific socio-economic and cultural aspects of SL.

Keywords- Competences, Physiotherapy, Nursing, Older Adults, Sri Lanka.

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1 Introduction

The CAPAGE project “Promoting academic and professional excellence in health care to meet the challenges of aging in Sri Lanka (SL)” is a transnational European Union co-funded project which main goal is to enhance professional competences of health care (HC) professionals, specifically physiotherapists and nurses, working with older adults in SL, through a coordinated interdisciplinary approach.

SL, an island country with a total area of 65,610 square kms in South Asia with a population exceeding 21 million, is one of the most densely populated countries globally (Ministry of Health - Sri Lanka, 2016). Life expectancy has gradually increased over the past seven decades reaching 77.73 years as of March 2024 (Macrotrends, 2024). Over the past few decades, the country has witnessed a declining fertility rate, leading to a demographic transition towards an aging population structure. According to the World Bank’s open data, a steep rise in older adults’ population can be seen over the past decade. In 2022, the percentage of the population above 65 years old from the total population was around 12% showing 4% growth compared to the year 2012 (Perera, 2017). This transformation has created challenges for the health care system and other social welfare programs, requiring a change in policy focus to address the needs of the older population; There are nowadays new demands for improved and updated competences of the HC working with this population (Statistics, 2024).

The complex interactions between non-communicable diseases (NCDs), infectious diseases, and emerging health issues are reflected in the epidemiological trends of SL. Historically, the nation has achieved significant accomplishments by successfully eradicating infectious diseases such as lymphatic filariasis, measles, malaria and polio (Morning, 2023). With the growth of older populations and lifestyle changes, there is a raising concern on NCDs, such as diabetes, cancer, and cardiovascular diseases (WHO, 2015). A clear difference can be seen in the prevalence of chronic illnesses between economically active and economically inactive older populations. The prevalence of diabetes mellitus and hypertension among the total older population is 18.0% and 27.3%, respectively, indicating the highest prevalence among other non-communicable diseases (Satharasinghe, 2016).

SL model of primary health care, available free through a government health system with island-wide coverage, forms a solid foundation basis for providing universal health coverage. However, this system is increasingly under pressure, notably from the high burden of non-communicable diseases, increasing older adults care needs and the growing out-of-pocket expenditure for chronic diseases. The physiotherapy and nursing practice is regulated by the Sri Lanka (SL) Medical Council and the SL Nursing Council, respectively. Physiotherapists and nurses work in government, private and non-

government organizations. The health care system of SL for older people consists of both public and private providers; most of the health care delivery is handled by the public sector providing nearly 50% of outpatient care and 95% of inpatient care. Government data identifies that the population has good levels of access to basic health care facilities and services, although with some important geographic differences, with a higher concentration health care services and infrastructure in the major cities (National Elderly Health Policy, 2017).

1.1 Competences of Health Professionals working with older adults

Worldwide populations are getting older, implying new demands regarding access to health care that allows to respond to the clinical conditions of the elderly, but also to promote a healthy and active aging of populations. This new demand for care in older people requires increasing knowledge and skills for health professionals (Australian Institute for Social Research, 2009). Caring for the elderly is challenging; geriatric care requires a deep knowledge of the physiological, psychological and social changes that occur with aging. Older people living with chronic conditions have unmet care needs related to their physical and psychological health, social life, as well as the environment in which they live and interact (Abdi, et al 2019).

Physiotherapists and nurses are two of the health professions that, included in interdisciplinary teams, contribute to an active and healthy aging process. They are recognized as key players among HC providers. They participate in all levels of the HC process (i.e., prevention, primary care, and rehabilitation). The increasing disability with age, the changed pattern of aging-related health problems, mainly non-communicable diseases, requires specific competences for the different health care specialists (WHO, 2020).

A “competence” considers scientific knowledge, practices and operational models in health promotion, care and rehabilitation of elderly. The European Commission identified that “competences can be defined as broader attributes that refer to an ability to use knowledge, skills, social and/or methodological abilities in work or study situations and in professional and personal development. Competence is not limited to the cognitive area; it also encompasses functional/technical areas, interpersonal skills and values” (European Union, 2014).

A professional competence framework must describe the expected behaviour, activities and outcomes of HC professionals when caring for older people. The concept of competence is used in an integrative way, combining individual, particular and general competences, in general situations or more specific contexts, such as caring for older people. It involves multiple dimensions, cognitive, functional, technical, self-knowledge, ethics and professional values (Dijkman, et al., 2022).

Our idea of creating a framework of competences for physiotherapists and nurses, the two HC professions involved in the CAPAGE project, will allow us to develop a modern and sustainable model for academic and professional education. It aims to identify competences but also to enhance the training and educational process to meet the demands of caring for the older population effectively in SL.

1.2 Previous results from the CAPAGE project need analysis on HC competences

Within CAPAGE project (working package 2), we performed a previous needs analysis study (online available on <https://capage.eu/>) that provided an important basis for the further framework process development. We summarized data from relevant literature sources on aging-related health issues in SL; we identified curriculum contents related to aging and geriatrics at the SL partner HEIs; and performed a survey conducted with academic staff, undergraduate students, and health care providers working with older adults. Using this comprehensive approach, this needs analysis allowed us to gather insights necessary for developing a knowledge and skills capacity base that corresponds specifically to the current demands in older adults HC and the education of health care professionals in SL.

The results showed that there seems to be some heterogeneity between older adults' contents and the number of hours in the different SL Health Education Institutions (HEIs). Besides some uniformization of contents, it will be necessary to adapt to the growing need and modify the number of hours allocated for these contents, as well as to maintain the best level of knowledge in terms of state-of-the-art and evidence-based interventions in the area of aging. It seems important that curricular contents are updated, changing the perspective and approach of more traditional geriatric care approach (centered on the disease) to actual new bio-psycho-social and multidimensional perspectives on healthy aging, longevity and well-being of the older adults.

The need analysis survey had a sample comprised 189 participants, mainly young professionals and academics; almost half of the sample had less than 3 years of experience in older adult care. Only 6.5% of the participants (3 (4.3%) physiotherapists and 5 (9.1%) nurses) had academic or professional specialization in geriatrics. The results of the survey allowed us to understand some knowledge and needs of SL academics, HC professionals and also undergraduates. As far as competence evaluation is concerned, physiotherapists (more often than nurses) identified the challenges in "managing chronic pain in older adults". The ability to differentiate "changes in normal physiological aging and pathological aging in older adults" is also an important theme identified to develop further knowledge and understanding.

Challenges identified by HC professionals when working with older adults were mainly communication barriers, financial constraints, and cultural sensitivity aspects; effective communication with older adults requiring adjustments to account for sensory and motor impairments, cognitive declines, and cultural differences were also important aspects identified.

The participants also identified the requirement to stay updated in their current understanding of core competences, which are mandatory for HC professionals working with older adults. They recognized that additional training and development opportunities should be offered to health care professionals in this field. Furthermore, communication with older adults and their families, integration into a multidisciplinary team, psychological support, specific rehabilitation skills, new technologies in health care, geriatric assessment, and outcomes are some of the major aspects identified as core competences essential for HC professionals.

Although the limitations reported by the authors in the previous document, critical insights gleaned from the need analysis indicate that both physiotherapists and nurses identify the care of the older person as a specialized area that needs enhanced knowledge and skills both presently and in the near future. It is noteworthy that alongside post-graduate specialized training, there is a need for continuous education within the undergraduate programs, as a foundation for the development of high competences for both physiotherapists and nurses to address the needs of the progressively increasing aging population.

Health care professionals, namely physiotherapy and nurses, need specific competences in the area of elderly health care with continuous search and updating knowledge. A Core competence framework can allow to guide HC professionals, academics and students in their path towards a positive, active and healthy aging of SL older adults. Moreover, public and private HC systems can have an updated tool to guide their standards for physiotherapists and nurses, contributing to better care of older people.

The information of the need analysis was the first step of the framework construction, since it served as the basis to adapt all the contents and approach specific for the older adults in SL, also for the specific needs of the physiotherapist and nurses that work with this population.

2. Objectives

The main objective of this study is to create a framework of core competences for physiotherapists and nurses working with older adults. Based on specific SL needs, a literature review and expert opinion based, a competences framework will identify knowledge and skill-based competences required for health care professionals, specifically for physiotherapists and nurses, working with elderly.

This paper is expected to create increased value to improve the competencies of HC professionals in SL and indirectly contribute to benefit the ageing population, with better health care services. This document can have as target group academics, scientists, policy makers, university managers, HC professionals, professional associations, patient associations and others in the identification of core competences in the older adult's health care in SL.

A literature review will allow us to identify important publications, serving as a reference to create an initial competence framework draft, that, in a second step, will be validated through an expert focus group. This final competence document will serve as a roadmap for developing academic courses for students and training for HC professionals; further aim of the competence framework is updating and equalizing the knowledge base among the SL partner Health EU Institutions and re-establishment of the existing potential in HC practice with elderly in SL.

3. Methods

3.1 Literature Review

The investigation question defined for this literature review was: "What are the current evidence-based competences required for nurses and physiotherapists in providing optimal care for the elderly population?".

Only review papers with less than 10 years of publication date were included, published in English, French, Spanish, Portuguese, Finnish, German or Sinhala and Tamil languages. We excluded papers in other languages or published dates, with other methodologies, contents or competences defined for other populations rather than elderly.

We used artificial intelligence softwares, to identify papers, plus manual search in *PubMed* database. Selected articles were aggregated using the *Ryyan* software. Data was extracted and organized by researchers in three groups: competences for health professionals, for physiotherapists and for nurses.

3.2 Focus Group

We used a qualitative methodology (Streubert & Carpenter, 2013), to understand and validate the dimensions of the competences needed for nurses and physiotherapists when working with older people, through a focus group analysis with experts in this area, having as theoretical support a need analysis and a literature review.

3.2.1 Composition of focus group.

Regarding the number of specialists, the recommendation for focus group is that there should be a minimum of six and up to ten participants. Larger groups may mean that not everyone could speak, and smaller groups may result in members feeling inhibited from speaking out (Lucasey, 2000). Our experts were people with a high degree of knowledge and experience in health care for older people, whether through scientific research, care practice and/or teaching. To ensure homogeneity, the group must have a proportional participation in relation to the number of nurses and physiotherapists, three or four experts from each, from SL and Europe.

The experts were appointed by the CAPAGE project coordinators; afterwards they received by email a formal invitation to participate, and after agreement to participate they received a confirmation letter (Appendix II), with all the information and support documents for previous reading and analysis (Needs

Analysis, Literature Review and a framework draft on core competence for physiotherapists and nurses working with older adults). To comply with all the ethical procedures (described ahead in this document) a link to the free informed consent (Appendix III), to the use of the collected data (Appendix IV) and a questionnaire regarding socio-demographic data collection (Appendix V) were also sent to the participants.

In addition to the experts' participation, another three project researchers were involved in the focus group, one moderator and two observers. The observers were assigned to take notes (including non-verbal information) and the session was audio recorded with the consent of the participants. The moderator lead and organized the discussion, promoting effective participation of all participants (Silva, Veloso & Keating, 2014).

