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Protocol

The Transition from Nursing Student to Newly Graduated Nurse: A Scoping Review Protocol

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Abstract

Transition from nursing student to newly graduated nurse is not a single event tied to first employment, but a multidimensional process involving the reconstruction of professional identity, the assumption of clinical responsibilities, organisational integration, and commitment to the profession. This process unfolds within evolving educational, social, and workforce contexts that may shape nurses' expectations, values, and career intentions. Although earlier reviews examined specific aspects of transition, it remains necessary to understand how this phenomenon has been examined over time across different populations and countries, and how the concepts, theoretical frameworks, and methodological approaches have been applied. This study aims to map and characterise the existing literature on the transition of nursing students into clinical practice. This scoping review follows the JBI methodology. The research will be conducted across multiple international databases, covering all studies in English, Portuguese, Spanish and French with no time restrictions. Two independent researchers will select articles based on predefined criteria, with a third to resolve disagreements. Primary studies, reviews, nonempirical papers and grey literature will be charted and presented through descriptive mapping and narrative summaries of how the transition has been defined and theorised.

Keywords: newly graduated nurses; nursing; scoping review; students nursing; transition-to-practice

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1. Introduction

Nurses represent the largest professional group in the global healthcare workforce [1]. Nevertheless, the profession continues to face a substantial workforce deficit, estimated at approximately 5.8 million in 2023 [1]. This gap compromises the quality and, above all, the provision of safe care across the lifespan in multiple areas of practice, including health promotion, disease prevention, treatment, rehabilitation, and palliative care. In this context, developing educational and organisational strategies that enhance the nursing profession's attractiveness while promoting workforce stability is essential.

Given the identified shortage of nurses, newly graduated nurses, in particular, constitute an important part of the workforce needed to address existing gaps. However, the transition to autonomous professional practice is widely recognised as one of the most demanding phases of a nursing career. Duchscher [2,3] conceptualises this period as a Transition Shock, characterised by confusion, doubt, and ambiguity arising from role changes, the assumption of new

responsibilities, the need to mobilise new knowledge, and the need to establish new relationships in the work environment. Although international studies have highlighted this phenomenon and emphasised the importance of support strategies to reduce the inherent risks during the initial phase of a nursing career, the transition to professional practice remains highly vulnerable. Newly graduated nurses frequently report feelings of isolation, stress, and burnout, factors that undermine confidence, competence, job satisfaction, well-being, and even retention in the profession [4,5]. This concern is reinforced by data from a recent report based on a 2025 sample of 527 hospitals in the United States of America, in which the youngest nurses showed the highest levels of turnover, intention to leave, and actual exit from the profession [6]. This evidence, although from a specific context, aligns with an international meta-analysis across eight countries on different continents, in which the intention to abandon had a combined estimate of around 36% [7]. In the same study, a moderate and statistically significant association was identified between transition shock and the intention to abandon, reinforcing the idea that difficulties experienced at the start of professional practice can contribute considerably to workforce instability in nursing [7].

Characterising how the transition from nursing student to newly graduated nurse has been studied over time is essential to understand how this phenomenon has been conceptualised, operationalised and framed in the literature.

Understanding this is particularly relevant in the context of change and the growing complexity of healthcare, driven by increased life expectancy, increasingly complex care needs, rapid advances in diagnostic and therapeutic methods, economic pressures, and the widespread shortage of healthcare professionals [8]. Together, these factors contribute substantially to increased workloads across clinical practice settings over time [8].

In light of the conceptualisation presented by Duchscher [2], the transition to professional practice will be understood here as a progressive, particularly intense, process of adaptation to the role of nurse that develops over the first twelve months of professional practice. However, the author also recognises the importance of the preparation developed during initial training at university [3]. Based on this knowledge, this scoping review will adopt a temporal delimitation covering the final six months of the undergraduate degree and the end of the first year (12 months) of autonomous professional practice. This choice will allow mapping the evidence produced along the continuum from academic preparation for entry into the profession.

