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Nursing care and models of care in relation to older people in long-term care contexts: A scoping review protocol

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**Nursing care and models of care in relation to older people in long-term care contexts:
A scoping review protocol**

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ABSTRACT

Introduction: What nurses do and how they do it can influence older people's experiences of the quality of long-term care. In addition, a clear role definition for nurses supports them in giving patients appropriate basic care. Despite this, there is a lack of a clear role definition regarding policy, work descriptions and expectations. Therefore, the objective of this scoping review is to map the literature on nurses' role, function, and care activities and/or nursing interventions, as well as to identify nursing interventions (as models of nursing care, patient care pathways and/or clinical practice guidelines) in relation to older people in long-term care. Hence, to explore how nurse's role, function and care activities in relation to older people's basic care needs are described and understood by key stakeholders (older people, their next of kin, nurses) in long-term care.

Methods and analysis: Arksey and O'Malley's methodologic framework for scoping studies will be used for this upcoming scoping review. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) checklist will be followed. Search strategies will be developed in collaboration with the research team and an experienced librarian. Search strategies will be adjusted for each of the databases: PubMed, PsycInfo, CINAHL and Scopus. Data will be charted using a pilot extraction sheet. Quantitative data will be described numerically, and qualitative data will be analysed using thematic analysis. The key stakeholders will be consulted for validation.

Ethics and dissemination: The upcoming study will follow ALLEA's principles for good research. The findings will be used to inform the design of future studies aiming to develop a nursing intervention targeting older peoples' basic care needs.

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STRENGTHS AND LIMITATIONS OF THE STUDY

- The upcoming scoping review will be conducted in accordance with the well-described framework by Arksey and O'Malley and reported in line with the PRISMA checklist for scoping reviews.
- At least two members of the research team will independently assess study eligibility.
- Studies conducted with qualitative, quantitative and mixed methods designs will be included to achieve a comprehensive picture of the topic in *foci*.
- Eligible studies will be quality appraised, and ethical standpoints will be included.
- One limitation might be the lack of patients and public involvement (PPI) in designing the study.
- The exclusion of grey literature and non-English publications is a potential risk of publication bias.

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INTRODUCTION

Registered and nonregistered nurses (Box 1) make up the main section of the health care profession and, therefore, are a crucial part of all health care organisations.¹ Nowadays, one important care context is long-term care, in which the providers of direct basic care to older people mainly consist of nonregistered nurses.² What nurses do—their role, and how they do it, that is, their function—is known to influence the patients' perceptions of the quality of care.³ A clear nursing role has been described as a way to support nurses to work effectively and prioritise basic nursing care,⁵ as well as to diminish the risk of missed care in the community care setting.⁶ Thus, research into nursing highlights the importance of a well-defined nursing role. However, the lack of a clear role definition regarding policy, work descriptions and expectations—role ambiguity—is described as being present within nursing.^{7, 8} The research into nursing has additionally raised the issue of to what extent nurses take responsibility for the patients' care needs, as well as to what extent health care organisations enable these responsibilities.^{9, 10} The nurses' role and function become visible by the care activities they perform and deliver.¹¹ Nursing care activities have been described as containing direct nursing care, indirect nursing care and work that is not related to patient care.^{12, 13} Independent activities/interventions are prescribed by nurses, while dependent and interdependent activities/interventions are prescribed by others or in collaboration with nurses.¹⁴ According to Kitson, more knowledge is still needed about nurses' activities, especially their direct basic care activities, because such knowledge would improve the care provided to patients.¹⁵

Box 1. Core concepts in the upcoming scoping review
Nurses will be operationalised as: registered nurses, registered practical nurses, licensed practical nurses, and nursing aides, according to Chu et al. ⁵⁰
Long-term care will be operationalised as: home healthcare, sheltered housing, special accommodation, and nursing homes, according to Sperre Saunes et al. ⁵¹

The term ‘basic nursing care’ can be defined as the care that patients recognise as being important and the most necessary; for that reason, others, e.g. Kitson et al. and Feo et al., have referred to basic nursing care as the essentials or fundamentals of care.^{9, 16} In the upcoming scoping review, the term basic nursing care will be in accordance with Zwakhalen et al.’s (2018) description: ‘*aspects of care that are fundamental to all patients’ health and wellbeing, regardless of diagnosis, cultural background, or health care setting*’ (p. 2497).¹⁷ Despite the term basic care, it should not be seen as ‘simple’, but rather as complex and, at times, challenging for nurses to ensure.^{15 18} Basic care is a natural and unconscious part of daily self-care activities. Activities such as elimination, diet, personal hygiene and mobility are often the first to be compromised when people are confronted with any kind of health challenges, which makes these needs very quickly become critical.¹⁹ However, international evidence reflects that the delivery of basic nursing care appears to be highly inconsistent and, at times, absent altogether, resulting in unsafe and automated patient experiences originating from neglect.²⁰⁻²³ Single studies imply that basic care activities are undervalued^{19, 24, 25} and might be perceived by nurses as easy and not worthy of taking their time.²⁵ Thus, these findings highlight the importance of exploring more in-depth what nurses do and how they do it, much like our case, which particularly focuses on older people in a long-term care context.

The global shift in health care services towards community care during the past few decades has led to a long-term care context (Box 1) that nowadays has become the main place of care for older care recipients. Growing old, or ageing, is mainly described as being associated with multimorbidity, frailty and several chronic diseases.²⁶ Consequently, people’s need for care increases with age. Therefore, focusing on curing diseases might not always be the most optimal strategy in the care of older people, and in a long-term care context, it is likely to be more beneficial if the care focuses on how to support older people’s functional ability and meet their basic care needs.²⁷ Our initial exploration of the subject indicates that—especially in a long-term care context—literature reviews focusing on the role and function of nurses are scarce. One integrative literature review by Montayre and Montayre was identified, but it did not focus on exploring nurse’s role and function, instead examining the contemporary perspective of the work of registered nurses (RNs) in long-term care facilities. Their findings implied that RNs may find it difficult to define their role and that they mainly focused on planning and coordinating care delivered by others, thus focusing more on indirect care activities. However, it is worth noting—and in comparison with our upcoming review—that Montayre and Montayre focused on RNs, limiting the long-term care context to residential care

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and nursing homes while leaving out home health care and other nursing staff.² Consequently, a broad understanding of both RNs' and other nursing staff's care activities targeting older people in this context is warranted. Such knowledge could aid in the quality of care and delivery of safe evidence-based nursing care for older people in long-term care.