3.2.2 Focus group session

Assuring ethical aspects and data protection (Moloney, Dietrich, Strickland, & Myerburg, 2003), the session was held during Porto Face-to-face Meeting (in Tuesday 1st October 2024), in a focus group session (90 minutes) and according to the saturation of the topics discussed, it was recorded and later transcribed for content analysis. Thirteen experts in the field participated, including one moderator, two observers and 10 respondents (Silva, Veloso & Keating, 2014).

We used a suggested simplified way of validating the construction of a framework of competences (Murad, 2017), by focusing on simple questions, such as: "Was the recommendation based on the best available evidence?" "Is the evidence in the draft reported and easily understood?" "Is the strength of the recommendations appropriate?" "Has the influence of conflicts of interest been minimized?"

Therefore, the focus group session (Elliot & Associates, 2005), was energized through questions previously prepared, divided between 3 categories (Appendix VI):

- i. Questions based on the literature review document; regarding the attributes and the characteristics of each competence described.
- ii. Questions based on the need analysis document; factors that can facility and/or difficult the higher education institutions for the development of these competences described for HC professionals working with older persons in SL; and what are the current external opportunities and/or what are the current external threats to the development of the competences for HCP working with older persons in SL.
- iii. Questions on the adequacy of the competences defined for the CAPAGE project in SL.

3.2.3 Data analysis

After the manual transcription of the audio record the results were evaluated through a qualitative content analysis methodology. The answers to the questions proposed during the focus group were categorized through the content analysis by a rule-based mixture of deductive and inductive category development. The predetermined categories (deductive) and the openness to new topics (inductive), ensured a comprehensive and flexible analysis of the focus group data. Afterwards, we performed the determination of analysis units, determination of categories, categorization process, integration and interpretation (Mayring, 2000; Minayo, 2001; Minayo 2012). The socio-demographic data of the participants was analyzed using descriptive statistics.

3.2.4 Dissemination of results

A final report was prepared, with the final core competence framework for Physiotherapists and Nurses working with older adults in SL. This final report will gather all the working package documents and will be disseminated among peers and in an open access publication.

3.3 Ethical considerations

The study was submitted to the Ethics Committee of the Escola Superior de Saúde Santa Maria – Porto, Portugal and approved with the code CE2024/05.

For literature review no ethical demands were identified.

For focus group an informed consent form was sent to all participants along with the questionnaire in digital format. The form contained information about the study objectives, study design and the guarantee of confidentiality.

Data collection and processing was encrypted. A assigned code was used for this purpose. The data was not recorded by name, but linked exclusively to the code. This ensures that data cannot be directly assigned to a person. Only CAPAGE project staff have access to the confidential data.

All relevant data will be deleted not later than October 2036, in accordance with the guidelines of good clinical practice of qualitative studies (10-year retention period, starting after the end of the study).

4. Results

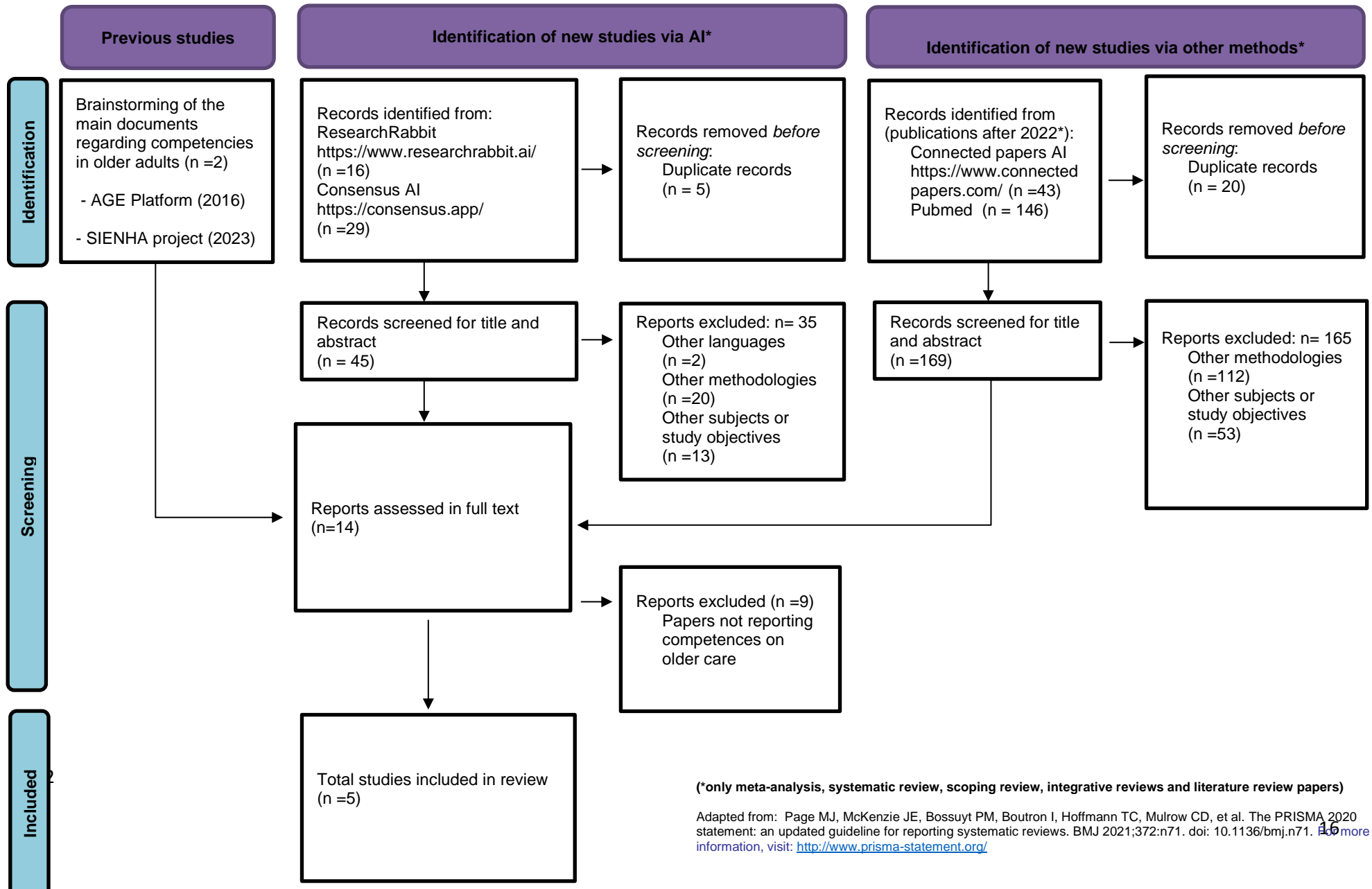
4.1 Literature Review

Initially through brainstorming the investigators identified 2 main documents regarding possible competences for health professionals working with older adults: the AGE Platform (2016) and the SIENHA project (2023). Then using AI, we searched for related publications associated with these papers, using *ResearchRabbit* software (<https://www.researchrabbit.ai/>); we also used *Consensus AI* (<https://consensus.app/>), using the research question (previous described) to identify further papers.

Finally, to identify the papers published after 2022 (data of the last major paper initially identified) we used the *Connected Papers AI* software (<https://www.connectedpapers.com/>); we also performed a *Pubmed* search using the following keywords: competences, framework, physiotherapy, physical therapy, nurse, nursing, health, older adults, ageing, aging, elderly, active aging and healthy aging (also for papers after 2022).

We only included in our search, meta-analysis, systematic review, scoping review, integrative reviews and literature review papers, with the inclusion and exclusion criteria early identified. We used *Ryvan* platform to screen the papers retrieved. The process was performed by two blind investigators, firstly by title and abstract; in case of conflict a third investigator made the decision. In case of any doubt the paper went to full text analysis. A total of 214 papers were screened for title and abstract. Then we retained 14 papers to be fully analysed. After the screening process, 5 studies were included in this literature review. 2 papers were on overall competences, 2 paper on specific competences for nurses and 1 for physiotherapists (Figure 1).

Figure 1 - Flow diagram on literature search



To ease data presentation and discussion we aggregated the 2 main papers describing core competences; these are European project founded studies: the AGE Platform (2016) and the SIENHA project (2023). They both use adapted versions of the CanMEDS Framework (Frank et al., 2015) that define the main essential competences in health care, facilitating the description, understanding and practical implementation in education and clinical practice. Competence refers to the knowledge, skills, attitudes, and linked personal traits in behavior that enable individuals to reach set aims in a professional setting. They summarize the following competences: Expert/Leader, Communicator, Collaborator, Organizer, Health and welfare advocate and Scholar. Each competence description is in table 1.

Table 1 -Studies describing competences for health professionals working with older persons.

Study	Author/Year	Country	Competences Described
European Competences Framework for Health and Social Care Professionals Working with Older People	Dijkman, B., Roodbol, P., Aho J., Achtschin-Sieger, S., Andrussziewicz, A., Coffey, A., Felsmann, M., Klein, R., Mikkonen, I., Oleksiw, K., Schoofs, G., Soares, C. & Sourtzi, P. / 2016	European Later Life Active Network (ELLAN). Project funded by the European Commission. 26 partners from 25 countries in Europe.	<p>1. Expert: a) Assessment: Conduct an appropriate assessment and collect data in a systematic way from the older person and, when necessary, from his/her family or caregivers about the physical and mental wellbeing, housing conditions, and social participation of the older person, as well as identifying his/her needs and wishes. b) Analysis and problem identification: Analyze the data collected from the assessment. Identify the problems and the risk factors for the older person and his/her family. Formulate a conclusion or, when applicable, a diagnosis. c) Planning: Develop a clear, timely, and appropriate individual plan with measurable objectives for the care and support of the older person and his/her family with a focus on optimum health, wellbeing, and quality of life. Use the techniques for shared decision making. d) Carry out interventions based on professional standards: Provide care, help, and support to the older person and his/her family in order to improve or prevent further decline in mental and physical wellbeing, housing, and living conditions and social participation. Carry out interventions based on professional standards. e) Evaluation: Re-evaluate and adjust service or care plans for the older person on a continuing basis, with the goal of providing optimum care and support for the wellbeing of the older person and his/her family.</p> <p>2. Communicator: a) Maintain relationships and effective communication: Form strong positive relationships with older persons and their families, based on empathy, trust, respect and reciprocity. Communicate in a clear and effective way considering older person's individuality, dignity, personal and social background, and needs. b) Empowerment: Promote capacities and resources in older people and their families own goals according to their needs and expectations. Contributing to lies so that they can gain control over their lives and achieve their the improvement of the older person's autonomy, independence, wellbeing and quality of life. c) Coaching: Encourage, motivate and coach the older person and relevant others in relation to self-management, self-reliance and co-reliance</p> <p>3. Collaborator: a) Integral cooperation and integrated services: Work effectively together with other professionals for integrated care and support. Multi- and inter-professional cooperation to achieve optimal support and care for the older persons with the goal of optimizing their health and wellbeing and quality of life in multiple locations. b) Informal care and support: Work together with older people's supportive families, informal caregivers and their social network to encourage appropriate informal care and support.</p> <p>4. Organizer: a) Planning and coordination of care and services: Plan, arrange, and coordinate the care and services provided by formal and informal health and social care workers, across different organizations, to provide the best-personalized care and support for the older person and their family. b) Program of care: Contribute to the organization of existing care and services within the region, which can be offered to groups of older people and their families. Take an active part in developing, adapting and implementing long term policy actions relating to care and services for older people on a national, regional, local or organizational level</p> <p>5. Health and welfare advocate: a) Collective prevention and health promotion. Advocate for health with, and on behalf, of older persons and their families, communities and organizations in order to improve health and wellbeing and build capacity for health promotion. b) Social map and social networks: Access and share information or resources with older persons, their families and their caregivers, regarding the social map, healthcare benefits, social support and public programs.</p> <p>6. Scholar: a) Expertise: Expand professional expertise for their own professional practice in relation to working with older people and their families. Spread relevant new evidence based research among fellow professionals and other professionals in health and social care services. b) Innovation of care and support: Interpret evidence based results of research and contribute to the development of knowledge and practical research in relation to the provision of care and support of older people and their families. Implement and apply new insights, protocols, standards, procedures, and technologies with the aim of promoting the quality, efficiency and effectiveness of care and services provided to older people and their families.</p> <p>7. Professional: a) Professional ethics: Demonstrate commitment to best practices for the health and wellbeing of older people, their families and society through adhering to ethical standards and professional-led regulation and by showing high personal standards of behavior. b) Professional commitment and personal awareness: Reflect on one's own actions and improve and innovate own professional behavior to the highest quality of care and support possible for older people</p>

and their families. Demonstrate commitment to the health and wellbeing of older people and their families. Show awareness of diversity and cultural differences.

