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- To understand the important aspects of competency frameworks for nurses
- To learn about a project to develop and evaluate a gerontological competency framework for early career nurses
- To recognise the potential benefits of competency frameworks in supporting post-registration nurse education

Developing a competency framework for early career nurses undertaking post-registration education in care for older people

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Abstract

Background Within gerontological nursing as a postgraduate nursing specialty, there is a lack of consensus regarding the standardised competencies and education development required, particularly in the UK.

Aim To develop and evaluate a competency framework for early career nurses undertaking post-registration education in a UK university in care for older people living with frailty.

Method The competency framework was developed as part of a broader gerontological education-career pathway intervention to improve competence and retention among early career nurses. A four-step process was used to develop the framework guided by a consensus building approach. A mixed-methods approach to the evaluation was adopted, with an online survey, one-to-one interviews and focus group interviews with students and organisational stakeholders.

Findings A total of 33 students completed the competency framework as part of an academic module, 30 of whom took part in the evaluation. There was consensus among interviewees that the competencies confirmed 'what they knew already' and identified areas they needed to develop. Survey respondents reported that the competency framework was a useful part of the education-career pathway.

Conclusion The competency framework was acceptable to students and feasible to complete. It also enabled students to appreciate the unique knowledge and skills that underpin gerontological nursing and to evidence their expertise using a structured approach.

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Keywords

career development, competence, competency framework, frailty, gerontology, older people, practice development, professional, professional development, professional issues, workforce

Background

Gerontological nursing is one of the fastest growing specialties due to shifts in population demographics. United Nations Department of Economic and Social Affairs (2019) data have indicated that one in six people in the world will be over the age of 65 years by 2050, an increase from one in 11 people aged over 65 years in 2019. Older people are one of the most heterogeneous population groups and capturing the essential attributes of gerontological nursing is challenging.

To prepare nurses who are new to the specialty, it is important to identify core competencies for their professional development.

The Nursing and Midwifery Council (NMC) (2010) has defined competence as 'the combination of skills, knowledge and attitudes, values and technical abilities that underpin safe and effective nursing practice and interventions'. The competency framework described in this article originated from the development of a 'proof of concept' intervention, the education-career pathway in care for older people for early career nurses (ECHO) (Naughton et al 2020). The ECHO intervention was originally developed for acute and community older adult services, then adapted for the nursing home sector under the title programme for education and careers for care home nurses (PEACH). The ECHO/PEACH pathway was created as a pan-London approach to the development of career pathways in care for older people, with the education component consisting of a bespoke university-based gerontological module (15 academic credits, level 7). The competency framework was developed for the ECHO/PEACH pathway to support application of theory to practice.

The competency framework was assessed in clinical practice by the student's clinical mentor on a pass or fail basis and integrated into a reflective portfolio that was submitted to the university alongside a case study report for the module final assessment. Students were expected to spend five days – 37.5 hours based on a 7.5 hour working day – on clinical visits outside their normal clinical setting, for example with a hospital at home service or emergency department frailty intervention team, and to complete reflective narratives of these supplemental learning opportunities. They were also encouraged to seek feedback from an older person or carer in their usual clinical service and include this in their portfolio.

The aim of the education module and the competency framework was to reflect and connect the values, theoretical knowledge and clinical skills required by nurses at post-preceptorship stage, to identify core gerontological nursing skills relevant to a wide range of older adult services and to link these with the interprofessional comprehensive geriatric assessment (CGA) model (British Geriatrics Society (BGS) 2014). The CGA is a multidimensional, multidisciplinary diagnostic and therapeutic process conducted across five domains – physical, psychological, functional, social and environmental – to determine modifiable issues and preferences of older people living with frailty to develop a coordinated and integrated plan for treatment and follow-up care (Ellis et al 2017, BGS 2019). The education module learning outcomes and the competency framework were structured around the CGA domains (Naughton et al 2016).

This article describes the development and evaluation of the bespoke competency framework for early career nurses across a range of clinical settings for older people.