Different literature reviews have examined the transition to professional independent nursing practice. However, these reviews usually focus on specific aspects by detailing subdimensions of the process, rather than providing an integrated, comprehensive overview of how evidence regarding the transition has been defined and studied.

This scoping review is important because the existing evidence is fragmented and has limited comparability. In our previous analysis, we identified some reviews on the transition theme as illustrative examples, but each takes a similarly segmented approach (see Appendix A). For example, previous reviews studied readiness among students [9,10], the influence of previous employment during undergraduate study [11], the factors that influence adaptation to autonomous clinical practice [12,13], turnover and intention to leave related to stress during the transition [14,15], and the influence of support strategies or transition programs [5,16–18]. They defined population and timeframes differently: only students [9,10,19], the first two years of practice in the hospital [15], the first five years [13] or newly graduated nurses without a stated limit [12,20]. Several searches were conducted between 2017 and 2022 [17–19,21], while six reviews appeared in 2025–2026 [5,9,11,13–15]. One synthesises qualitative studies published in English between 2010 and 2022 on role transition from student to registered nurse [21], and another mapped how the field evolved, but only using keywords and citations in Web of Science records. Such metadata show

which topics co-occur and are cited together, not how each study defines the transition, bounds it in time, or uses theory [14]. To our knowledge, no review has mapped how the transition to practice from final-stage nursing student to newly graduated nurse has been defined, bounded in time and theorised across the literature. This review will clarify the concepts and definitions in use; chart the periods, populations, settings, designs, and theoretical frameworks applied; and identify gaps reported by authors. It will provide a shared basis of terminology for future research and for designing subsequent evidence synthesis. In this way, this scoping review aims to systematically map and characterise existing knowledge on the transition to practice between nursing students in academia and their entry into autonomous professional nursing practice, providing a comprehensive overview of the transition period. This review will cover:

- Characteristics of the literature: Year of publication, country, context, objectives, design method, sample, types of variables used to study the transition, and key findings as reported.
- Conceptual and theoretical map: How the transition is defined and delimited in time, which related constructs are examined and in what role, and which theories or models are used and how.
- Gaps and recommendations: Reported by the authors and those identified in the review team.
- Exploratory: Generation, when explicitly reported by the source.

This comprehensive mapping aims to provide a structured overview of the transition to guide practice and future research. This synthesis is significant. In a world where interest in entering the nursing profession is declining [22], and where intentions to leave the profession are on the rise (estimated at 40% in the next 5 years in the United States of America) [23], accompanied by World Health Organisation forecasts of a shortage of nurses reaching 4.1 million by 2030 [1], it is crucial to understand how the transition has been studied and how we can improve this phase in the future of nursing careers, which is internationally recognised as decisive for entry and retention, or for entry and leaving the profession. This is reinforced by the knowledge that generations are changing (e.g., Baby Boomers, Millennials, Generation Z). The social, cultural, educational, and professional contexts have changed substantially over time. These broader contextual changes shape career interests that emerge during childhood and adolescence, and subsequently impact how individuals make career choices [24,25]. For those entering nursing, these are also reflected in nursing students' and newly graduated nurses' expectations, values, professional aspirations, and perceptions of work–life balance [13,21], which may impact how they experience clinical and organisational contexts, how they develop professional commitment, and how they consider remaining in or leaving the profession. Consequently, it is crucial to map the literature's temporal development and characterise how the transition from nursing student to newly graduated nurse has evolved across different periods, populations, and contexts.

In this review, transition refers to the time-bound process of role change from a final-stage nursing student (in the final six months of academia) to a newly graduated nurse in first employment (in the first 12 months of practice). Related constructs will be included, according to their role in relation to this process: transition shock as an initial common experience [3]; professional socialisation and organisational integration as components; readiness for practice as an antecedent; preceptorship, mentorship and residency programmes as supports; and turnover, intention to leave and burnout as outcomes. A study will be eligible when it examines the transition in relation to the defined population and period.

Review Questions

To address the objectives of this review, using the Population, Concept and Context (PCC) framework recommended by the JBI, the question is: How has the transition from

final-stage nursing student to newly graduated nurse been defined, delimited and studied in the literature?