One way to guarantee the above might be to support nurses in delivering care through distinctly articulated and defined models of care (MoC). In particular, MoC can be understood as a map of care, here aiming to ensure that the patients receive the right care at the right time and place. Hence, it outlines the best practices of care.²⁸ Terms such as MoC, nursing model and framework have been described both as ambiguous and used interchangeably, even though referring to various but corresponding concepts.^{29, 30} In long-term care, nurse-led integrative MoC are often highlighted.³¹⁻³⁴ However, in a recent literature review by Deschodt et al. that focuses on nurse-led integrative care models in long-term care (here among home-dwelling older persons), no significant positive outcomes on mortality, hospitalisation, nursing home admission, quality of life, activities of daily living and emergency department visits were identified.³⁵ Despite this, according to Davidson et al., MoC can support nurses in working systematically towards a collective set of goals in care, as well as aiding in the assessment and evaluation of the deliverance of care. They can especially encourage nursing staff to have the same foundation and picture of given care.²⁹ Taking all the above into account, the objective of the proposed scoping review is to map the literature on nurses' role, function and care activities and/or nursing interventions, as well as to identify nursing interventions (as MoC, patient care pathways and/or clinical practice guidelines) in relation to older people in long-term care. Hence, our objective is to explore how nurse's role, function and care activities in relation to older people's basic care needs are described and understood by key stakeholders (older people, their next of kin, nurses) in long-term care.

METHODS

The upcoming scoping review will address a particularly broad topic, and a diverse range of study designs can be relevant in answering our broad questions. Arksey and O'Malley's methodologic framework for scoping reviews will be used for designing this upcoming study.³⁶ Additionally, the methodological developments by Levac et al.³⁷ and Daudt et al.³⁸ will be considered. To make a distinct analysis of this potentially complex account of data, thematic analysis will be used.³⁹ The Preferred Reporting Items for Systematic Reviews and Meta-

Analyses Extension for Scoping Reviews checklist—PRISMA-ScR—⁴⁰ will be used to form the base of the upcoming review. PRISMA-ScR was also used for forming this protocol.

Stage 1: Identifying the research question

A modified PICoS (population, phenomenon of interest, context and study design) framework⁴¹ was used to help us formulate the research questions and guide us in the search process (Table 1). The following tentative questions regarding the literature were developed:

- How are nurses’ role, function and care activities generally described by key stakeholders, specifically in relation to older people in long-term care (older people, next of kin and nurses)?
- How are nurses’ role, function and care activities described—and by whom—in relation to older people’s basic care needs in long-term care?
- What type of nursing interventions (dependent, independent and interdependent) are generally described—and by whom—in relation to older people in long-term care?
- What MoC (as systematic models of nursing care, patient care pathways and/or clinical practice guidelines) are described in relation to older people in long-term care?

We will also tentatively ask the following subquestions: What long-term care contexts are described? What characterises are included in the papers’ study design regarding methods, quality and ethical standpoints?

Table 1. Framework (PICoS) for determination of eligibility of review questions	
Criteria’s	Determinants
Population	Nurses (registered nurses, licenced practice nurses, licenced vocational nurses, nurse assistants) Older people (patients) Significant others, next of kin
(Phenomenon of) Interest	Nurses’ role and functions. Nursing care activities, nursing interventions Nursing care models, care models Care, basic care, fundamentals of care, essentials of care
Context	Long-term care (Home health care, home care, special accommodation, sheltered housing and nursing homes)
Study design	All types of research designs (Descriptions, experiences, attitudes and perceptions, effect, and efficacy)

Identifying relevant studies

To identify relevant studies, the databases PubMed, CINAHL, SCOPUS and PsycInfo will be used. The databases are chosen to cover a broad sample of the literature. The search strategy will include headings specific to the database, as well as keywords and synonyms. Boolean operators AND/OR will be used to combine the search terms. Reference lists from the included studies will be manually searched for to ensure comprehensiveness.³⁶ A search strategy will be formulated for each database. This will be done by the research team and will be assisted by an experienced librarian.³⁷ A preliminary search strategy is made for PubMed (Appendix 1). Grey literature will not be included. No limits will be applied concerning publication year. Studies in languages other than English will be excluded. All reasons for exclusion will be carefully documented.

Study selection and eligibility criteria

Before selection starts, eligible studies for inclusion will be divided equally between a minimum of two reviewers. The selection process will be done individually by the reviewers, but they will meet regularly to discuss criteria and selection and to avoid vagueness.³⁷ Criteria for inclusion can be modified during the process.³⁶ The selection process will be done in two phases: (1) a title act review and (2) a full-text review. If the title and abstract are in line with our questions of the literature or if the relevance is unclear, a full-text reading will be done.³⁶ If disagreements occur between the reviewers about the inclusion or exclusion of a study, another member of the research group will make the decision.³⁷ The reviewers will have regular meetings with the research team to discuss eligibility criteria and uncertainties during the process. The selection process (Figure 1) will be visualised in the PRISMA flow diagram.⁴²

Arksey and O'Malley did not recommend assessing the quality of studies because the aim is to cover a topic, not rank it.³⁶ Despite this, Levac et al. and Daudt et al. suggested assessing the quality of the included studies.^{37, 38} Assessing the quality of the studies can give the scoping review even more useful content. However, studies will not be excluded because of quality issues.^{37, 38} Checklists from the Critical Appraisal Skills Programme⁴³ will be used to assess the quality of qualitative and quantitative studies. For mixed methods studies, the Mixed Methods Appraisal Tool⁴⁴ will be used. Assessments will be performed by a minimum of two reviewers.

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--- Insert Figure 1 about here please ---

Charting the data

The research team will develop the data charting form (Box 2). At least two of the reviewers independently extracting data from 10 articles will support us in testing the suitability of the form. The data charting form can be modified after piloting and, if needed, later during the process.³⁷

Box 2. Tentative data charting form.	
Author and date.	
Journal full reference.	
Aim, objective and/or research questions.	
Study and recruitment context (eg, in what country and setting people were recruited).	
Participant characteristics (eg,profession, patient, relative, age, gender).	
Sampling method.	
Number of study participants.	
Study design.	
Data collection (eg, what data collection methods were used?).	
Data analysis (eg, how was the data analyzed?).	
Described ethical approval and/or considerations.	
Main result concerning nurses role/function, activity/interventions or described care models.	