1. Collaborator: As collaborators, health and social care professionals work together with others to promote and support healthy aging throughout the lifespan among individuals, groups of individuals and/or communities. The forms of collaboration can involve the individuals' families*, health and social care professionals, community partners and other stakeholders.

Key competence 1: The professionals are able to work effectively with other professionals within and outside the health and social care profession to promote and support healthy aging throughout the lifespan.

Key competence 2: The professionals are able to work effectively with individuals and families* to promote and support healthy aging throughout the lifespan.

2. Communicator: As Communicators, health and social care professionals form positive relationships with the individuals and their families, facilitating the gathering and sharing of essential information related to healthy aging. Using person-centered communication, they support and advise individuals in shared decision-making and lead effective interactions that promote health and well-being

Key competence 1: The professionals are able to communicate effectively with individuals, families and stakeholders to establish strong positive relationships with them

Key competence 2: The professionals are able to stimulate and encourage individuals, their families and stakeholders regarding healthy aging

Key competence 3: The professionals are able to advise and support individuals, families and stakeholders regarding healthy aging / or self-management, self-reliance and co-reliance.

3. Health and welfare advocate: As Health and Welfare Advocates, health professionals contribute their expertise and influence when working with individuals and their families, communities or populations to promote and support healthy aging. Health and Welfare advocacy optimizes health across the whole continuum, from the level of individuals to the population at large. The professional as Health and Welfare Advocate can influence change at any level of the continuum to enhance healthy aging of a society.

Key competence 1: The professionals are able to perform a person-centered assessment of an individual focusing on the determinants of healthy aging

Key competence 2: The professionals are able to establish a plan together with the individual, their families and relevant stakeholders to promote and support healthy aging

Key competence 3: The professionals are able to perform actions for the promotion of healthy aging in individuals

Key competence 4: The professionals are able to evaluate and adjust the plan on a continuing basis

Key competence 5: The professionals are able to advocate for the promotion of healthy aging with, and on behalf of communities, populations and organizations

4. Leader: As Leaders, health and social care professionals engage with others to contribute to a vision on healthy aging and take responsibility for the quality of health and social care in the field of healthy aging. They function as individual care professionals, as members of teams, and as participants and leaders in health and social care at different levels (regionally, nationally etc.)

Key competence 1: The professionals are able to articulate and act on both a personal vision on healthy aging as well as a common vision shared with others

Key competence 2: The professionals are able to contribute to the quality of health and social care in the domain of healthy aging

Key competence 3: The professionals are able to demonstrate leadership in the domain of healthy aging

5. Professional: As Professionals, health and social care professionals are committed to the health, well-being and healthy aging of individuals and the society through ethical practice, high personal standards of behavior, accountability to the profession and society, physician-led regulation, and maintenance of personal health

Key competence 1: The professionals are able to apply best practices and adhere to high ethical standards

Key competence 2: The professionals are able to recognize and respond to societal expectations and knowledge gaps within the healthy aging domain

6. Scholar: As scholars, health and social care professionals demonstrate a lifelong commitment to expand professional expertise in the field of healthy aging through continuous learning. They interpret evidence based results of research and contribute to the development of knowledge and practical research in relation to the provision of care and support of individuals and their families

Key competence 1: The professionals are able to engage in the continuous enhancement of their professional activities through ongoing learning

Key competence 2: The professionals are able to integrate best available evidence into practice

Key competence 3: The professionals are able to contribute to the creation and dissemination of knowledge and practices applicable to health

One of the papers describing specific competences for nursing was the Tate et al., (2024) study; it is a scoping review that incorporates 8 literature sources, 4 of which were academic papers and 4 documents describing gerontological entry-to-practice standards and competences from national nursing associations (Canada and the United States).

Dijkman et al., (2022), in a research design, with a needs analysis, a situational analysis, a trend analysis and a competence analysis created a competence framework that then was analyzed by a two-round Delphi study with a panel of Chinese and European experts. The information on these 2 studies is provided in table 2.

Table 2 - Studies describing competences for nurses working with older persons.

Study	Author/Year	Country	Competences Described
Gerontological nursing competences: A scoping review.	Tate, K., Guney, S., Lai, C., Van Son, C., Kennedy, M., & Dahlke, S. (2024).	Canada /USA	<p>Person-Centered Care: Focuses on respecting and responding to the preferences, needs, and values of older adults. Involves collaboration with older adults and their families to promote health and well-being.</p> <p>Relational and Cultural Competences: Emphasizes the importance of building and maintaining therapeutic relationships with older adults. Includes understanding and respecting cultural differences and incorporating this understanding into care practices.</p> <p>Professional Values: Involves adhering to ethical principles, such as autonomy, dignity, and justice in the care of older adults. Nurses should advocate for older adults' rights and provide care that aligns with ethical standards.</p> <p>Competences:</p> <ol style="list-style-type: none"> Assessment: Collect pertinent data relative to the older adult's health. Diagnosis: Analyze assessment data to determine diagnoses or issues. Outcomes Identification: Identify expected outcomes for individualized plans. Planning: Develop plans to attain measurable outcomes. Implementation: Implement identified plans. Coordination of Care: Coordinate care delivery across the healthcare continuum. Health Promotion: Employ strategies to promote health and safe environments. Evaluation: Evaluate progress toward goals and outcomes. Ethics: Integrate ethical provisions in all practice areas. Cultural Humility and Inclusion: Practice in a manner congruent with cultural diversity principles. Communication: Communicate effectively in all practice areas. Collaboration: Collaborate with older adults and stakeholders. Leadership: Lead within the professional practice setting. Professional Development: Seek knowledge reflecting current gerontological nursing practices. Evidence-Based Practice: Integrate research findings into practice. Quality of Practice: Contribute to quality nursing practice. Resource Utilization: Use appropriate resources to provide evidence-based services. Environmental Health: Practice in an environmentally safe manner. Holistic Patient Assessment: Consider physical, psychological, social, and spiritual aspects. Planning Care: Develop care plans based on comprehensive assessments. Implementation: Provide and manage care plans. Evaluation: Evaluate the effectiveness of care plans. Ethical Practice: Ensure ethical standards in all practices. Leadership and Education: Lead and educate within the gerontological nursing field. Interprofessional Collaboration: Work collaboratively with other health professionals. Quality Improvement: Engage in activities to improve care quality. Collaboration: Work with older adults and their families to promote health and well-being. Resilience and Adaptation: Foster resilience and adaptation in older adults. Optimization of Health: Focus on optimizing health and well-being. Prevention: Prevent illness and injury. Respect and Dignity: Provide respectful, dignified, and culturally sensitive care. Relational Care: Focus on relationships between older adults and their family/caregivers. Ethical Care: Advocate for autonomy, inclusion, diversity, and collaborative decision-making. Evidence-Informed Care: Address health assessments, chronic condition management, and end-of-life care. Aesthetic/Artful Care: Enhance care environments and activities for cultural and creative expressions. Safe Care: Ensure safety in various aspects including housing, food security, and abuse prevention. Socio-Politically Engaged Care: Address ageism, care inequities, and advocate for older adults' needs.
Developing a competence framework for gerontological nursing in China: a two-phase research design including a needs analysis and verification study	Dijkman, B. L., Hirjaba, M., Wang, W., Palovaara, M., Annen, M., Varik, M., Cui, Y., Li, J., van Slochteren, C., Jihong, W., Feiteng, C., Luo, Y., Chen, Y., & Paans, W. (2022).	China	<p>1. Providing gerontological care The gerontological nurse comprehensively assesses, analyses, plans, implements and evaluates the care of older people. The gerontological nurse is able to utilize evidence-based knowledge and critical thinking when making decisions and providing person-centered and holistic care in different care settings. The nurse considers the wishes and physical and mental well-being of older people and their families by supporting all parties' active participation.</p> <p>a. Assessment Conduct a systematic, comprehensive gerontological assessment with input from the older people and, when necessary, from their families or caregivers. Inquire about the older people's physical and mental well-being, medical history, personal history, housing conditions, social participation and loneliness. Identify the needs, wishes and possibilities to increase older people's comfort. Assess the level of nursing needs.</p> <p>b. Nursing diagnosis Analyze the data collected from the gerontological assessment and, through careful consideration, form a diagnosis using knowledge about healthy aging, geriatric syndromes and the most common health problems among older people.</p>

Identify the problems and risk factors for older people and their families. Diagnose the required nursing care using current theoretical and clinical knowledge of the nursing process.

c. Planning

Develop a clear, timely and appropriate plan for person-centered nursing care with a focus on recovery, optimal health, well-being and quality of life for older people and their families. Use practice- and evidence-based interventions. If possible, include the use of technology for the benefit of the patient and family members. Use appropriate techniques for shared decision-making.

d. Implementation of nursing interventions

Provide accurate implementation of the care plan and perform the nursing interventions based on professional nursing standards in different care settings such as home care, hospital care, long-term care and hospice care. Guarantee person-centered and holistic care.

e. Evaluation

Evaluate and adjust care plans for older people on a continuing basis with the purpose of providing optimal nursing care for older people and their families.

2. Communication and collaboration

To provide person-centered care, the gerontological nurse communicates and collaborates with older people, family members, other informal caregivers and other professionals in health and social care. The nurse is able to use Information and Communication Technology (ICT) properly for this purpose.

a. Person-centered communication and empowerment

Form strong, positive professional relationships with older people based on empathy, trust, respect and reciprocity. Communicate in a clear and effective way considering older people's individuality, sociocultural backgrounds, health problems and needs. Collaborate with patients, use shared decision-making and empower older people to take responsibility for their own health and comfort.

b. Collaborate with family members and informal caregivers

Work together with older people's supportive families, informal caregivers and social networks to encourage appropriate informal care and support. Be aware of older patients who suffer from loneliness and family members who suffer from caregiver burden.

c. Collaborate with nursing colleagues and the multidisciplinary team

Work effectively together with other professionals for integrated care and support. Encourage multi- and inter-professional cooperation to achieve optimal support and care for older people. Pursue the goal of optimizing their health, well-being and quality of life in multiple areas.