Additionally, this review will explore the following sub-questions:

a. Characteristics of the literature
- In which years were articles on the theme of transition published?
- In which countries have the studies been conducted?
- What are the types, designs and objectives established?
- Which populations and participant groups were studied?

b. Conceptual and theoretical map.
- How is the transition defined and delimited in time?
- Which related constructs are examined, and in what role?
- Which theories or models underpin the studies?

c. Gaps
- What gaps or recommendations do the authors report?

d. Generation (exploratory)
- Is generation reported and, if so, how is it defined?

2. Methods

The proposed scoping review will follow the JBI methodology for scoping reviews [26] and will be reported in accordance with the PRISMA-ScR guidelines [27]. Before submission to this journal, we registered a protocol on the Open Science Framework (DOI: 10.17605/OSF.IO/N6HE4) on 12 August 2026. Amendments will be recorded with date and rationale in the OSF project.

2.1. Inclusion Criteria

Based on the JBI methodology, the PCC mnemonic will be used to define the key criteria for the scoping review.

2.1.1. Participants

This review will include studies involving student nurses in the final six months of their academic pre-registration programme leading to first-level registration and newly graduated nurses in the first year (12 months) of first employment, from any setting (e.g., hospital care, community health, critical care, public or private). This includes studies during the final six months as pre-registration nursing students (including diploma, college-based and bachelor's programmes leading to first-level registration), students in internships (clinical training during the transition), newly graduated nurses, nurses in their first job, and nurses in residency or integration programmes for professional practice. Studies with mixed samples are eligible only when data on the target transition are separately identifiable, or when the target transition is clear. If this is not possible, we will exclude the article. Since the transition under study is the first transition from academic to practice, we will not include studies that focus on direct-entry midwifery programmes, experienced nurses, transitions to specialist or advanced roles, or other professionals, such as health assistants or technicians, as these do not align with the nurse career profile.

2.1.2. Concept

The central concept under review is the lived transition of nursing students from academia to clinical practice, which occurs during the final six months of their education and the first year in clinical practice. This includes experiences, preparation for and adaptation to a professional career, organisational integration and professional socialisation. It also covers support strategies, such as mentorship and preceptorship, and strategies to improve

outcomes, including retention, turnover, intention to leave, and burnout, related to the target population's transition process within the defined timeframe. We will exclude studies that do not relate to the transition to practice or that focus solely on specific clinical competency development, without connection to transition to practice. Simulation studies are assessed by the same criteria, not by teaching modality. A study will be eligible if the authors explicitly examine the transition from final-stage nursing student to newly graduated nurse. The constructs above are eligible only when examined as part of the transition. Studies that examine these constructs without reference to the transition will be excluded. Additionally, we will not consider transitions into other career stages, such as advanced practice, management, or education.

2.1.3. Context

We will consider studies conducted in any educational or healthcare settings, including those managed by private or public organisations, since they include newly graduated nurses. Studies based exclusively on simulated practice or laboratory scenarios without a connection to the transition to practice will not be included, nor will studies based on the transition of general registered nurses with previous professional experience who move into a specific practice context.

2.1.4. Type of Sources

This study will include a wide range of study designs to comprehensively capture the existing evidence on the lived transition of nursing students into clinical practice. Temporally, this covers the experience from the final six months through the first year of clinical practice. To capture this broad range of experiences, we will consider both experimental and quasi-experimental study designs, including randomised controlled trials, non-randomised controlled trials, before-and-after studies, and interrupted time-series studies. We will also consider analytical observational studies, including prospective and retrospective cohort studies, case–control studies, and analytical cross-sectional studies. The study will also include descriptive observational designs, such as case series, individual case reports, and descriptive cross-sectional studies. Qualitative studies will also be incorporated, including, but not limited to, phenomenology, grounded theory, ethnography, qualitative description, and action research.