As suggested by Weingarten et al. and Westerdahl et al., ethical aspects will be assessed and charted to highlight ethical issues in research (Box 3).^{45, 46}

Box 3. Tentative ethical criteria inspired by Weingarten et al. and Westerdahl et al.	
Was informed consent obtained?	Yes/No
Was the study approved by a research ethical committee?	Yes/No
Were adequate measures taken to protect personal data?	Yes/No
Is there a declaration on financial support?	Yes/No
Is there a declaration on potential conflicts of interest?	Yes/no

Collating, summarising and reporting the results

In the fifth stage, following Arksey and O'Malley's framework, the findings from the studies will be processed in three steps. First, descriptive numerical data from the charting stage will be analysed and presented to give an overview of the research area.³⁶ Second, data from the studies will be summarised using thematic analysis.^{37,38} Braun and Clark's thematic analysis³⁹ will be used for this proposal. The analysis method is described as flexible and appropriate to apply to a complex account of data.⁴⁷ Quantitative data will be summarised using basic descriptive analysis.³⁶ In studies with a mixed methods design, data will be separated so that qualitative data are analysed thematically, and descriptive analysis will be used for the quantitative data. If it is not possible to separate qualitative and quantitative data, the study will be excluded. Finally, the results will be described in text, tables and charts.

Consultation

Consultation is an optional step, but it is recommended to involve stakeholders in the process. Stakeholders can validate a preliminary result while offering new perspectives on the topic.³⁶ ³⁷In this upcoming study, stakeholders will be consulted in stage five.³⁷ Discussion groups with key stakeholders will be conducted as a form of input into analysis.

Patient and public involvement

Patients and the public have not been involved in designing the upcoming study but will be involved through consultation. This study will hopefully contribute to the development of nursing interventions that improve patient care in long-term care contexts.

Ethics and dissemination

The upcoming scoping review will follow ALLEA's four fundamental principles for research integrity: reliability, honesty, respect and accountability.⁴⁸ Reliability will be ensured using a clearly declared method. The findings will be included without any distortion, and the researchers' preunderstanding will be carefully discussed. The research process will be truthfully described to follow the principle of honesty. The methods used in the thesis will get proper credit, and the investigators will take full responsibility for the studies. The upcoming review will be submitted to a peer-reviewed journal. We expect to report on the findings at the beginning of 2023.

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The upcoming scoping review will be the first study in a series of studies adhering to the Medical Research Council’s framework for Complex Interventions.⁴⁹ The overarching objective is to develop and pilot the acceptability and feasibility of a nursing intervention targeting older people’s basic care needs in long-term care contexts. The upcoming scoping review is part of the development phase—identifying the evidence.

Contributors

KS, CO, ERG and GB were responsible for the initial design of this study. KS conceptualised the review approach and led in the writing of the manuscript. KS, CO, ERG and GB contributed to the protocol’s development and approved the final version of this protocol. CO, ERG and GB supervised manuscript preparation.

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Competing interests

None declared.

Patient consent for publication

Not required.

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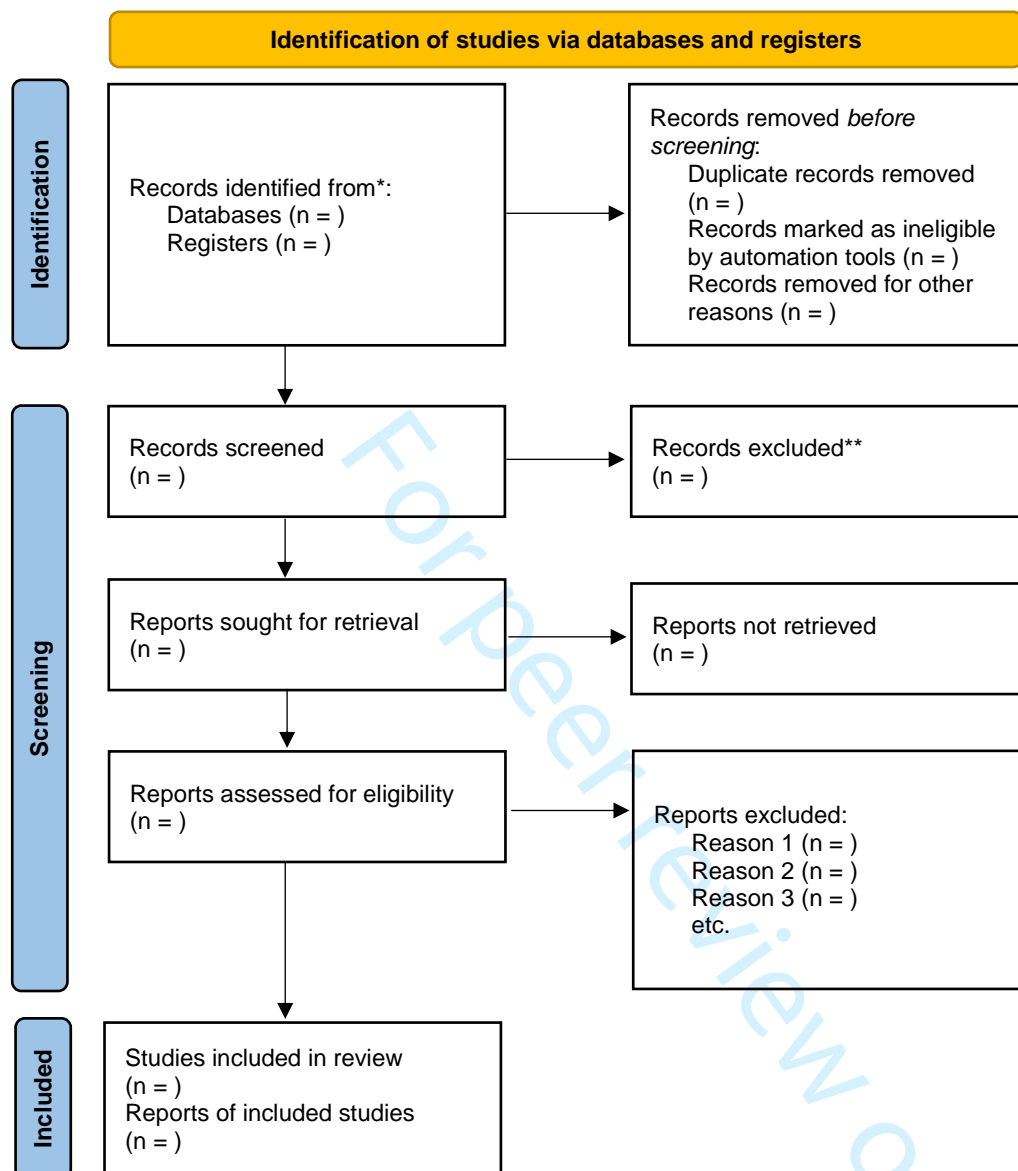
FIGURE CAPTION

- Box 1. Core concepts in the upcoming scoping review
- Table 1. Framework (PICO_S) for determination of eligibility of review questions.
- Figure 1. Overview of study selection process.
- Box 2. Tentative data charting form.
- Box 3. Tentative ethical criteria inspired by Weingarten et al. and Westerdahl et al.