3. Organization of gerontological nursing care

The nurse plans and coordinates safe, high-quality person-centered care for older people. The nurse is involved in quality assurance activities and contributes to the innovation of care for older people; this includes the use of suitable technical applications in care.

a. Planning and coordination of care and services

Plan, arrange and coordinate the care and services provided by nurses and other formal or informal health and social care workers across different organizations to provide the best personalized care and support for older people and their families. Ensure continuity of care.

b. Innovation and technology

Use innovative ideas, theories and methods to improve gerontological nursing practice. This process includes the use of technological applications.

c. Quality management

Initiate, monitor and participate in quality management activities to provide safe, high-quality person-centered nursing care for older people. Establish assessment mechanisms and processes for continuous quality improvement.

4. Health promotion

The gerontological nurse is able to prevent further functional decline and promote healthy aging and a healthy lifestyle. The nurse helps older people and their families find comprehensive person-centered solutions within the entire healthcare system.

a. Plan person-centered health promotion

Identify early risk factors that can impact the functional ability of older people. Plan holistic and person-centered health promotion interventions.

b. Perform health promotion interventions

Work closely together in partnerships with patients, informal caregivers and other healthcare professionals to promote a healthy lifestyle and to work towards the improved self-care of older people.

5. Evidence-based nursing and lifelong learning

The gerontological nurse uses evidence-based practices and lifelong learning activities to provide the best care for older people and their families.

a. Lifelong learning and professional development

Increase knowledge, understanding and skills in gerontological nursing through continuous education and professional development.

Demonstrate commitment to lifelong learning.

b. Evidence-based practice

Use and support the implementation of evidence-based nursing's theory and methodology in gerontological care.

c. Training and coaching

Participate as a teacher and coach in education and training activities about gerontological nursing for staff, students and teachers.

Strengthen the competences of nursing staff in gerontological nursing.

6. Professional behavior

The gerontological nurse shows a professional attitude, is aware of professional guidelines and is committed to providing appropriate person-centered care for older people and their families.

a. Professional ethics

Provide nursing care for older people in accordance with professional and personal ethics, legal guidelines and cultural sensitivities.

b. Professional commitment and personal awareness

Demonstrate commitment to providing appropriate gerontological nursing care for older people and their families. Be aware of personal values and assumptions

Specific competences for physiotherapist are described by the Academy of Geriatric Physical Therapy (American Physical Therapy Association, 2014). The paper was published in the Journal of Physiotherapy Education; it is a document describing entry-to-practice standards and competences for physiotherapists in older adults. The information is provided in table 3.

Table 3 - Studies describing competences for physiotherapists working with older persons.

Study	Author/Year	Country	Competences Described
Essential Competences in the Care of Older Adults at the Completion of the Entry-Level Physical Therapist Professional Program of Study	Academy of Geriatric Physical Therapy, American Physical Therapy Association (2014)	USA	<p>1: Health Promotion and Safety</p> <p>A. Advocate to older adults and their caregivers about interventions and behaviors that promote physical and mental health, nutrition, function, safety, social interactions, independence, and quality of life.</p> <p>B. Identify and inform older adults and their caregivers about evidence-based approaches to screening, immunizations, health promotion, and disease prevention.</p> <p>C. Assess specific risks and barriers to older adult safety, including falls, elder mistreatment, and other risks in community, home, and care environments</p> <p>D. Recognize the principles and practices of safe, appropriate, and effective medication use in older adults.</p> <p>E. Apply knowledge of the indications and contraindications for, risks of, and alternatives to the use of physical and pharmacological restraints with older adults.</p> <p>2: Evaluation and Assessment</p> <p>A. 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.</p> <p>B. Apply knowledge of the biological, physical, cognitive, psychological, and social changes commonly associated with aging.</p> <p>C. 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.</p> <p>D. Demonstrate knowledge of the signs and symptoms of delirium and whom to notify if an older adult exhibits these signs and symptoms.</p> <p>E. Develop verbal and nonverbal communication strategies to overcome potential sensory, language, and cognitive limitations in older adults.</p> <p>3: Care Planning and Coordination</p> <p>Across the Care Spectrum (Including End-of- Life Care)</p> <p>A. Develop treatment plans based on best evidence and on person-centered and person-directed care goals.</p> <p>B. Evaluate clinical situations where standard treatment recommendations, based on best evidence, should be modified with regard to older adults' preferences & treatment/care goals, life expectancy, co-morbid conditions, and/or functional status.</p> <p>C. Develop advanced care plans based on older adults' preferences and treatment/care goals, and their physical, psychological, social, and spiritual needs.</p> <p>D. 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.</p> <p>4: Interdisciplinary and Team Care</p> <p>A. Distinguish among, refer to, and/or consult with any of the multiple healthcare professionals and providers who work with older adults, to achieve positive outcomes.</p> <p>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.</p> <p>5: Caregiver Support</p> <p>A. 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.</p> <p>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.</p> <p>C. Know how to access and explain the availability and effectiveness of resources for older adults and caregivers that help them [the patient] meet personal goals, maximize function, maintain independence, and live in their preferred and/or least restrictive environment.</p> <p>D. 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.</p> <p>6: Healthcare Systems and Benefits</p> <p>A. Serve as an advocate for older adults and caregivers within various healthcare systems and settings.</p> <p>B. Know how to access, and share with older adults and their caregivers, information about the healthcare benefits of programs such as Medicare, Medicaid, Veteran's Services, Social Security, and other public programs.</p> <p>C. Provide information to older adults and their caregivers about the continuum of long-term care services and support -such as community resources, home care, assisted living facilities, hospitals, nursing facilities, sub-acute care facilities, and hospice care.</p>

4.2. Framework Draft on Core Competences

To develop the competency dimensions of this initial framework, we used the recommendation from Royal College CanMEDS Project, CanMEDS Roles (Frank, Snell & Sherbino, 2015), adapting it has previously been performed in AGE Platform (2016) and in SIENHA project (2023), two of the most important documents previously identified in the literature review (Figure 2).



Figure 2- Competences Roles/Categories in Healthcare - Adapted from CanMEDS Roles (Frank et al., 2015)

Using these roles/categories, we develop a framework draft with core competences for nurses and physiotherapists working with older adults using the data collected through a literature review and the analysis of specific needs in SL; data was collected interpreted and resumed by the authors. The competences identified in these documents were assigned in 7 different roles/categories: expert/leader, communicator, collaborator, organizer, health and welfare advocate, scholar and professional. This intermediate step, with the initial framework draft is available in the Appendix I.

Although we initially identified the possibility to divide them into specific nurses and physiotherapists competences, after analysis and discussion we decided to present the results by general competences, once the data obtained in the literature review and the needs expressed by professionals, academics and students were similar in the main domains of competences that a HC professional should have when working with older adults. Thus, this framework can be applied to both professional groups.

The next step of this study was to validate the initial framework draft; the content, description and dimensions of the competences needed for nurses and physiotherapists when working with older people, through focus group analysis.

5. Validation of Core Competence Framework for Physiotherapists and Nurses working with older adults in SL, using a focus group process

Clinical guidelines and other recommendations should be based on a systematic review of the literature and developed by a multidisciplinary panel of experts, and transforming this evidence into decisions requires consideration of the quality of evidence, balance between benefits and harms, patient values, available resources, feasibility of the intervention, acceptability by stakeholders and effect on health equity (Murad, 2017). To improve and validate our draft framework on core competence physiotherapists and nurses working with older adults in SL, a combination of theoretical-scientific foundations with consensus methods was used, through a focus group technique.

5.1 The Focus Group

As far as the sociodemographic characteristics of the participants are concerned, the 10 experts' participants on the focus group had mean (SD) age of 36,5 (7,19) years and 8 (80%) were women. We had participants from all the 10 universities (4 European and 6 Sri Lanka HEIs) involved in the CAPAGE consortium, 7 (70%) participants were Doctorate and 3 (30%) had a Master's degree. All identified to have experience in older adult's care, with 10,33 (7,24) years of experience in this area [mean(SD)].

5.1.1 Analysis of Focus Group on Core Competences for Physiotherapists and Nurses Working with Older Adults In SL

5.1.1.1 Pre-Analysis (Initial Familiarization)

In this stage, the researchers read the produced material to gain an improve understanding of the content and objectives, regarding the validation of a framework of competences for HC professionals working with older adults in SL. Nurses and physiotherapists discussed various aspects of competences such as leadership, communication, evidence-based practice, and ethical considerations. The text reflects the group's feedback on whether the proposed competences are applicable and how they align with the SL national context.

5.1.1.2 Exploration of Material (Categorization and Coding)

The next step was to identify key categories emerging from the transcription. Those potential categories included:

a) General Competences: Seven competences (expert/leader, communicator, collaborator, organizer, health and welfare advocate, scholar, professional) were introduced to the participants that provided their feedback on their adequacy.

b) Contextualization: Discussions on whether the competences are adaptable to the Sri Lankan HC context, particularly when working with older adults.

c) Feasibility: Concerns about how realistic it is to apply these competences in everyday professional life, understanding the resource limitations, lack of training facilities, and cultural challenges.

d) Ethical Considerations: Discuss the importance of including ethics within the competences, especially when considering cultural and religious backgrounds.

e) Communication and Leadership Challenges: Ideas on specific challenges in leadership and communication, particularly around active listening, time constraints, and working in multidisciplinary teams.

f) Recommendations for Improvement: Suggestions regarding the improvement and final adjustment of the competences' framework.

5.1.1.3 Treatment of Results (Interpretation and Data Processing)

After organizing the data into categories, the next step of the analysis was data interpretation. For each category, we extracted relevant data and analyzed their meaning and implications.

a) General Competences:

The participants agree that the seven proposed (expert/leader, communicator, collaborator, organizer, health and welfare advocate, scholar, professional) are relevant. However, several participants noted overlaps between roles, such as the difference between being a leader and a collaborator, suggesting more clarity might be needed in role definition. There was also a consensus that competences such as communication and teamwork are essential for effective HC delivery to older people.

b) Contextualization:

A recurring theme was the importance of contextualizing the competences to for Sri Lanka context. For instance, while participants agreed on the competences' relevance, they emphasized the need for adjustments to fit regional and institutional realities. For example, highlighted the need for better integration of communication and listening skills in everyday practice, considering is normally a

gap mainly caused by the limited time available to HC workers in Sri Lanka when working with older adults.

c) Feasibility:

One of the central concerns expressed was the feasibility of applying these competences in Sri Lanka's HC system. Participants mentioned several challenges, such as the lack of specialized health services in older adults' care, the working conditions and heavy workloads for SL health professionals and insufficient training opportunities in the area of aging and older adults. They emphasized that these aspects would influence the practical feasibility of the implementation of these core competences in Sri Lanka HC professionals working with older persons.

d) Ethical Considerations:

Ethical principles emerged as an essential aspect of professional practice, described in the competency draft proposal, but participants identified that they weren't clearly explicit. Some of them pointed out that values such as respect for cultural diversity, religious beliefs, and patient dignity must be emphasized in the core competences of health professionals working with older persons.

e) Communication and Leadership Challenges:

A major issue discussed was the lack of communication skills when working with older persons, particularly the need for HC professionals to listen patients actively. This competence was normally not applied due to time constraints; this was an aspect mainly referred to by the physiotherapy participants. There was also a discussion on leadership in interdisciplinary teams, with some participants expressing doubt about whether non-medical professionals could take on leadership roles effectively in Sri Lankan services.