Gerontological nursing competency frameworks

UK frameworks

Gerontological nursing is recognised nationally and internationally as a postgraduate nursing specialty. However, there is a lack of consensus on standardised competencies and education development, particularly in the UK. The NMC (2018) standards of proficiency for registered nurses apply across all fields of nursing practice and all care settings, but there is no national certification in gerontological nursing and the NMC has not endorsed curricula at post-registration level. This contrasts with countries such as the US, where there has been substantial development of competencies in care of the older person, leading to certification in gerontological nursing (American Association of Colleges of Nursing and Hartford Institute for Geriatric Nursing 2010).

In the UK, there have been several attempts to progress the specialty over the last ten years. For example, Pearson et al (2015) developed a National Career Framework for Nurses for Older People with Complex Needs in England. The framework provides prompts to enable nurses to identify their learning needs but does not articulate specific competencies related to their level of expertise.

As part of a programme to prepare advanced nurse practitioners in gerontological nursing, Goldberg et al (2016) developed a framework consisting of 49 essential competencies. Similarly, Stanyon et al (2017) identified 22 competencies specifically for care home nurses which describe the unique needs of older people in this setting. The competency areas broadly cover items such as practical clinical skills, management and leadership, quality improvement and team working.

International frameworks

Globally, there are concerns about the preparedness of the health and social care workforce, including nurses, to provide

age-attuned care, which has resulted in a growing number of articles identifying the need to articulate and appraise gerontological competencies (Stanley and Alesandrini 2004, Bing-Jonsson et al 2015, Karlstedt et al 2015, Goldberg et al 2016, Boscart et al 2017, Dijkman et al 2017, Stanyon et al 2017, Kiljunen et al 2018, Chen et al 2019).

In a European context, a collaboration involving 17 countries produced the European Core Competences Framework for Health and Social Care Professionals Working with Older People (Dijkman et al 2017). The framework describes seven roles and competences, expert (focused on physical care), communicator, collaborator, organiser, health and welfare advocate, scholar and professional. Meanwhile, in the context of care homes, Kiljunen et al (2018) focused on a range of skills and tasks that described competencies under four main themes: practice, skills, attitudes and ethics.

In the US, work supported by the Hartford Institute and the Nurses Improving Care for Healthsystem Elders programme developed a framework for gerontological nurse competence that identified 27 domains focusing on physical, mental and functional health, common geriatric conditions, carers, coordinating care, interprofessional working and education (Stanley and Alesandrini 2004).

Developing the competency framework

Competency assessment should be reliable and valid for the population and the healthcare system context in which it is applied. There is also a need to develop a competency framework in line with the prevailing multidisciplinary model of care for older people to ensure a common language and shared multidisciplinary goals, which in the UK context is the CGA (BGS 2014). The principles underpinning the development of this competency framework were:

- Recognise the individuality of older people.
- Valid for a population of early career nurses – defined as within 5-7 years of nurse registration.
- Applicable across diverse care settings, including acute care, mental health, community and care homes.
- Structured using the CGA framework.
- Relevant to the UK healthcare system.

While published competency frameworks (Goldberg et al 2016, Boscart et al 2017, Dijkman et al 2017, Chen et al 2019) informed the development of this gerontological competency framework for early career nurses, none met the principles outlined above. Therefore, a four-step process was used to develop the framework, guided by a consensus-building approach (Halcomb et al 2008).

Step 1: review of existing frameworks

The review of the national and internationally developed frameworks referred to previously identified the following core domains regarding the knowledge and skills required for competence in nursing older people:

- Health promotion and disease prevention.
- Ethics and culture.
- Understanding the ageing process and application to patient assessment.
- Pharmacological, mental status, functional and environmental risk factors.
- Recognition and management of common signs and symptoms and syndromes.
- Optimising function.
- End of life care.
- Interprofessional working.
- Working with carers and families.

These core domains were integrated with the CGA model and organised into ten competency domains, with clinical leadership included as an essential attribute of successful interdisciplinary working and older adult advocacy. Competency statements, which were adapted from the literature and appropriate to gerontological practice for early career nurses, were also developed. The competency statements are not situation specific to provide flexibility for students when identifying their personal learning goals in caring for older adults in their service. Initially 80 competency statements were formulated and later reduced to 69. Table 1 outlines the module learning outcomes and competency domains and includes examples of competency statements.

The education module learning outcomes and content reflect the ten domains. The module was delivered using a flipped learning classroom model (Bergmann and Sams 2014), combining six face-to-face study days over six months with online learning, clinical visits and mentorship in practice. As students progressed through the theoretical knowledge underpinning each domain, the in-class workshops provided opportunities for shared learning, case study presentation and reflection on application of CGA in practice.