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Figure 1. Overview of study selection process.



APPENDIX
Overview tentative search blocks for PubMed

Population – Older people	
1	Aged [MT]
2	Elderly [MT]
3	Older adult* [MT]
4	Old [AF]
5	Older people [AF]
6	Senior* [AF]
7	(1) OR (2) OR (3) OR (4) OR (5) OR (6)

Population – Relatives	
8	Family [MT]
9	Spouse* [MT]
10	Daughter [AF]
11	Son [AF]
12	Relative* [AF]
13	Significant other* [AF]
14	Kinship [AF]
15	Next of kin [AF]
16	Informal caregiver[AF]
17	(8) OR (9) OR (10) OR (11) OR (12) OR (13) OR (14)) OR (15) OR (16)

Population- nurses	
18	Allied health personnel* [MT]
19	Licenced practical nurse [MT]
20	Nurse*[MT]
21	Registered nurse* [AF]
22	Licensed practice nurse* [AF]
23	Registered practical nurse*[AF]
24	Licensed vocational nurse* [AF]
25	Nurse assistant* [AF]
26	Health care assistant [AF]
27	Formal caregiver [AF]
28	Health care professional [AF]
29	(18) OR (19) OR (20) OR (#21) OR (22) OR (23) OR (24) OR (25) OR (26) OR (27) OR (28)

Phenomena of Interest - Role and function	
30	Professional Role [MT]
31	Nurse's role [MT]
32	Job description [MT]
33	Attitude of Health personnel [MT]
34	Health knowledge, Attitudes., Practice [MT]
35	Social identification [MT]
36	Social responsibility [MT]
37	Function* [AF]
38	Duty [AF]
39	Professional identity [AF]
40	(30) OR (31) OR (32) OR (33) OR (34) OR (35) OR (36) OR (37) OR (38) OR (39)

Phenomena of Interest – Care and activities	
41	Nursing care [MT]
43	Nursing [MT]
43	Nursing process [MT]
44	Nursing assessment [MT]
45	Nursing diagnosis [MT]
46	Comprehensive health care [MT]
47	Geriatric nursing* [MT]
48	Delivery of Health Care [MT]
49	Practice Patterns, Nurses [MT]
50	Task performance and analysis [MT]
51	Nurs* activity [AF]
52	Care activity [AF]
53	Nurs* action* [AF]
54	Intervention* [AF]
55	Nursing skills* [AF]
56	Basic care [AF]
57	Essential care [AF]
58	Fundamental care [AF]
59	Fundamentals of care [AF]
60	Core nursing [AF]
61	Compassionate care [AF]
62	Advanced care [AF]
63	"Patient* care need*" [AF]
64	"Physical care need*" [AF]
65	Basic nursing need* [AF]
66	Spiritual need* [AF]
67	Psychosocial need* [AF]
68	(41) OR (42) OR (43) OR (44) OR (45) OR (46) OR (47) OR (48) OR (49) OR (50) OR (51) OR (52) OR (53) OR (54) OR (55) OR (56) OR (57) OR (58) OR (59) OR (60) OR (61) OR (62) OR (63) OR (64) OR (65) OR (66) OR (67)

Phenomena of Interest – Models of Care	
69	Models, nursing (MT)
70	Clinical pathway [MT]
71	Clinical practice guideline [MT]
72	Practical guidelines as topic [MT]
73	Standard of Care [MT]
74	Process assessment, Health care [MT]
75	Nursing guideline* [AF]
76	Care model* [AF]
77	Care guideline* [AF]
78	Patient* pathway* [AF]
79	Nursing pathway* [AF]
80	Care pathway* [AF]
81	Care strateg* [AF]
82	(69) OR (70) OR (71) OR (72) OR (73) OR (74) OR (75) OR (76) OR (77) OR (78) OR (79) OR (80) OR (81)

Context	
83	Community health services [MT]
84	Home health services [MT]
85	Home health nursing [MT]
86	Long term care [MT]
87	Primary health care [MT]
88	Nursing home* [MT]
89	Housing for the elderly [MT]
90	Homes for the aged (MT)
91	Home care services (MT)
92	Independent living (MT)
93	Assisted Living Facilities (MT)
94	Primary care [AF]
95	Community care [AF]
96	Community health services [AF]
97	Municipal care [AF]
98	Home care [AF]
99	Home dwelling [AF]
100	Home healthcare [AF]
101	Home and community-based care [AF]
102	Home and community-based services [AF]
103	Home nursing professional [AF]
104	Personal care services [AF]
105	Sheltered accommodation* [AF]
106	Sheltered housing (AF)
107	Residential care [AF]
108	Care home [AF]
109	Day care [AF]
110	Special accommodation* [AF]
111	Eldercare [AF]
112	(83) OR (84) OR (85) OR (86) OR (87) OR (88) OR (89) OR (90) OR (91) OR (92) OR (93) OR (94) OR (95) OR (96) OR (97) OR (98) OR (99) OR (100) OR (101) OR (102) OR (103) OR (104) OR (105) OR (106) OR (107) OR (108) OR (109) OR (110) OR (111)

Combinations	
113	((7) OR (17) OR (27)) AND ((40) OR (68) OR (82)) AND (112)

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Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	
Limitations	20	Discuss the limitations of the scoping review process.	
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	

JB1 = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med*. 2018;169:467–473. doi: [10.7326/M18-0850](https://doi.org/10.7326/M18-0850).