5.1.1.4 Recommendations for improvement

The participants provided several recommendations for improving the competences framework. There were suggestions to incorporate more specific communication skills, such as active listening, into the framework. There was also a demand to clarify differences between some roles, such as leader and collaborator. The participants recommended that the framework would be aligned with the existing Sri Lankan qualification standards (Sri Lanka Qualifications Framework - SLQF, 2015), at level 5 and 6), ensuring consistency across curricula. Moreover there should be the reference to the learning outcomes mentioned in the same document, that should be applied to all the competences described. Each core competence should have the following learning outcomes categories: theoretical knowledge, practical knowledge and application, communication, teamwork and leadership, creativity and problem solving, managerial and entrepreneurship, information usage and management, networking and social

skills, adaptability and flexibility, attitudes, values and professionalism, vision for life and lifelong learning.

5.1.1.5 Inferences and Final Considerations

a) Applicability of the Competency Framework:

The general consensus is that the proposed competences are relevant, but need adaptation to the Sri Lankan HC context, particularly considering resource limitations and cultural considerations and the need to capacitate health professionals in some of these areas.

b) Contextual Challenges:

The challenges related to time, resource allocation, and the hierarchical structure of HC institutions in Sri Lanka may hinder the full implementation of these competences.

c) Ethical and Cultural Sensitivity:

Ethical principles should be expressed and included in a clearer way in the framework, namely respect for cultural diversity, that is essential so that the framework is aligned with the national context and needs of Sri Lanka.

5.1.1.6 Conclusion

The focus group offered valuable insights for redefining and adapting the framework to ensure that it is relevant and applicable to HC professionals working with older adults in Sri Lanka. The participants were also asked to perform a SWOT analysis of HC competences for SL context based on previous need analysis and literature review documents on core competences for physiotherapists and nurses working with older adults in SL (Table 1).

The content analysis, based on Minayo's framework (Minayo, 2012), highlights the need for a flexible and context-sensitive competency framework that accounts for the realities of the Sri Lankan reality and HC system. It also emphasizes the importance of cultural and ethical dimensions in professional competences, the adjustment of competences to national HC dynamics, and the possibility of improving the access to important content and essential curricula to obtain some of the competences that are still in deficit in both physiotherapy and nursing professionals working with older persons. Afterwards, there will be the need for practical feasibility studies that can assess the implementation of these core competences.

This approach allowed us to extract deeper meanings and implications from the discussion, ensuring the competency framework is aligned with the participants' experiences and the SL HC environment and context.

6. The Validated Framework of Core Competences for Physiotherapists and Nurses working with older adults

According to the previous focus group analysis we performed some changes in the initial core competences draft, incorporating the contributions of both physiotherapists and nurses that participated in the discussion (Table 4).

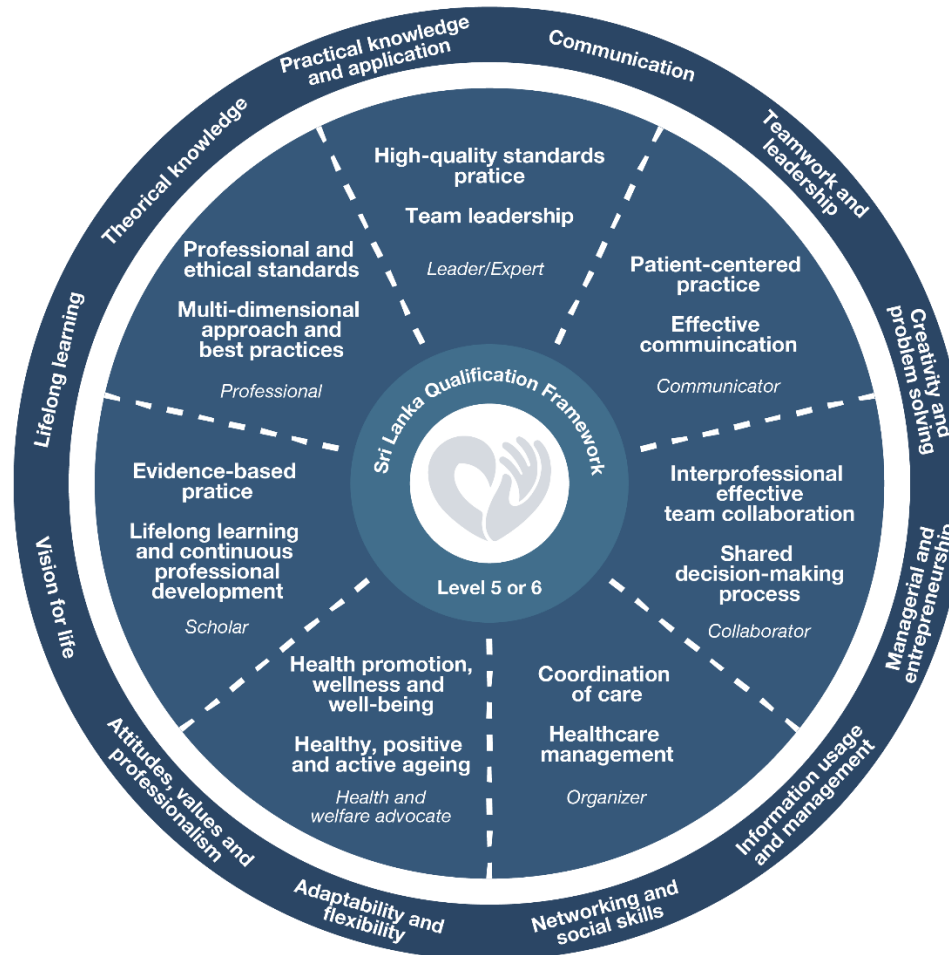
Furthermore, besides improving and adapting the competences according to the focus group results, we decided (as proposed by the participants) to create a model/infographic that could help academics, health professionals and students to better understand and enroll in a person-centered model for the older adult care (Figure 2).

This framework provides a definition of the competences both for physiotherapists and nurses, providing a reference for the academic and professional training and development of these professionals working in older adults. Specific for the CAPAGE project, this is a mandatory document that will guide us through the other working packages to achieve the main purpose of the project: promote academic and professional excellence in health care to meet the challenges of aging in SL.

Table 4 - Validated framework on core competences for HC professionals working with older adults in SL.

Roles/Categories	Expert/Leader	Communicator	Collaborator	Organizer	Health and welfare advocate	Scholar	Professional
<p>General Competences for Physiotherapists and Nurses in older adult health care in Sri Lanka</p>	<p>Be able to “lead” and be responsible for the process of health care of the older adult.</p> <p>Be capable of assuming the leadership of an interdisciplinary collaborative team in older adult’s care (according to each specific context).</p> <p>Participate in the process of assessment/evaluation, analysis, diagnosis, intervention and re-assessment of the older adult, using the best updated available knowledge.</p> <p>Use valid and updated tools, instruments, outcome measures for data collection during all the health care process.</p> <p>Possess the best and updated knowledge and skills on physiological and pathological changes in older adults and the specific care skills in prevention, treatment, care and rehabilitation of age-related conditions.</p>	<p>Be able to communicate with different stakeholders in the health care process (older adults, family, caregivers, other professionals, stakeholders).</p> <p>Apply patient-centered practices and establish appropriate therapeutic relationships, focusing on the empowerment, self-management and coaching of older adults.</p> <p>Use effective communication, incorporating empathy and active-listening strategies, considering the older adults’ primary concerns, priorities, and preferences.</p> <p>Possess the best and updated knowledge and skills on specific communication aspects with older adults regarding their specific needs and specificities (e.g. cultural, social and spiritual diversity of the Sri Lanka context)</p>	<p>Be able to establish effective collaboration with the different stakeholders of the health care process (older adults, families, caregivers, social services, other professionals, stakeholders).</p> <p>Use integral collaboration, involving the older adult in the shared decision-making process, respecting their preferences, needs and values.</p> <p>Interprofessional team collaboration, within integrated service care, for effective teamwork.</p> <p>Facilitate, plan, manage and evaluate all care possibilities, with the interdisciplinary team, family and persons involved, ensuring the optimal health care coordination.</p> <p>Possess the best and updated knowledge and skills on interprofessional competences and possibilities of collaboration and cooperation between all professionals involved in health care of older adults.</p>	<p>Be able to plan and coordinate the process of health care of the older adult.</p> <p>Understand the national, regional, local and organizational levels of health care for older adults (e.g., public, private, non-governmental organizations).</p> <p>Ensure quality management and continuous improvement, innovation and research in health care.</p> <p>Identify resources availability, planning different settings and levels of care (e.g. specific treatment options, transitions, discharge); identify both material and human needs (e.g. specific material demands for specific older adult’s care; ratio health professional/older adult).</p> <p>Possess the best and updated knowledge and skills in the coordination of care, national and international guidelines possibilities and different health care settings according to the older adults’ needs (e.g. aging in place, housing options, community management, home care, hospital care).</p>	<p>Implement and coordinate health promotion, wellness and well-being programs and care of the older adults, contributing to healthy aging and longevity of populations.</p> <p>Act on disease prevention in a patient-centered approach for positive and active aging, promoting health literacy and positive behavioral changes.</p> <p>Optimize older adults’ health, promoting their independence, function and quality of life.</p> <p>Promote opportunities to influence local and national policies on older adults’ care availability and management.</p> <p>Possess the best and updated knowledge and skills on healthy aging, understanding major health determinants and how to positively influence them in the different stages of life (e.g. early aging, palliative care, end-of-life care).</p>	<p>Be updated in recent research, evidence, guidelines and best practices in aging care.</p> <p>Evidence-based practice on older adults according to the best evidence available.</p> <p>Have the ability and opportunity to train in different specific older adults’ contexts and clinical settings.</p> <p>Engage and participate in academic, research and community activities in older adult’s care.</p> <p>Have the commitment for lifelong learning and continuous professional enhancement and development of the best and updated knowledge and skills in health care of the older adult.</p>	<p>Promote and disseminate ethical standards and legal aspects developing the best practices and conduct available in the field of older adult’s care.</p> <p>Perform evidence-based practice but also patient-centered care, in a multi-dimensional approach.</p> <p>Respect older adults’ dignity and autonomy, understanding their preferences, needs and values.</p> <p>Engage and participate in academic, professional and patients (national and international) organizations and associations on older adult’s care and healthy aging.</p> <p>Possess the best and updated knowledge and skills to recognize and respond to physical, psychological, social and spiritual needs of the older person.</p>
<p>Minimum Sri Lanka Qualification Framework Level 5 or 6 (SLQF, 2015)</p>							
<p>Learning outcomes to be developed in each competency</p>							
Theoretical knowledge	Practical knowledge and application	Communication,	Teamwork and leadership	Creativity and problem solving	Managerial and entrepreneurship	Information usage and management	Networking and social skills
Adaptability and flexibility		Attitudes, values and professionalism		Vision for life		Lifelong learning	

Figure 3. Core competences model for health care professionals working with older adults in SL.