Step 2: face and content validity testing

Face and content validity testing of the competency framework were conducted at local and national level, engaging expert groups and stakeholders in co-production workshops. In the first instance, a co-production workshop was held with a local

expert group of ten senior hospital-based nurses from clinical practice and education practice development, who agreed that the structure and domains were valid. Minor areas for clarification were identified in three domains and competency statements.

In a second workshop with private and public care home manager stakeholders, there was consensus that the competencies were valid for caring for older people in nursing and residential care.

Finally, there was universal agreement on the face validity of the domains for acute, community and long-term care settings. This means that the experts and stakeholders agreed that the competencies reflected accurately what early career nurses can be expected to demonstrate in practice.

Step 3: review of draft competencies

The draft competencies were reviewed at a workshop and by email by 14 members of the BGS Nurse and Allied Health Professions Special Interest Group (now replaced by the BGS Nurse and Allied Health Professional Council). This resulted in further minor adjustments and clarifications, including recognition of carers' diverse needs, and resulted in the final list of 69 competency statements.

Step 4: application in practice

Students sought a clinical mentor – usually a ward manager or practice development nurse – to support their completion of the competency framework and demonstrated achievement through written narratives and

Table 1. Module learning outcomes and competency domains

Fundamental Knowledge and Skills in Older Person's Care	Module aim: to provide nurses with the fundamental knowledge and skills to provide evidence-based high-quality care to older people and their families. Module learning is based on a comprehensive geriatric assessment (CGA) and management model that considers the physical, psychological, functional, social and environmental dimensions to health and their application to practice under ten domains		
Module learning outcomes	**Domain**	**Number of competency statements**	**Example of competency statements**
Critically analyse contemporary models of clinical assessment and management of complex health and social care needs in older adults, including identification of frailty and application of CGA	Clinical leadership	7	» Promotes positive cultures of care in care settings which serve older people with complex needs » Addresses diversity, stigma and prejudice – including ageism
Integrate current knowledge to assess and manage physical, functional, psychological and mental health alongside social and environmental challenges faced by older people across diverse care settings	Interprofessional working	5	» Demonstrates effective collaboration, influencing and negotiation skills within the nursing and multidisciplinary teams
	Recognition of frailty and application of CGA	8	» Identifies and responds to indications of frailty using valid and reliable tools
Analyse and apply strategies to integrate an older person's and the family's priorities and preferences into care planning, to include support and well-being of carers	Patient involvement and choice	8	» Skilfully communicates with patients, their relatives and carers
	Caring for carers	5	» Effectively signposts carers to sources of support and help
Identify and critically discuss a range of strategies for health optimisation, self-management and wellness promotion for older adults	Health and wellness promotion	10	» Works collaboratively with the older person to identify person-centred reablement and rehabilitation goals
Demonstrate clinical competencies across the range of CGA domains required to support older adults living with frailty and or dementia	Medicines management	6	» Understands the challenges of polypharmacy for the older person and recognises common high-risk medication
	Mental health and psychological needs	8	» Assesses cognition using valid and reliable tools
	Physical function in daily activity	4	» Implements and monitors strategies to prevent risk and promote safety, including falls risk, medication management, skin care and pressure ulcer prevention
	End of life care	8	» Demonstrates confidence to undertake sensitive conversations regarding end of life priorities and preferences with patients and family

discussions with their mentor. It was expected that students and their mentors would meet on three or four occasions over the six-month duration of the module. Individual competency statements could also be signed by allied health professionals or specialist nurses, for example clinical nurse specialists in palliative care.

Competency framework evaluation

Aim

To evaluate a competency framework for early career nurses undertaking post-registration education in a UK university in care for older people living with frailty.

Method

The evaluations took place between June 2018 and May 2019. A mixed-methods approach was used involving online surveys, one-to-one interviews and focus group interviews with students, mentors, ward managers and care home managers. Only the evaluation data specific to the competency framework are reported in this article. A bespoke survey was designed, as part of the evaluation of the competency framework, students' contact with mentors and supplemental learning days, based on a five-point Likert scale (1=strongly disagree to 5=strongly agree). Focus group interviews with students were held and recorded on the final module study day, while one-to-one interviews were conducted with mentors and ward managers following completion of the module. Descriptive thematic analysis as described by Braun and Clarke (2006) was used to identify themes.