BMJ Open

Nursing care and models of care in relation to older people in long-term care contexts: A scoping review protocol

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**Nursing care and models of care in relation to older people in long-term care contexts:
A scoping review protocol**

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ABSTRACT

Introduction: What nurses do and how they do it can influence older people's experiences of the quality of long-term care. In addition, a clear role definition for nurses supports them in giving patients appropriate basic care. Despite this, there is a lack of a clear role definition regarding policy, work descriptions and expectations. Therefore, the objective of this scoping review is to map the literature on nurses' role, function, and care activities and/or nursing interventions, as well as to identify nursing interventions (as models of nursing care, patient care pathways and/or clinical practice guidelines) in relation to older people in long-term care. Hence, to explore how nurse's role, function and care activities in relation to older people's basic care needs are described and understood by key stakeholders (older people, their next of kin, nurses) in long-term care.

Methods and analysis: Arksey and O'Malley's methodologic framework for scoping studies will be used for this upcoming scoping review. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) checklist will be followed. Search strategies will be developed in collaboration with the research team and an experienced librarian. Search strategies will be adjusted for each of the databases: PubMed, PsycInfo, CINAHL and Scopus. Data will be charted using a pilot extraction sheet. Quantitative data will be described numerically, and qualitative data will be analysed using thematic analysis. The key stakeholders will be consulted for validation.

Ethics and dissemination: The upcoming study will follow ALLEA's principles for good research. The findings will be used to inform the design of future studies aiming to develop a nursing intervention targeting older peoples' basic care needs.

Registration details: Open Science Framework registration doi: [10.17605/OSF.IO/ZAFJQ](https://doi.org/10.17605/OSF.IO/ZAFJQ)

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STRENGTHS AND LIMITATIONS OF THE STUDY

- The upcoming scoping review will be conducted in accordance with the well-described framework by Arksey and O'Malley and reported in line with the PRISMA checklist for scoping reviews.
- At least two members of the research team will independently assess study eligibility.
- Studies conducted with qualitative, quantitative and mixed methods designs will be included to achieve a comprehensive picture of the topic in *foci*.
- Eligible studies will be quality appraised, and ethical standpoints will be included.
- One limitation might be the lack of patients and public involvement (PPI) in designing the study.

INTRODUCTION

Registered and nonregistered nurses[1] make up the main section of the health care profession and, therefore, are a crucial part of all health care organisations.[2] Nowadays, one important care context is long-term care[3] (Box 1), in which the providers of direct basic care to older people mainly consist of nonregistered nurses.[4] What nurses do—their role, and how they do it, that is, their function—is known to influence the patients' perceptions of the quality of care.[5 6] A clear nursing role has been described as a way to support nurses to work effectively and prioritise basic nursing care,[7] as well as to diminish the risk of missed care in the community care setting.[8] Thus, research into nursing highlights the importance of a well-defined nursing role. However, the lack of a clear role definition regarding policy, work descriptions and expectations—role ambiguity—is described as being present within nursing.[9, 10] The research into nursing has additionally raised the issue of to what extent nurses take responsibility for the patients' care needs, as well as to what extent health care organisations enable these responsibilities.[11, 12] The nurses' role and function become visible by the care activities they perform and deliver.[13] Nursing care activities have been described as containing direct nursing care, indirect nursing care and work that is not related to patient care.[14, 15] Independent activities/interventions are prescribed by nurses, while dependent and interdependent activities/interventions are prescribed by others or in collaboration with nurses.[16] According to Kitson, more knowledge is still needed about nurses' activities, especially their direct basic care activities, because such knowledge would improve the care provided to patients.[17]

Box 1. Core concepts in the upcoming scoping review

Nurses will be operationalised as: registered nurses, registered practical nurses, licensed practical nurses, and nursing aides, according to Chu et al. [1]

Long-term care will be operationalised as: home healthcare, sheltered housing, special accommodation, and nursing homes, according to Sperre Saunes et al. [3]

The term 'basic nursing care' can be defined as the care that patients recognise as being important and the most necessary; for that reason, others, e.g. Kitson et al. and Feo et al., have referred to basic nursing care as the essentials or fundamentals of care.[11, 18] In the upcoming scoping review, the term basic nursing care will be in accordance with Zwakhalen et al.'s

(2018) description: ‘aspects of care that are fundamental to all patients’ health and wellbeing, regardless of diagnosis, cultural background, or health care setting’ (p. 2497).[19] Despite the term basic care, it should not be seen as ‘simple’, but rather as complex and, at times, challenging for nurses to ensure.[17, 20] Basic care is a natural and unconscious part of daily self-care activities. Activities such as elimination, diet, personal hygiene and mobility are often the first to be compromised when people are confronted with any kind of health challenges, which makes these needs very quickly become critical.[21] However, international evidence reflects that the delivery of basic nursing care appears to be highly inconsistent and, at times, absent altogether, resulting in unsafe and automated patient experiences originating from neglect.[22-25] Single studies imply that basic care activities are undervalued[21, 26, 27] and might be perceived by nurses as easy and not worthy of taking their time.[27] Thus, these findings highlight the importance of exploring more in-depth what nurses do and how they do it, much like our case, which particularly focuses on older people in a long-term care context.

The global shift in health care services towards community care during the past few decades has led to a long-term care context that nowadays has become the main place of care for older care recipients. Growing old, or ageing, is mainly described as being associated with multimorbidity, frailty and several chronic diseases.[28] Consequently, people’s need for care increases with age. Therefore, focusing on curing diseases might not always be the most optimal strategy in the care of older people, and in a long-term care context, it is likely to be more beneficial if the care focuses on how to support older people’s functional ability and meet their basic care needs.[29] Our initial exploration of the subject indicates that—especially in a long-term care context—literature reviews focusing on the role and function of nurses are scarce. One integrative literature review by Montayre and Montayre[4] was identified, but it did not focus on exploring nurse’s role and function, instead examining the contemporary perspective of the work of registered nurses (RNs) in long-term care facilities. Their findings implied that RNs may find it difficult to define their role and that they mainly focused on planning and coordinating care delivered by others, thus focusing more on indirect care activities. However, it is worth noting—and in comparison with our upcoming review—that Montayre and Montayre[4] focused on RNs, limiting the long-term care context to residential care and nursing homes while leaving out home health care and other nursing staff.[4] Consequently, a broad understanding of both RNs’ and other nursing staff’s care activities targeting older people in this context is warranted. Such knowledge could aid in the quality of care and delivery of safe evidence-based nursing care for older people in long-term care.