7. Discussion

The growing concern about the aging population and associated health problems along with the socioeconomic and family structure changes, increases the expectations on health care providers competence's. The competences here defined are for health professionals who systematically provide direct and indirect professional care, support and rehabilitation to individuals or communities of people aged 65 and older. Competency and competences are person orientated referring to person's underlying characteristics and qualities that lead to an effective/superior performance (Woodruffe,1993).

In line with the European Union definition of “competences”, our study identifies that competences must be understood in a “broader sense” involving both values, knowledge, skills and abilities (European Union, 2014). There is also the concern that patients, in this case the older adult, are in the center of HC approach. This patient centered practice is guided to the person's needs, but also to his values and preferences, in the shared decision-making process, and is the key to maximize functionality and quality of life of the older person (Clavel et al., 2021).

Although many of the competences can have a universal application, the purpose was to establish a competence framework adapted to SL reality and its socio, religious, cultural and economic characteristics. Although we tried to present that in our framework, we understand the difficulty of expressing some particular aspects related to the diversity of scenarios, contexts and particularities of SL culture; but we highlight the need to be taken into account these aspects in the understanding of this framework.

Learning outcomes are statements that describe what learners should know, understand and can demonstrate upon the completion of a course or study programme (Sri Lanka Qualifications Framework - SLQF, 2015). Mapping competences and how then can achieved, according to Sri Lanka Qualifications Framework, is essential: theoretical knowledge, practical knowledge and application (Knowledge), communication, teamwork and leadership, creativity and problem solving, managerial and entrepreneurship, information usage and management, networking and social skills (skills), adaptability and flexibility, attitudes, values and professionalism (attitudes and values) and vision for life and lifelong learning (mind-set and paradigm). A description of specific student/professional-centered teaching and learning methods for each outcome can also be identified in that document (Sri Lanka Qualifications Framework - SLQF, 2015).

7.1 Literature review discussion

Findings of the literature review emphasize the importance of developing knowledge and competence model's around the needs of older people (Abdi et al., 2019). A coordinated approach to sharing information and expertise among nations is needed to develop international gerontological competences to facilitate improved care in older adults (Tate et al., 2024). Interprofessional competences were identified by the AGE and SIENHA projects; although with some differences in terms of methodologies used to build the frameworks papers, they identify the need to understand different dimensions in terms of competences for health professionals in older adults.

Specific nursing competences for professionals working with older adults were found in a recent scoping review by Tate et. Al (2024). This study aggregates information from different academic and professionals' sources from Canada and USA. The study from Dijkman et al, (2022) identified a potential framework for nurses working in China, but also based on European standards.

For specific physiotherapists competence's for professionals working with older adults, we identified the competences described by the American Physiotherapy Association (2014); It is important to say that APTA has also other competence documents that provides a description of each competence according to the degree of specialization/expertise of the physiotherapy. In the literature we found several papers describing general competences for physiotherapists but there seems to be a lack of documents for specific geriatric competences.

Although not with the specific purpose of identifying specific competences, some of the papers not included also describe some important aspects of the older adult's care. For example, Yoshimatsu et al. (2024) study "Diagnose, Treat, and SUPPORT" is an important paper describing clinical competences in the management of older adults with aspiration pneumonia. Specific condition-related guidelines should be also considered when identifying competences of health professionals working with older people.

McCarthy et al. (2023) developed a list of core competences for medical aspects of healthcare delivery in care homes, through a scoping review and Delphi process. Although they identify specific aspects for physicians, from this paper resulted a group of competences which outline the interprofessional expertise required to deliver good healthcare practice in care homes.

Seijas et al. (2024) studied the rehabilitation in primary care in aging populations and they identified that rehabilitation interventions in primary care, should be grouped into six categories: assessment; care coordination and management; restorative and compensatory approaches, (including

pharmacological approach); education, counselling, and skills training; environmental adaptations; and provision and training in the use of assistive technology.

Two world health organization reports, that were also fully analyzed, have important information regarding competences in healthy aging. The 2015 document, “World report on aging and health” (WHO, 2015), identifies that health professionals are often unprepared to deal with the healthcare needs of older adults, and highlights two major concerns that need to be addressed:

- Prevention: Health workers are often trained to respond to pressing health concerns, rather than to proactively anticipate and counter changes in function and are rarely trained to work with older people to ensure they can increase control over their own health.

- Care integration and coordination: HC to be safe and effective, the involvement of several health professionals and the use of multiple, potentially interacting interventions requires a high degree of coordination over time, both between health professionals and across treatment levels and settings.

Older people’s care must be a shared decision-making process, implementing team-based care, using information technology, and engaging in continual quality improvement. Major challenges for healthy aging should be to stop ageism within health care; to offer older-person-centered integrated care; to provide systematic support for self-management; and to support aging in place.

The 2020 document, UN Decade of Healthy Aging: Plan of Action (WHO, 2020), built on the Madrid International Plan of Action on Aging, describes the plan for a Decade of Healthy Aging 2021–2030, which will consist of 10 years of concerted, catalytic, sustained collaboration. To foster healthy aging and improve the lives of older people and their families and communities, fundamental shifts on health professionals are required not only in the actions we take but in how we think about age and aging. This document addresses four areas for action: to change how we think, feel and act towards age and aging; to ensure that communities foster the abilities of older people; to deliver person-centered integrated care and primary health services responsive to older people; and to provide access to long-term care.

One of the full analyzed papers, although not included in this review, is specifically from Sri Lanka (Asian Development Bank, 2019). In the chapter “Policy Recommendations for the Provision of Health and Long-Term Care to the Elderly” the paper identifies that improving the ability of primary care services to deliver effective primary and secondary preventive care for older people is essential. The primary care system needs to take on new responsibilities such as geriatric care as well as more aspects of chronic disease care. However, this will require increased investment. This will also require teaching and training of health-care providers on geriatric issues, not as a "specialty," but as part of primary

care provision and community care. The current primary care network needs to be adapted to provide elderly care services. The integration of primary care with secondary prevention and associated clinical care is also needed as elderly people, especially those above 80 years of age or those with disability, will find it difficult to access or afford care far from their homes. Provision of such services through coordination with primary care providers will allow elders and their care providers to comply with treatment regime and thereby reduce complications (Asian Development Bank, 2019).

7.2 Focus group and final framework discussion

This discussion on results about competences, together with a need analysis published previously, allowed us to perform the next step of this study. Our framework was built identifying 7 dimensions: expert/leader, communicator, collaborator, organizer, health and welfare advocate, scholar and professional. Nowadays, we know that health professionals, namely physiotherapists and nurses, need to improve and update their knowledge in older adult's care. Our framework draft was thought to serve as a possible guide, allowing a continuous improvement of the health care provided to older adults in SL.

To improve and validate our initial framework we used a focus group methodology, through an expert panel process. Focus group is a technique used to obtain more information and consensus on a particular topic or issue. There is reflection and discussion, where the idea of one of the participants can be complemented or even contradicted by the other elements of the group, resulting in a collective or divergent opinion (Silva, Veloso & Keating, 2014; Sim & Waterfield, 2019).

Stewart, Shamdasani & Rook (2007) identified seven purposes of the focus groups: obtaining feedback; creation of research hypotheses that can be tested in larger studies; creating new ideas or concepts; identification of problems or collection of information about products or services; obtaining information for instruments; and help in the interpretation of previously obtained qualitative data. Therefore, we identified that it could be an eligible method for validating the core competence framework draft for physiotherapists and nurses working with older adults in SL.

The rationale of focus group strategies tends to be centered on a review of relevant and available scientific literature. For some topics there may be limited or weak scientific evidence basis, strategies based on expert opinion are frequently used, which validate the quality of the content prepared, as well as the evidence of its justification, and its ability to evaluate what it proposes to evaluate. Judgment groups are preferable to individual judgment, avoiding personal bias.

Expert opinion techniques are distinguished from intervention research techniques that use quantitative methods, where the statistical definition of a representative sample is a fundamental condition for the validity of the results obtained. However, because experts may disagree on the interpretation of evidence, rigorous methods are needed to incorporate their opinions, which are structured facilitation techniques that exploit consensus among a group of experts by synthesizing opinions (Pringle, Wilson & Grol, 2002; McGlynn & Steven, 1998).

There are several expert opinion methods found in the literature for substantiating and qualifying assessment measures. They present similar structuring steps and aim to generate a methodologically validated process to qualify care practices. They frequently include the following stages: a) theoretical-scientific foundation; b) preparation of the evaluation measure by experienced professionals in the area in question and based on this theoretical foundation; c) development of an instrument that includes attributes of the measure and criteria for conformity or consensus; d) selection of a panel of experts for opinion validation based on this previously prepared instrument. (Pringle, Wilson & Grol, 2002; McGlynn & Steven, 1998).

Differences between the techniques are found in the types of reasoning used, in the formation of the panel of experts, in the criteria for conformity or consensus and in the purpose of applying the elaborated process. The quality of these methods and their results are influenced by several aspects such as: a) selection of participants (e.g. number, level of homogeneity); b) form of presentation of information (example: level of evidence); c) interaction structure (e.g. number of rounds of questionnaires or meetings, correspondence, anonymity or face-to-face); d) method for synthesizing individual judgments (e.g. definition of agreement); e) set of tasks (e.g. item valuation indices) (Campbell et al., 2003).

7.3 Study Limitations

Even though we tried to systematize our search, this paper is intended to be a literature review and not a systematic review per se. There are several other professional and clinical guidelines in different countries that did not comply with the inclusion criteria, or that we could have retrieved through grey literature, that can be important to understand competences in different countries and realities. There was a high heterogeneity in how competences were described between studies, and so it was difficult to aggregate and present resumed data.

Nevertheless, we have not included all the papers published, we believe we have collected some important documents regarding competences for health professionals working with older people. We

focused on reviews, guidelines and reference papers because the purpose was to identify the current competences for health professionals that work with older people.

Competency frameworks are developed for a variety of purposes, including describing professional practice and informing education and assessment frameworks. Despite the volume of frameworks developed in the healthcare professions, and the increasing move toward competency-based education some models offers developers a structure by which to identify the competences required to enact competent healthcare professional practice (Batt et al., 2021). We built our framework on core competences based on the CanMEDS model, once it was the model usage in the main two papers on competences identified. Palermo et al., (2022) identify that several models have been described in literature and can be used as reference (Palermo et al., 2022).

To improve and validate our initial framework we used a focus group methodology; Other methods and strategies can be used in this process; no clear guidance exists for which is the the best method to explores, discuss and develop contents in these field (Batt et al., 2021).

8. Conclusion

SL is considered one of the fastest-aging countries in the South Asia region, as the growth of the older population is nearly double compared to other countries in the region. Population aging has a significant impact on economic, social and health systems in Sri Lanka. Health care professionals' competences in this area are essential to answer these challenges. But these challenges stem from the unique needs and vulnerabilities of the aging population, as well as health care system specificities and availability.

Physiotherapy and nursing professionals, academics and students need to progressively adapt to this new reality. By incorporating these competences in HEIs curriculum and mapping competences in specific course for physiotherapy and nursing (part of the other working packages of CAPAGE project) that will allow to update and improve knowledge, know-how, skills and mainly the conceptual approach in care and management of older adults in SL.