Ethical considerations

Ethical approval was obtained from the university ethics committee (Ref LRS-16/17-4675). Written consent was obtained from participants for publication of data from surveys and interviews.

Findings

A summary of the profile of students and organisational stakeholders is shown in Table 2.

Completion of competency portfolio

Of the 46 students recruited to the ECHO and PEACH interventions, 33 submitted and passed the competency portfolio (ECHO *n*=23, PEACH *n*=10) and 30 participated in the evaluation (ECHO *n*=23, PEACH *n*=7). When reviewing the portfolios, it was found that nine out of the ten domains were completed. The exception was the end of life domain which students working in community or specialist acute hospital teams did not have the opportunity to complete.

There was variation in the degree to which students' reflective narratives and mentor comments were completed, but where portfolios were completed adequately, mentors affirmed the student's progress over the six months. Their comments included the following:

'[Name] demonstrates a passion for the care of older people.'

'[Name] has grown in confidence and demonstrated strong clinical leadership.'

Survey data

Of the 30 students who participated in the evaluation, 27 completed the survey (ECHO *n*=23, PEACH *n*=4). Table 3 shows students' survey responses, reported in median values and interquartile range. Students' responses showed that they found the competency framework useful, that it aligned well with the theoretical module and that it helped to bridge the gap between theory and practice. In general, students found the competency statements easy to understand, but noted there was some duplication that could be reduced and identified the need for mentor preparation.

Focus group interviews

Of the 30 students who participated in the evaluation, 28 took part in focus group interviews. There was one PEACH focus group (focus group 1, *n*=7) and two ECHO focus groups (focus group 2, *n*=10, focus group 3, *n*=11). The focus group data confirmed findings from the survey data, in that the competency framework was acceptable to the students and there was consensus that the competencies confirmed 'what they knew already' and identified areas they needed to develop. For example, one student commented:

'I realised that some of those competencies were things that I should have been doing as a nurse which I didn't realise I was not doing. So, for me it's really an eye opener for me, some of the competencies.' (PEACH student, focus group 1)

The themes generated from the data collected during the focus group interviews were organised under two broad headings - benefits and challenges. There were three subthemes under benefits, unique knowledge, affirmation and expanded insights.

Benefits

Unique knowledge

The competency statements enabled students to recognise the unique gerontological knowledge

and skills associated with the specialty. They believed the competencies gave them greater legitimacy and confidence to work with other members of the multidisciplinary team and to gain a better understanding of their role within a CGA model:

'It just makes you think a little bit more about what you actually do on a day-to-day basis, you might do naturally. I think it just kind of gives you that evidence behind it and a bit more structure to it.' (ECHO student, focus group 2)

Affirmation

Students appreciated the time with and feedback from their mentors and the opportunity to demonstrate their new knowledge and progress:

'[My mentor] was really good because she also offered some support… Aside from the fact that she went through our competency book, we discussed it, she made me think, we said things that we actually do for our patients and how complex [this is] and how interesting at the same time.' (ECHO student, focus group 3)

Expanded insights

The supplemental learning opportunities were highly valued because they enabled students to gain greater insight into the patient pathway and enhanced their understanding of the possibilities in terms of a career in older adult services:

'I went to memory clinic and before I would refer people to memory clinic but actually seeing what the role is was really interesting and, because I work in a hospital… it's good to see different people's perspective and things.' (ECHO student, focus group 3)

Challenges

Table 4 shows the main challenges identified by students during the focus groups. These challenges included repetition and layout of the competency framework, logistics and mentor preparation.