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One way to guarantee the above might be to support nurses in delivering care through distinctly articulated and defined models of care (MoC). In particular, MoC can be understood as a map of care, here aiming to ensure that the patients receive the right care at the right time and place. Hence, it outlines the best practices of care.[30] Terms such as MoC, nursing model and framework have been described both as ambiguous and used interchangeably, even though referring to various but corresponding concepts.[31, 32] In long-term care, nurse-led integrative MoC are often highlighted.[33-36] However, in a recent literature review by Deschodt et al. that focuses on nurse-led integrative care models in long-term care (here among home-dwelling older persons), no significant positive outcomes on mortality, hospitalisation, nursing home admission, quality of life, activities of daily living and emergency department visits were identified.[37] Despite this, according to Davidson et al., MoC can support nurses in working systematically towards a collective set of goals in care, as well as aiding in the assessment and evaluation of the deliverance of care. They can especially encourage nursing staff to have the same foundation and picture of given care.[31] Taking all the above into account, the objective of the proposed scoping review is to map the literature on nurses' role, function and care activities and/or nursing interventions, as well as to identify nursing interventions (as MoC, patient care pathways and/or clinical practice guidelines) in relation to older people in long-term care. Hence, our objective is to explore how nurse's role, function and care activities in relation to older people's basic care needs are described and understood by key stakeholders (older people, their next of kin, nurses) in long-term care.

METHODS

The upcoming scoping review will address a particularly broad topic, and a diverse range of study designs can be relevant in answering our broad questions. Arksey and O'Malley's methodologic framework for scoping reviews will be used for designing this upcoming study.[38] Additionally, the methodological developments by Levac et al.[39] and Daudt et al.[40] will be considered. To make a distinct analysis of this potentially complex account of data, thematic analysis will be used.[41] The Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews checklist—PRISMA-ScR—[42] will be used to form the base of the upcoming review. PRISMA-ScR was also used for forming this protocol.

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Stage 1: Identifying the research question

A modified PICoS (population, phenomenon of interest, context and study design) framework [43] was used to help us formulate the research questions and guide us in the search process (Table 1). The following tentative questions regarding the literature were developed:

- How are nurses’ role, function and care activities generally described by key stakeholders, specifically in relation to older people in long-term care (older people, next of kin and nurses)?
- How are nurses’ role, function and care activities described—and by whom—in relation to older people’s basic care needs in long-term care?
- What type of nursing interventions (dependent, independent and interdependent) are generally described—and by whom—in relation to older people in long-term care?
- What MoC (as systematic models of nursing care, patient care pathways and/or clinical practice guidelines) are described—and by whom—in relation to older people in long-term care?

We will also tentatively ask the following subquestions: What long-term care contexts are described? What characterises are included in the papers’ study design regarding methods, quality and ethical standpoints?

Table 1. Framework (PICoS) for determination of eligibility of review questions	
Criteria’s	Determinants
Population	Nurses[1] Older people 65+ (patients) Significant others, next of kin
(Phenomenon of) Interest	Nurses’ role and functions. Nursing care activities, nursing interventions Nursing care models, care models Care, basic care, fundamentals of care, essentials of care
Context	Long-term care[3]
Study design	All types of research designs (Descriptions, experiences, attitudes and perceptions, effect, and efficacy)

Stage 2: Identifying relevant studies

To identify relevant studies, the databases PubMed, CINAHL, SCOPUS and PsycInfo will be used. The databases are chosen to cover a broad sample of the literature. The search strategy will include headings specific to the database, as well as keywords and synonyms. Boolean operators AND/OR will be used to combine the search terms. Reference lists from the included studies will be manually searched for to ensure comprehensiveness.[38] A search strategy will be formulated for each database. This will be done by the research team and will be assisted by an experienced librarian.[39] A preliminary search strategy is made for PubMed (Appendix 1). Grey literature will not be included. No limits will be applied concerning publication year. Studies in languages other than English will be excluded. All reasons for exclusion will be carefully documented.

Stage 3: Study selection and eligibility criteria

Eligible criteria's will be conducted to ensure consistency, validity, and reliability.[37] A summary of initial inclusion and exclusion criteria are described below. Due to the tentative nature of a scoping review, eligibility criteria might be adjusted at any time during the selection process. Adjusted criteria will be applied to all records.[38] Inclusion and exclusion criteria will initially depart from the search terms mentioned in table 1. Key stakeholders are nurses, older people, and significant others. The latter refers to persons who have a close relation to the older people, and older people will be defined as 65 years old and above. Due to the reviews broad approach and wide research questions, we have had to limit the number of key stakeholders. Other perspectives such as care managements and care providers (i.e., unpaid carers), are therefore excluded. Due to time- and resource constrains only peer-reviewed papers published in English containing an abstract and following the research process will be included. All study designs (qualitative, quantitative, and mixed methods) will tentatively be eligible for inclusion. Literature reviews, opinion or discussion or articles, conference proceedings and theses will be omitted.

The screening process will be done in several swifts: (1) titles and abstracts will be assessed for inclusion, (2) records in line with our research questions, or if the relevance is unclear, will be read in full text.³⁸ Two independent reviewers will screen the records for eligibility[39, 40] Any cases of disagreements during the screening process will be resolved through consensus discussion with a third team member.[39] Rayyan will be used for managing the screening

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process, and for using the opportunity to “blind on” and ensure consistency between the reviewers.[44] The screening process (Figure 1) will be visualised in the PRISMA flow diagram.[45]

--- Insert Figure 1 about here please ---

Arksey and O’Malley did not recommend assessing the quality of studies because the aim is to cover a topic, not rank it.[38] Despite this, Levac et al. and Daudt et al. suggested assessing the quality of the included studies.[39, 40] Assessing the quality of the studies can give the scoping review even more useful content. However, studies will not be excluded because of quality issues.[39, 40] Checklists from the Critical Appraisal Skills Programme[46] will be used to assess the quality of qualitative and quantitative studies. For mixed methods studies, the Mixed Methods Appraisal Tool[47] will be used. Assessments will be performed by a minimum of two reviewers. Ethical aspects will be assessed and charted to highlight ethical issues in research (Box 2). [48, 49]

Box 2. Tentative ethical criteria inspired by Weingarten et al. [48] and Westerdahl et al. [49]	
Was informed consent obtained?	Yes/No
Was the study approved by a research ethical committee?	Yes/No
Were adequate measures taken to protect personal data?	Yes/No
Is there a declaration on financial support?	Yes/No
Is there a declaration on potential conflicts of interest?	Yes/No

Stage 4: Charting the data

The research team will develop the data charting form (Box 3). At least two of the team members will independently extract data from 10 articles will support us in testing the suitability of the form. The data charting form can be modified after piloting and, if needed, later during the process.[39]

Box 3. Tentative data charting form.