This framework on competences that arise from this document will serve as a basis to enrich the curricula at the 6 CAPAGE partner SL Universities with the co-creation of new competence-based courses on older adult's care and healthy aging for physiotherapist and nurses, promoting academic and professional excellence in health care in SL.

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Appendix I

THE INITIAL FRAMEWORK WITH CORE COMPETENCES FOR NURSES AND PHYSIOTHERAPISTS WORKING WITH OLDER ADULTS IN SL.

Competences	Expert/Leader	Communicator	Collaborator	Organizer	Health and welfare advocate	Scholar	Professional
<p>General Competences for Physiotherapists and Nurses in older adults health care</p>	<p>Be able to “lead” and be responsible for the process of health care of the older adult.</p> <p>Participate in the process of assessment/evaluation, analysis, diagnosis, intervention and re-assessment of the older adult.</p> <p>Use valid and updated tool, instruments, outcome measures and records during all the health care process.</p> <p>Have the best and updated knowledge and skills on physiological and pathological changes in the older adults and the specific care skills in prevention, treatment, care and rehabilitation of age-related conditions.</p>	<p>Be able to communicate with the different intervenients of the health care (older adult, family, caregivers, other professionals, stakeholders)</p> <p>Use effective communication, with empathy and active-listening strategies.</p> <p>Apply a patient-centered-practice and establish proper therapeutic relations, with older adult empowerment and coaching.</p> <p>Have the best and updated knowledge and skills on specific communication aspects with older adults regarding their specific needs and specificities.</p>	<p>Be able to establish effective collaboration with the different intervenients of the health care (older adult, family, caregivers, other professionals, stakeholders)</p> <p>Use integral collaboration, involving the older adult in the decision-making process, respecting their preferences, needs and values.</p> <p>Interprofessional team collaboration, within integrated service care.</p> <p>Have the best and updated knowledge and skills on interprofessional competences and possibilities of collaboration and cooperation between all professionals involved in health care of older adults.</p>	<p>Be able to plan and coordinate the process of health care of the older adult.</p> <p>Understand the national, regional, local and organization levels of the health care for older adult.</p> <p>Ensure the quality management and continuous improvement of health care.</p> <p>Have the best and updated knowledge and skills on the coordination care, guidelines and possibilities different health care settings according to the older adults’ needs (e.g. community management, home care, hospital care).</p>	<p>Be able to act on health promotion and well-being of the older adults, promoting healthy aging and longevity of populations.</p> <p>Act on disease prevention in a patient-centered approach.</p> <p>Optimize older adults’ health, promoting their independence, function and quality of life.</p> <p>Have the best and updated knowledge and skills on healthy aging, understanding major health determinants and how to positive influence them in the different stages of life (e.g. Early aging, palliative care, end-of-life care).</p>	<p>Be updated to recent research, evidence, guidelines and best practices in aging care.</p> <p>Health care based on evidence-based practice according to the best evidence available.</p> <p>Engage and participate in academic, research and community activities in older adult’s care.</p> <p>Have the commitment for lifelong learning and continuous professional enhancement and development, allowing the best and updated knowledge and skills in health care of the older adult.</p>	<p>Use the best practices available on the field of older adults care, including the ethical standards.</p> <p>Health care based on evidence-based practice, but also patient-centered care.</p> <p>Respect older adults dignity and autonomy, understanding their preferences, needs and values.</p> <p>Have the best and updated knowledge and skills to recognize and respond to physical, psychological, social and spiritual needs of the older person.</p>

Appendix II

Focus Group Confirmation Letter

August __, 2024

Dear _____,

Thank you for your willingness to participate in this focus group. We would like to hear your ideas and opinions about the competences for Health Care (HC) professionals, and the best practices to work with older adults. For your reflexion we would like you to read the needs analysis and literature review, documents, that that have been the basis for preparing the draft on core competences, to be discussed in the focus group

For this purpose you will be in a group with others nurses and physiotherapists, professionals or education experts inin older adults' care.

You are receiving 3 documents for previous lecture; please it is very important, if you could prepare your participation. All the responses and reflexions will be kept anonymous.

The date, time, link to access the free informed consent for participation and for socio-demographic data collection are:

Date: __/__/__

Time: __: __

Link to free informed consent for participation and for socio-demographic data collection:

If you need some more informations or if you are not able to attend for any reason, please send us an e-mail: cristiane.silva@santamariasaude.pt

Sincerely,

Members of Capage Project

Appendix III

Informed Consent

(<https://forms.gle/FXcboqechdaLBJtH9>)

Information and consent form for participation in a focus group

“Focus Group on Core Competences for Physiotherapists and Nurses Working with Older adults in Sri Lanka”

Dear participant,

Your participation in the focus group is voluntary. You can withdraw from the survey at any time without giving any reason. Refusal to participate or early withdrawal from this survey will not have any adverse consequences for you.

Please only sign the consent form

- if you fully understand the nature and procedure of the survey,
 - if you are willing to consent to participate,
 - and you are aware of your rights as a participant in this study.
- are clear.

The following information will describe you all the details about this focus group.

1. Information on the project

This focus group is part of the second working package of the CAPAGE project: Promoting academic and professional excellence in health care to meet the challenges of aging in Sri Lanka (SL).

Through the project objectives, academic and professional education will be enriched in different HC settings with innovative health and aging contents; an educational and scientific network on aging will be developed; research and internationalization in academic staff and students will be promoted; awareness will be raised on active aging among older citizens. Improved knowledge and academic excellence will in turn enhance quality of care and promote longer healthy life in the country.

2. What is the purpose of this specific project task?

The Core Competence Framework for Physiotherapists and Nurses, working with older adults in SL will developed based on the needs analysis and literature review report previously carried out. This Core Competence Framework will serve as a roadmap for developing academic courses for students and training for Physiotherapists and Nurses and will promote shared

understanding of HC professional competences between EU and SL experts, with emphasis on interdisciplinarity. Through collaborative international and interdisciplinary work, knowledge and research skills of the partner members will be enhanced.

3. How does the project proceed?

We will send previous support documents for reading (Needs Analysis, Literature Review and a Framework draft on Core Competence for Physiotherapists and Nurses Draft) and a draft of a questionnaire will be sent to the experts together these documents. The participants are asked to read and reflect on those documents, to provide a basis for discussion in the focus group. The questions previously prepared by the researchers are divided between:

- i. Questions Based on the Literature Review Document - Regarding the attributes and the characteristics of each competence described.
- ii. Questions Based on the Need Analysis Document - factors that can facility and/or difficult the higher education institutions for the development of these competences described for HCP working with older persons in SL; and what are the current external opportunities and/or what are the current external threats to the development of the competences for HCP working with older persons in SL.
- iii. Questions on the adequacy of the competences defined for the CAPAGE project.

The focus group will be held during Porto Face-to-face Meeting (in Tuesday 1st October 2024) and recorded locally. Participation in the focus group will take approximately 1-2 hours.

4. What is measured in the project?

This focus group will validate the Core Competence Framework for Physiotherapists and Nurses working with older adults in SL. Questions will be asked about this content. Asking for suggestions for improvement is an important part of the discussion.

For easier analysis, recordings are made during the focus group using screencast software. This is software that allows the screen and the audio recording to be filmed and saved locally. No reference to your name will be made in the recordings. They are only used to facilitate and more accurately evaluate the study. They will be used exclusively for this project. We reserve the right to share these recordings with staff involved in other parts of the project in an anonymised form.

5. Personal data

Personal data is anonymised and is only accessible to staff members of this project. All staff members have the duty of confidentiality. If the results of the project are published in studies and reports, it will not be possible to draw conclusions about your person at any time.

6. What is the benefit of participating in the project?

You could make an important contribution to the development of competences of health care professionals (physiotherapy and nursing) working with older persons in SL .

7. Are there any possible risks and/or complaints?

There are no known risks or occurring complaints.

8. Costs

No costs are incurred by taking part in the investigation.

9. Contact persons

If there are still any questions after the investigation has been completed, or if you wish to withdraw your consent subsequently, please contact the person responsible at your school:

Escola Superior de Saúde de Santa Maria: Cristiane Pavanello Rodrigues Silva - cristiane.silva@santamariasaude.pt

Escola Superior de Saúde de Santa Maria: Duarte Rafael Sampaio Pereira – duarte.pereira@santamariasaude.pt

Informed Consent

I agree to participate in the “Focus Group on Core Competences for Physiotherapists and Nurses Working with Older adults in Sri Lanka”.

I have been informed in detail and in a comprehensible manner about the conduct of the project, possible burdens and risks, as well as about the nature, significance and implications.

I have also read previous support documents (Needs Analysis, Literature Review and Framework draft on Core Competence for Physiotherapists and Nurses). Any questions that arose were answered in a comprehensible and sufficient manner by those carrying out the study. I have had sufficient time to make up my mind and currently have no further questions.

I will follow the instructions necessary for the conduct of the examination, but I reserve the right to terminate my voluntary participation at any time without incurring any disadvantages.

After having been informed about the use and processing of the collected data, I give my express consent that my personal data may be processed by the investigators of the “CAPAGE project. The Data Protection Regulation Standards will be fulfilled when handling the data.

Consent to participate in the focus group	
<input type="checkbox"/>	I agree to participate in the focus group and authorize the use of data collected.
<input type="checkbox"/>	I do not agree to participate in the focus group and authorize the use of data collected.

Appendix IV

Use and processing of the collected data

1. Voluntariness, withdrawal and further rights

The processing of your data is also based on your express voluntary consent under data protection law in the sense of your voluntary participation in the interview study. There is no legal or contractual obligation to provide your data. If you do not consent to this processing, this will not have any adverse consequences for you. You can revoke your consent at any time and without giving reasons by sending an e-mail (contacts see page 4). The revocation also has no adverse consequences for you. The revocation does not affect the lawfulness of the processing carried out up to that point.

In addition to the right of withdrawal, you also have the right of:

- Right to information about the personal data concerning me,
- the right to rectification or deletion or to restriction of the processing of my data
- the right to data portability,

which lies with the data protection officer of the respective School, Escola Superior de Saúde de Santa Maria, Travessa Antero Quental nº 173/175, <https://www.santamariasaude.pt/politica-de-privacidade/>, canaldenuncias@ppfmns.pt.

All rights do not apply insofar as this is likely to render impossible or seriously impair the achievement of purposes pursuant to Article 89(1) of the General Data Protection Regulation (archiving purposes, scientific or historical research purposes and statistical purposes). Data may need to be further processed to demonstrate compliance with guidelines to ensure good scientific practice even after a revocation. We will inform you of this if the occasion arises. For the planned storage period, see 6.

2. Purpose of this project?

The Core Competence Framework for HC, Physiotherapists and Nurses, working with older adults in SL was developed based on the needs analysis and literature review report previously carried out. This Core Competence Framework will serve as a roadmap for developing academic courses for students and training for Physiotherapists and Nurses and will promote shared understanding of HC professional competences between EU and SL experts, with emphasis on interdisciplinarity. Through collaborative international and interdisciplinary work, knowledge and research skills of the partner members will be enhanced.