Mentor evaluation

Three mentors were interviewed and their views reflected those of the students. The mentors were positive about the reflective portfolio as part of the wider intervention but said they would have liked further preparation and support. For example, one mentor commented:

'I think that [the competency framework and reflective portfolio] was good. Each of [the education-career components] complemented

Table 2. Summary of the profile of students and organisational stakeholders

	Education-career pathway in care for older people for early career nurses (ECHO)	Programme for education and careers for care home nurses (PEACH)
Number of participating organisations	8 hospital or community trusts	9 care homes
Number of nurses recruited to the programme	30	16
Number of nurses who completed the evaluation (that is, the survey and/or focus group interviews)	23 (77%)	7 (44%)
Number of years working in older adult services*	3 (interquartile range (IQR) 2-7)	4 (IQR 2-6)
Gender*	22 (96%) female	5 (71%) female
	1 (4%) male	2 (29%) male
Organisational stakeholders involved as mentors, ward managers or care home managers and their years of experience	5	2
	>10 years of experience	>10 years of experience

*Based on number of students who completed the evaluation

Table 3. Students' survey responses

Item	Median	Interquartile range
The competency framework helped me to understand the standard required in gerontological nursing	4	(3-5)
The ten domains were relevant to gerontological nursing	4	(4-5)
The statements in each domain were comprehensive and easy to understand	4	(3-4)
There were some statements that I could not understand and should be clarified	3	(2-4)
My mentor understood what was required and we found it straightforward to complete	3	(3-4)
Six/seven months was sufficient time to allow me to work through the competency framework and reflective portfolio	4	(3-4)
It was easy for me to arrange additional learning opportunities outside my clinical area to allow me to complete the competency framework and reflective portfolio	3	(2-4)
My mentor found the competency framework confusing and was not really able to support me	2	(1-3)
The competency framework was overly long with repetition of some ideas and took too long to complete	3	(3-4)
The competency framework helped me apply theory from the module to clinical practice	4	(4-4)
Overall, the competency framework is worth keeping as part of the programme	4	(3-4)

each other and brought the things, brought it together, and I think it was nice for [student] to see different practice and I think the networking within the group he really liked as well.'

Service user feedback

Indirect feedback from service users was obtained from optional entries in students' reflective portfolios. The feedback from older people focused on the students' competence and quality and was positive. For example, one service user said:

'She listened well, she provided me with great care and persuasion. Overall, she is a wonderful nurse and I wish there were more nurses like her. She made sure my medication was correct and given on time, very compassionate and understanding.'

Discussion

The competency framework, which was tested across a range of clinical older adult services, was acceptable to ECHO and PEACH students and was feasible to complete. Linking to the interprofessional CGA model and care planning for older people living with frailty resulted in a competency framework that was widely applicable to practice and enabled students to identify personal learning goals that were relevant to their practice.

Table 4. Main challenges identified by students during the focus groups

Theme	Example of education-career pathway in care for older people for early career nurses (ECHO) and programme for education and careers for care home nurses (PEACH) student feedback	Modifications following feedback
Repetition and layout of the competency framework – for example, repetition within competency statements, lack of space in the competency document for colleagues to comment	'Quite a lot of the skills are a little bit wishy-washy and a bit repetitive' (ECHO student, focus group 2)	Repetition was reduced and space was provided for other professionals to provide student feedback
Logistics – for example, identifying a mentor and finding time for placements	'I found it quite hard to get a mentor actually. I think I'm going to have to go out and seek somebody and we haven't been given any time for placements either, so I'm going to have to give up my own time to do that' (PEACH student, focus group 1)	Further information was provided to ward managers and care home managers about mentor and placement requirements
Mentor preparation – for example, challenges identifying a mentor and uncertainty about the role of mentor	'[My mentor is] a new manager and he's still learning the job. We have a lot of conversations but at the same time when I go back, he's still asking me "What am I supposed to do again?"' (ECHO student, focus group 2)	Written information and instructions for mentors were expanded

There were challenges in supporting students, for example some mentors found the competency framework and portfolio format confusing initially, indicating that the need for mentor preparation had been underestimated. Additional information for mentors was provided during the programme in response to student feedback, but one option that could be considered in the future is pre-course mentor workshops.

The six-month duration of the intervention – which involved completion of the module, competencies and supplemental learning opportunities – was not sufficient time for some students to achieve proficiency in new competencies in unfamiliar areas of practice. While students undertook up to 37.5 clinical hours (five days) of supplemental learning across the six-month programme, this was not adequate time to consolidate new competencies. By contrast, the Hartford Institute Master's course stipulates a minimum of 250 clinically precepted hours across a one-year programme to meet the required competencies (Greenberg et al 2017).

Five days for supplemental learning was regarded as feasible during the design phase of the intervention. However, during its implementation, some organisations found it challenging to release the students due to workforce pressures, resulting in some using their own time or failing to complete the full five days.