Author and date.

Journal full reference.

Aim, objective and/or research questions.

Study and recruitment context (eg, in what country and setting people were recruited).

Participant characteristics (eg, profession, patient, relative, age, gender).

Sampling method.

Number of study participants.

Study design.

Data collection (eg, what data collection methods were used?).

Data analysis (eg, how was the data analyzed?).

Described ethical approval and/or considerations.

Main result concerning nurses role/function, activity/interventions or described care models.

Stage 5: Collating, summarising and reporting the results

In the fifth stage, the findings from the studies conducted with qualitative, quantitative and/or mixed method designs will initially be processed separately before findings are combined in the discussion. [38] Qualitative data will be summarised by using Braun and Clark's thematic analysis⁴¹ as recommended by others. [39, 40] The analysis method is described as flexible and appropriate to apply to a complex account of data.[41, 50] Quantitative data will be summarised using basic descriptive analysis.³⁸ Finally, following Arksey and O'Malley's framework, all data from the charting stage will be analysed and presented to give an overview of the research area. The results will be described in text, tables and charts. [38]

Consultation

Consultation is an optional step, but it is recommended to involve stakeholders in the process. Stakeholders can validate a preliminary result while offering new perspectives on the topic.[38, 39] In this upcoming study, stakeholders will be consulted in stage five.[39] Discussion groups with key stakeholders will be conducted as a form of input into analysis.

Patient and public involvement

Patients and the public have not been involved in designing the upcoming study but will be involved through consultation. This study will hopefully contribute to the development of nursing interventions that improve patient care in long-term care contexts.

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Ethics and dissemination

The upcoming scoping review will follow ALLEA’s four fundamental principles for research integrity: reliability, honesty, respect and accountability.[51] Reliability will be ensured using a clearly declared method. The findings will be included without any distortion, and the researchers’ preunderstanding will be carefully discussed. The research process will be truthfully described to follow the principle of honesty. The methods used in the thesis will get proper credit, and the investigators will take full responsibility for the studies. The upcoming review will be submitted to a peer-reviewed journal. We expect to report on the findings at the beginning of 2023.

The upcoming scoping review will be the first study in a series of studies adhering to the Medical Research Council’s framework for Complex Interventions.[52] The overarching objective is to develop and pilot the acceptability and feasibility of a nursing intervention targeting older people’s basic care needs in long-term care contexts. The upcoming scoping review is part of the development phase—identifying the evidence.

Contributors

KS, CO, ERG and GB were responsible for the initial design of this study. KS conceptualised the review approach and led in the writing of the manuscript. KS, CO, ERG and GB contributed to the protocol’s development and approved the final version of this protocol. CO, ERG and GB supervised manuscript preparation.

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Competing interests

None declared.

Patient consent for publication

Not required.

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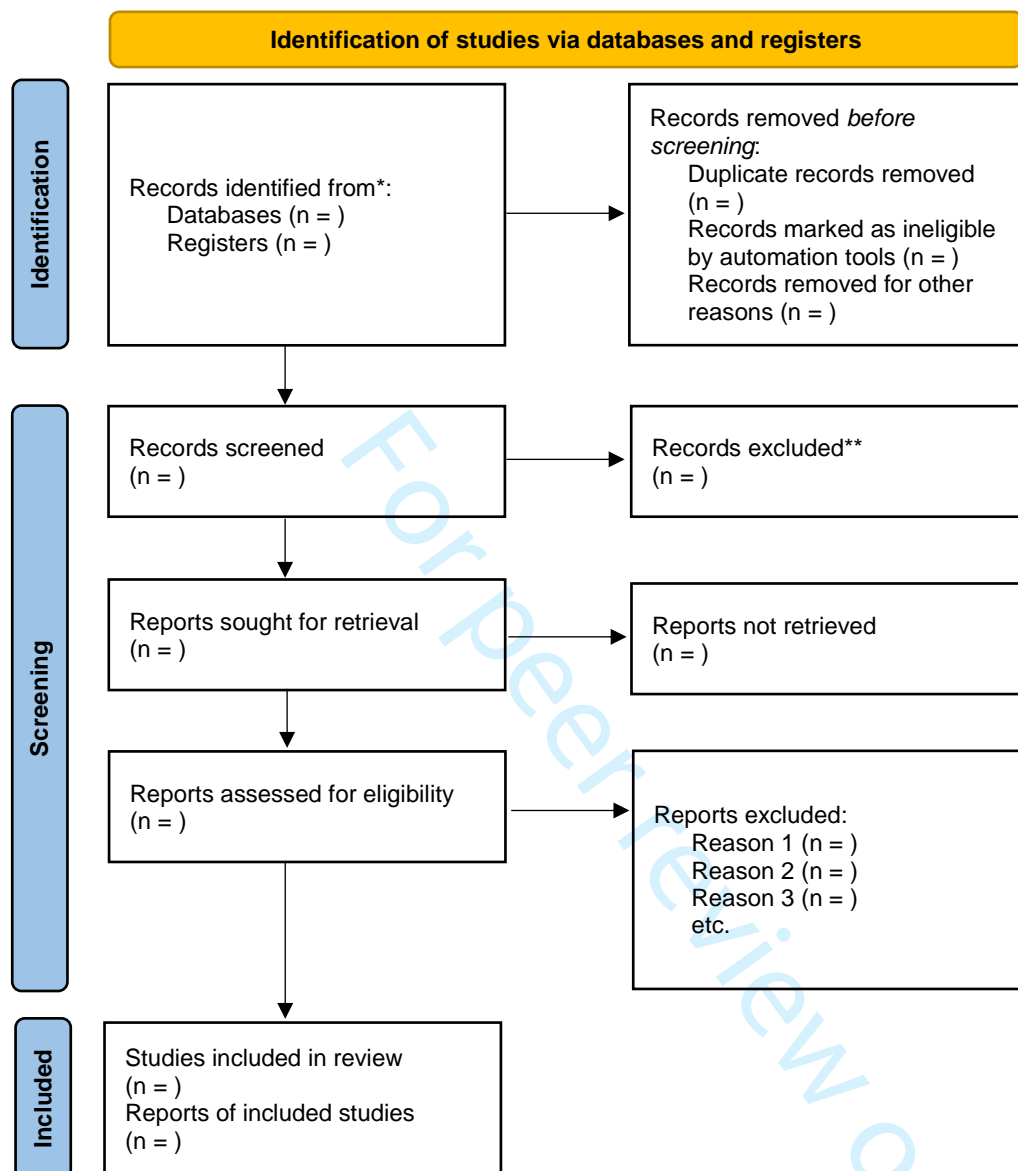
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FIGURE CAPTION