3. Data categories

Before you take part in the project, we will ask you for your name. A code will then be generated and assigned to your person. Name and code are not recorded together in any document (exception: consent form - see below). Thus, after the code has been assigned, no connection can be made between the data collected in the interview survey and the participating person. We request your consent under data protection law regarding the processing of your social demographic data.

As part of this consent, you will provide us with your name again for identification purposes. These data will be stored separately and securely with the assignment to the pseudo code

4. Privacy concept

Data collection and processing is pseudonymised (encrypted). You will be assigned a code for this purpose. The data is not recorded by name but is linked exclusively to your code. This ensures that the data in the processing cannot be directly assigned to a person. Only CAPAGE project staff have access to the confidential data. They are subject to a duty of confidentiality and are obliged to comply with the guidelines of the General Data Protection Regulation. Only anonymous data will be published.

5. Recipients of data

The transfer of your personal data to third parties, universities not involved in the project, is not planned.

6. Retention of data

All relevant documents will be deleted by October 2036 at the latest in accordance with the guidelines of good clinical practice, which guarantee a qualitative study conduct (10-year retention period, starting with the end of the study). The remaining data are only available in anonymised and aggregated form.

Appendix V

Social Demographic Data Questionnaire

(<https://forms.gle/FXcboqechdaLBJtH9>)

***Indicates a mandatory question**

Section 1: General demographic Information

Gender: *

Male

Female

Age* _____

Background/Professional/Academic area: *

Physiotherapy

Nursing

Current working/division:* _____

Current position/Title: *

Academic Staff Member

HC Professional

Section 2: Professional and Education related information

Highest level of education: *

Diploma

Bachelor's degree

Master's degree

Doctorate

Post-doctorate

Outro: _____

Area/ Field of specialization:* _____

Current position/Title: * _____

Years of experience in older adults' care: * _____

Appendix VI

Focus Group on core competences for physiotherapists and nurses working with older adults in Sri Lanka Practical Guide

Focus group date:

Moderator:

Facilitators:

Participants:

1. Presentation:

- a. Each participant as well as the moderator and facilitators introduce themselves.

2. Objectives:

- a. The moderator describes to the main objective of the focus group;
- b. The moderator explains the dynamics of the work and reinforces the ethical aspects.

3. Guiding Questions Based on the Literature Review document.

a. Regarding the attributes of the competences described:

- i. **Attributable:** Do the described competences reflect or describes essential aspects for health care professionals (HCP) that work with older people in Sri Lanka (SL)?
- ii. **Contextualizable:** can the competences described be contextualized and/or adjusted to the professional activities of HCP working with older adults in SL, in the different types of existing services (e.g., hospital/clinical settings, specialized services, public/private institutions, local/regional differences)
- iii. **Feasible:** Can the described competences be acquired both in its theoretical and practical components by HCP working with older people in SL?
- iv. **Objective:** Do the described competences be evaluated/assessed allowing a clear measurement action, through all the process, without

subjective judgments, through an observation of the practice of HCP working with older persons in SL?

b. Regarding the characteristics of each competence described:

- i. **Behavioral:** allows clear and precise evaluation action;
- ii. **Objectivity and Simplicity:** expresses a single idea, without the possibility of other interpretations;
- iii. **Clarity:** it is intelligible, uses concise sentences, with simple and unambiguous expressions;
- iv. **Pertinence, saturation, one-dimensionality, or correspondence:** it does not imply attributes other than those defined;
- v. **Precision:** each competency is distinct from the other components that compose the framework;
- vi. **Variety and Comprehensiveness:** terms used specify each competency, that is, they are not confused with the others or do not give the idea of repetition;
- vii. **Credibility:** it is described in such a way that it does not seem mischaracterized or unreasonable in relation to the health professionals involved (nurses and physiotherapists).

4. Guiding Questions based on the need analysis document:

- a. What are the facilitating factors of higher education institutions for the development of these competences described for HCP working with older persons in SL?
- b. What are the factors that can difficult the higher education institutions for the development of the competences for HCP working with older persons in SL
- c. What are the current external opportunities (policies, resources, etc.) for developing the competences for HCP working with older persons in SL
- d. What are the current external threats (policies, resources, etc.) to the development of the competences for HCP working with older persons in SL?

5. Guiding Questions on the adequacy of the competences defined for the CAPAGE project

- a. Can this competence framework serve as a roadmap for developing academic courses for students and training for HCP, updating and equalizing the knowledge of HCP working with older adults in SL?

6. Ending:

- a. The moderator gives an overview of the discussions;
- b. The moderator gives the final considerations and asks the participants the approval for these conclusions
- c. Ends the session, presenting next steps and tasks of the working package.

Appendix VII

**Need analysis online survey:
Competency Assessment for Physiotherapy and Nursing
Professionals Working with Older Adults**

Introduction:

Thank you for participating in this survey. Your feedback will help us to understand the competencies of physiotherapy and nursing professionals working with the elderly. Please respond honestly and to the best of your ability. Your responses will remain confidential.

This need analysis online survey is a part of the CAPAGE project "Promoting academic and professional excellence in health care to meet the challenges of aging in Sri Lanka". The main goal is to enhance professional competencies of health care providers in Sri Lanka, working with older adults through a coordinated interdisciplinary approach, in line with EU standards, national health priorities and in collaboration with academics, health care professionals, students, clients, researchers and (non)governmental organizations.

Questions marked with "*" are mandatory.

1. The above-mentioned research study is intended to assess the core competencies on elderly care among physiotherapist, nurses, and the students of the respective fields, through an online questionnaire. *

It is assured that all data regarding the identification of the study participants is confidential and that anonymity will be maintained.

By participating in this survey, you declare that you have read and understood this document, as well as the information provided. It is assured that you can refuse to participate in this study at any time without any kind of consequences.

If you want any clarification about this study, please contact the researcher Duarte Pereira by email: duarte.pereira@santamariasauade.pt.

*Please select only one option. **

- I agree to participate in this study and authorize the use of the data that I voluntarily provide.
- I do not agree to participate in this study and do not authorize the use of my data.

Section 1: General demographic Information

2. Gender: *

Select only one option.

Male

Female

3. Age *

4. Background/Professional/Academic area: *

Select only one option.

Physiotherapy

Nursing

5. Current working/study place/division: *

6. Current position/Title: *

Select only one option.

Academic Staff Member

Undergraduate Student (final year student) *Move to question 21.*

Healthcare Professional

Section 2: Professional and Education related information

7. Highest level of education: *

Select only one option.

Diploma

Bachelor's degree

Master's degree

Doctorate

Post-doctorate

Other: _____

8. Area/ Field of specialization: *

9. Current position/Title: *

10. Years of experience in area/field of specialization: *

Select only one option.

- Less than 1 year
- 1 ≥ 3 years
- 3 ≥ 6 years
- 6 ≥ 10 years
- More than 10 years

11. Years of experience in older people care: *

Select only one option.

- None
- Occasionally
- Less than 1 year
- 1 to 3 years
- 3 to 6 years
- 6 to 10 years
- More than 10 years
- Other: _____

Section 3: Competence in Clinical Skills

12. How proficient are you in assessing mobility issues in older adults? *

Select only one option.

- Very proficient
- Proficient
- Somewhat proficient
- Not proficient
- Not Applicable



13. Rate your ability to develop individualized treatment plans for older adults based on their physical condition and needs. *

Select only one option.

- Excellent
- Good
- Fair
- Poor
- Not Applicable

14. How confident are you in managing chronic pain in older adults? *

Select only one option.

- Very confident
- Confident
- Somewhat confident
- Not confident
- Not Applicable

15. How confident are you in differentiating changes in normal physiological aging and pathological aging in older adults? *

Select only one option.

- Very confident
- Confident
- Somewhat confident
- Not confident
- Not Applicable

Section 4: Communication Skills

16. How effectively do you communicate with older adults to understand their healthcare goals and preferences? *

Select only one option.

- Very effectively
- Effectively
- Somewhat Effectively
- Not effectively
- Not Applicable

17. Rate your ability to communicate complex medical information to older adults and their families clearly and understandably.

Select only one option.

- Excellent
- Good
- Fair
- Poor
- Not Applicable

18. Rate your ability to demonstrate interpersonal communication skills that result in effective information transfer among multidisciplinary team members. *

Select only one option.

- Excellent
- Good
- Fair
- Poor
- Not Applicable

Section 5: Empathy and Patient-Centered Care

19. How do you demonstrate empathy towards older adults during their care? *
- Select all that apply.

- Active listening

- Compassionate communication
- Respect for their dignity and autonomy
- Providing emotional support
- Other: _____

20. How often do you involve older adults in decision-making regarding their treatment and care? *

Select only one option.

- Always
- Often
- Sometimes
- Rarely
- Never
- Not Applicable

Section 6: Training and Professional Development

21. Have you received any training specific to elderly care during your educational or professional career? *

Select only one option.

- Yes
- No *Move to question 25.*

22. If yes, please rate the effectiveness of the training program(s): *

Select only one option.

- Very Effective
- Effective
- Neutral
- Ineffective
- Very Ineffective



23. How frequently do you engage in continuing education or professional development activities related to older adults' care? *

Select only one option.

- Monthly
- Quarterly
- Annually
- Rarely
- Never
- Other: _____

24. Rate the importance of staying updated with current research and best practices in geriatric care for your professional development. *

Select only one option.

- Extremely important
- Important
- Somewhat important
- Not important
- Not Applicable

Section 7: Understanding of Competencies required to elderly care

25. How would you rate your current understanding of core competencies required for healthcare professionals working with older adults? *

Select only one option.

- Excellent
- Good
- Fair
- Poor
- Not Applicable



26. Please select the core competencies you believe are essential for healthcare professionals working with older adults: (select all that apply) *

- Perform a comprehensive, efficient, and proper geriatric assessment
- Ability to establish care plan to promote healthy aging
- Multidisciplinary team collaboration
- Communication with elderly patients and their families
- Managing chronic conditions in elderly patients
- Palliative care and end-of-life support
- Preventive healthcare for the elderly
- Ethical considerations in elderly care
- Encourage individual, families and stakeholders regarding healthy aging
- Apply evidence-based practice in caring for the elderly
- Engage in continuing professional development activities to promote healthy aging
- Carry-out research in the field of healthy aging
- Other: _____

27. What additional training or development opportunities would you like to see offered for healthcare professionals working with older adults?

Section 8: Challenges and Opportunities

28. In your opinion, what are the challenges healthcare professional faces when working with older adults? Select all that apply. *

- Communication barriers
- Ethical dilemma
- Financial constraints
- Cultural sensitivity
- Lack of policies
- Other: _____

29. How can Higher Education Institutions (HEIs) better prepare healthcare professionals for working effectively with older adults? (Select all that apply) *

- Geriatric Education Integration
- Interprofessional Education
- Simulation-Based Training/Pratice
- Evidence-Based Practice
- Communication Skills Training
- Technology Integration
- Continuing Education and Lifelong Learning
- Other: _____

30. Additional Comments:

Please provide any additional comments or suggestions regarding competencies in physiotherapy and nursing professionals working with older adults.

Conclusion:

Thank you for completing the survey. Your input is valuable and will allow gathering comprehensive feedback from academic staff, undergraduate students, and healthcare professionals regarding their perspectives on core competencies.