Mentors were not required to evidence credentials such as completion of mentor training programmes, but early feedback from students and mentors during the programme revealed a need for mentorship development to appraise postgraduate clinical and leadership competencies. While nurses working in older adult services have considerable pragmatic clinical experience, many have not engaged with gerontological academic programmes (Naughton et al 2016). Better preparation of gerontological nurses, including well-structured clinical rotations similar to a medical specialist training model, is required to deliver new models of older adult care (NHS England 2019).

Contemporary and future models of gerontology require a highly skilled and flexible multidisciplinary workforce, particularly nursing, with the capacity and confidence to work across service boundaries and lead service development (World Health Organization 2016). To date there has been inadequate innovation in the development of gerontological nurses at all stages of their careers, including a significant gap in the

preparation of early career nurses. Developing higher level competencies including leadership requires more structured postgraduate pathways that involve gerontological clinical rotations with clearly articulated competencies.

The coronavirus disease 2019 pandemic has demonstrated the urgent need to support ongoing professional development across all areas of gerontological nursing to enable innovation and adaptation, such as care delivery via telehealth and supporting care home residents in quarantine or during restricted visiting (Resnick 2020).

Limitations

A range of stakeholders was consulted during the project, but there was no direct engagement with older adult service users when developing the competencies, although service user feedback was encouraged as part of the students' reflective portfolios. The project also involved a small number of participants across a range of organisations, so it was beyond its scope to demonstrate its effects on patients and residents or to infer causality.

The competency framework requires further testing and refinement to ensure its applicability across geographical regions and other older adult services and to address patient outcome measures.

Conclusion

The gerontological competency framework for early career nurses detailed in this article is one of the first that has been tested in clinical practice. The completion of a competency framework within a linked education module enabled students to appreciate the unique knowledge and skills that underpin gerontological nursing and to evidence their expertise using a structured approach.

Developing a modern gerontological workforce requires new models of professional development that link theory to practice. This includes investigating clinical rotations as a mechanism for developing clinical competencies that enable interprofessional working and evaluating the effects of this on patient outcomes.

Implications for practice

- The gerontological competency framework is a useful and practical tool for early career nurses
- While the competency framework was designed to be part of a structured learning experience, including clinical visits, mentoring and classroom and online learning, it could also be used as a standalone initiative
- The competency framework could be used as part of a work-based learning programme

References

American Association of Colleges of Nursing, Hartford Institute for Geriatric Nursing (2010) Recommended Baccalaureate Competencies and Curricular Guidelines for the Nursing Care of Older Adults: A Supplement to The Essentials of Baccalaureate Education for Professional Nursing Practice. www.aacnnursing.org/Portals/42/AcademicNursing/CurriculumGuidelines/AACN-Gero-Competencies-2010.pdf (Last accessed: 4 January 2022.)

Bergmann J, Sams A (2014) Flipping for mastery. Educational Leadership. 71. 4, 24-29.

Bing-Jonsson PC, Bjørk IT, Hofoss D et al (2015) Competence in advanced older people nursing: development of 'nursing older people--competence evaluation tool'. International Journal of Older People Nursing. 10, 1, 59-72. doi: 10.1111/opn.12057

Boscart V, McCleary L, Huson K et al (2017) Integrating gerontological competencies in Canadian health and social service education: an overview of trends, enablers, and challenges. Gerontology & Geriatrics Education. 38, 1, 17-46. doi: 10.1080/02701960.2016.1230738

Braun V, Clarke V (2006) Using thematic analysis in psychology. Qualitative Research in Psychology. 3, 2, 77-101. doi: 10.1191/1478088706qp063oa

British Geriatrics Society (2014) Fit for Frailty Part 1. Consensus Best Practice Guidance for the Care of Older People Living in Community and Outpatient Settings. www.bgs.org.uk/sites/default/files/content/resources/files/2018-05-23/fff_full.pdf (Last accessed: 4 January 2022.)

British Geriatrics Society (2019) 2. CGA in Primary Care Settings: The Elements of the CGA Process. www.bgs.org.uk/resources/2-cga-in-primary-care-settings-the-elements-of-the-cga-process (Last accessed: 4 January 2022.)