- Box 1. Core concepts in the upcoming scoping review
- Table 1. Framework (PICO_S) for determination of eligibility of review questions.
- Figure 1. Overview of study selection process.
- Box 2. Tentative ethical criteria inspired by Weingarten et al. and Westerdahl et al.
- Box 3. Tentative data charting form.

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Figure 1. Overview of study selection process.



APPENDIX
Overview tentative search blocks for PubMed

Population – Older people	
1	Aged [MT]
2	Elderly [MT]
3	Older adult* [MT]
4	Old [AF]
5	Older people [AF]
6	Senior* [AF]
7	(1) OR (2) OR (3) OR (4) OR (5) OR (6)

Population – Relatives	
8	Family [MT]
9	Spouse* [MT]
10	Daughter [AF]
11	Son [AF]
12	Relative* [AF]
13	Significant other* [AF]
14	Kinship [AF]
15	Next of kin [AF]
16	Informal caregiver[AF]
17	(8) OR (9) OR (10) OR (11) OR (12) OR (13) OR (14)) OR (15) OR (16)

Population- nurses	
18	Allied health personnel* [MT]
19	Licenced practical nurse [MT]
20	Nurse*[MT]
21	Registered nurse* [AF]
22	Licensed practice nurse* [AF]
23	Registered practical nurse*[AF]
24	Licensed vocational nurse* [AF]
25	Nurse assistant* [AF]
26	Health care assistant [AF]
27	Formal caregiver [AF]
28	Health care professional [AF]
29	(18) OR (19) OR (20) OR (#21) OR (22) OR (23) OR (24) OR (25) OR (26) OR (27) OR (28)

Phenomena of Interest - Role and function	
30	Professional Role [MT]
31	Nurse's role [MT]
32	Job description [MT]
33	Attitude of Health personnel [MT]
34	Health knowledge, Attitudes., Practice [MT]
35	Social identification [MT]
36	Social responsibility [MT]
37	Function* [AF]
38	Duty [AF]
39	Professional identity [AF]
40	(30) OR (31) OR (32) OR (33) OR (34) OR (35) OR (36) OR (37) OR (38) OR (39)

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Phenomena of Interest – Care and activities	
41	Nursing care [MT]
43	Nursing [MT]
43	Nursing process [MT]
44	Nursing assessment [MT]
45	Nursing diagnosis [MT]
46	Comprehensive health care [MT]
47	Geriatric nursing* [MT]
48	Delivery of Health Care [MT]
49	Practice Patterns, Nurses [MT]
50	Task performance and analysis [MT]
51	Nurs* activity [AF]
52	Care activity [AF]
53	Nurs* action* [AF]
54	Intervention* [AF]
55	Nursing skills* [AF]
56	Basic care [AF]
57	Essential care [AF]
58	Fundamental care [AF]
59	Fundamentals of care [AF]
60	Core nursing [AF]
61	Compassionate care [AF]
62	Advanced care [AF]
63	"Patient* care need*" [AF]
64	"Physical care need*" [AF]
65	Basic nursing need* [AF]
66	Spiritual need* [AF]
67	Psychosocial need* [AF]
68	(41) OR (42) OR (43) OR (44) OR (45) OR (46) OR (47) OR (48) OR (49) OR (50) OR (51) OR (52) OR (53) OR (54) OR (55) OR (56) OR (57) OR (58) OR (59) OR (60) OR (61) OR (62) OR (63) OR (64) OR (65) OR (66) OR (67)

Phenomena of Interest – Models of Care	
69	Models, nursing (MT)
70	Clinical pathway [MT]
71	Clinical practice guideline [MT]
72	Practical guidelines as topic [MT]
73	Standard of Care [MT]
74	Process assessment, Health care [MT]
75	Nursing guideline* [AF]
76	Care model* [AF]
77	Care guideline* [AF]
78	Patient* pathway* [AF]
79	Nursing pathway* [AF]
80	Care pathway* [AF]
81	Care strateg* [AF]
82	(69) OR (70) OR (71) OR (72) OR (73) OR (74) OR (75) OR (76) OR (77) OR (78) OR (79) OR (80) OR (81)

Context	
83	Community health services [MT]
84	Home health services [MT]
85	Home health nursing [MT]
86	Long term care [MT]
87	Primary health care [MT]
88	Nursing home* [MT]
89	Housing for the elderly [MT]
90	Homes for the aged (MT)
91	Home care services (MT)
92	Independent living (MT)
93	Assisted Living Facilities (MT)
94	Primary care [AF]
95	Community care [AF]
96	Community health services [AF]
97	Municipal care [AF]
98	Home care [AF]
99	Home dwelling [AF]
100	Home healthcare [AF]
101	Home and community-based care [AF]
102	Home and community-based services [AF]
103	Home nursing professional [AF]
104	Personal care services [AF]
105	Sheltered accommodation* [AF]
106	Sheltered housing (AF)
107	Residential care [AF]
108	Care home [AF]
109	Day care [AF]
110	Special accommodation* [AF]
111	Eldercare [AF]
112	(83) OR (84) OR (85) OR (86) OR (87) OR (88) OR (89) OR (90) OR (91) OR (92) OR (93) OR (94) OR (95) OR (96) OR (97) OR (98) OR (99) OR (100) OR (101) OR (102) OR (103) OR (104) OR (105) OR (106) OR (107) OR (108) OR (109) OR (110) OR (111)

Combinations	
113	((7) OR (17) OR (27)) AND ((40) OR (68) OR (82)) AND (112)

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For peer review only

Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	
Limitations	20	Discuss the limitations of the scoping review process.	
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	

JB1 = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

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