Chen HP, Chen Q, Xu X et al (2019) Instrument development for evaluation of gerontological nurse specialists core competencies in China. Clinical Nurse Specialist. 33, 5, 217-227. doi: 10.1097/NUR.0000000000000469

Dijkman B, Reehius L, Roodbol P (2017) Competences for working with older people: the development and verification of the European core competence framework for health and social care professionals working with older people. Educational Gerontology. 43, 10, 483-497. doi: 10.1080/03601277.2017.1348877

Ellis G, Gardner M, Tsiachristas A et al (2017) Comprehensive geriatric assessment for older adults admitted to hospital. Cochrane Database of Systematic Reviews. Issue 9. CD006211. doi: 10.1002/14651858.CD006211.pub3

Goldberg SE, Cooper JO, Blundell A et al (2016) Development of a curriculum for advanced nurse practitioners working with older people with frailty in the acute hospital through a modified Delphi process. Age and Ageing. 45, 1, 48-53. doi: 10.1093/ageing/afv178

Greenberg SA, Squires A, Adams J et al (2017) A post-master's advanced certificate in gerontology for NPs. Nurse Practitioner. 42, 9, 18-23. doi: 10.1097/01.NPR.0000521992.53558.73

Halcomb E, Davidson P, Hardaker L (2008) Using the consensus development conference method in healthcare research. Nurse Researcher. 16, 1, 56-71. doi: 10.7748/nr2008.10.16.1.56.c6753

Karlstedt M, Wadensten B, Fagerberg I et al (2015) Is the competence of Swedish registered nurses working in municipal care of older people merely a question of age and postgraduate education? Scandinavian Journal of Caring Sciences. 29, 2, 307-316. doi: 10.1111/scs.12164

Kiljunen O, Välimäki T, Partanen P et al (2018) Multifaceted competence requirements in care homes: ethical and interactional competence emphasized. Nordic Journal of Nursing Research. 38, 1, 48-58. doi: 10.1177/2057158517712084

Naughton C, Hayes N, Zahran Z et al (2016) The development of the Older Person's Nurse Fellowship: education concept to delivery. Nurse Education Today. 44, 1-7. doi: 10.1016/j.nedt.2016.04.022

Naughton C, Ezhova I, Hayes N et al (2020) 77 Developing and testing an education-career pathway in healthcare for older people (ECHO) to promote retention in early-career gerontological nurses. Age and Ageing. 49, Suppl 1, i25-i26. doi: 10.1093/ageing/afz191.02

NHS England (2019) The NHS Long Term Plan. www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf (Last accessed: 4 January 2022.)

Nursing and Midwifery Council (2010) Standards for Pre-Registration Nursing Education. NMC, London.

Nursing and Midwifery Council (2018) Future Nurse: Standards of Proficiency for Registered Nurses. NMC, London.

Pearson P, Steven A, Tiplady S et al (2015) The Design and Development of a National Career Framework for Nurses Caring for Older People with Complex Needs in England – Summary. cdn.ps.emap.com/wp-content/uploads/sites/3/2015/04/summary-framework.pdf (Last accessed: 4 January 2022.)

Resnick B (2020) COVID-19 lessons learned from the voices of our geriatric nurses: leadership, resilience, and heroism. Geriatric Nursing. 41, 4, 357-359. doi: 10.1016/j.gerinurse.2020.06.008

Stanley J, Alesandrini A (2004) Nurse Practitioner and Clinical Nurse Specialist Competencies for Older Adult Care. docplayer.net/2533173-Nurse-practitioner-and-clinical-nurse-specialist-competencies-for-older-adult-care-march-2004.html (Last accessed: 4 January 2022.)

Stanyon MR, Goldberg SE, Astle A et al (2017) The competencies of registered nurses working in care homes: a modified Delphi study. Age and Ageing. 46, 4, 582-588. doi: 10.1093/ageing/afw244

United Nations Department of Economic and Social Affairs (2019) World Population Prospects 2019: Highlights (ST/ESA/SER.A/423). https://population.un.org/wpp/Publications/Files/WPP2019_Highlights.pdf (Last accessed: 4 January 2022.)

World Health Organization (2016) Health Workforce for Ageing Populations. www.who.int/ageing/publications/health-workforce-ageing-populations.pdf?ua=1 (Last accessed: 4 January 2022.)