Other systematic, integrative, or scoping reviews that meet the inclusion criteria and address the research question will also be included. Additionally, theoretical articles, expert opinions, discursive papers, and grey literature, such as theses, dissertations, and reports from professional organisations, universities, or hospitals, will be included. Protocols and conference abstracts will be excluded due to limited data availability. Sources will be classified into three tiers: (1) primary studies, (2) reviews, and (3) non-empirical sources and grey literature (theoretical and opinion papers, theses and organisational reports). All included sources must clearly pertain to nursing transition in educational or clinical settings and address the defined research questions, as they help explain the complexity of the transition experience.

2.2. Search Strategy

The search strategy was developed with the assistance of an expert librarian knowledgeable in scoping reviews. In line with JBI methodology, we used a three-step search strategy (sensitised search, formal search, and additional screening). In the first step, we conducted a preliminary search limited to MEDLINE (via PubMed) to identify relevant articles and analysed words in their titles and abstracts, as well as their index terms. These keywords and index terms were used to build the search strategy, which included natural concepts,

Medical Subject Headings (MeSH) and Cumulative Index to Nursing and Allied Health Literature (CINAHL), with Boolean operators and truncation to build phrase searches (see Appendices B and C). In the second step, we adapted the strategy to each database, using controlled vocabulary where available and free-text terms. The searches were run in MEDLINE, CINAHL, Scopus, Web of Science, ERIC (Education Resources Information Center) and PsycINFO (see Appendix D, Table A4). Grey literature was searched in the Open Access Portuguese Scientific Repository (Repositório Científico de Acesso Aberto de Portugal—RCAAP via EBSCO Discovery Service), the ProQuest Dissertations & Theses Citation Index (via Web of Science), and Open Dissertations (via EBSCOhost) (see Appendix D, Table A5). We ran the searches on 16 November 2026. After the primary search, we will screen the reference lists of all included articles for additional papers.

The search will include studies published in English, Portuguese, Spanish and French, based on the reviewers' skills. We will not restrict the publication year, as the goal is to analyse how the transition has been examined over time and across geographic areas.

2.3. Source of Evidence Selection

Following the search strategy, all identified records will be collated and uploaded into Rayyan® software (https://www.rayyan.ai/, accessed on 29 September 2026), a web-based platform specifically developed to support screening in systematic and scoping reviews [28]. Following the recommendation, we will automatically remove all duplicate studies. Then, we will pilot-screen 25 articles to refine the operational definitions of these eligibility criteria, repeating the process until we achieve at least 80% agreement. This will provide a basis for the reviewers to reach agreement on the pre-established criteria. After the pilot test, two independent reviewers (TX and CO) will screen the titles and abstracts using the predefined inclusion criteria for the review. Next, the same two researchers will retrieve all studies that meet the criteria and independently re-evaluate them. The team will resolve any disagreements during selection through discussion with a third reviewer. The reasons for the exclusion of all full-text articles that are not included will be recorded.

The complete search strategies, data charting form, and final extracted dataset will be reported on the Open Science Framework Project and as a supplement to the final scoping review publication. The study selection process will also be presented in a flow diagram, in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) [27].

To enhance transparency, at the final stage of the screening process, we will make the review public and accessible via a URL created in Rayyan® software.

2.4. Data Extraction

Data will be extracted from the full text of articles by two reviewers (TX and CO) using a data extraction tool developed by the reviewers, based on the data extraction template developed by the authors (see Appendix E), and the results will be compared. The extracted data will encompass specific details about the study characteristics, such as title, authors, publication year, country, aim, study design, and sample features, as well as information about the transition process, including the transition period examined, variables, theories and models used as frameworks, and the recommendations and gaps highlighted by the studies, in line with the objectives defined for this scoping review. If necessary, the authors will adapt the data extraction tool (Appendix E) and report their modifications in the final scoping review. If the search includes other reviews, only review-level characteristics will be charted. Results from the studies they contain will not be extracted to avoid double-counting when they are also included as primary studies. For non-empirical sources, a

reduced charting form will be used. To meet the defined objectives, we will, when necessary, contact authors to request any missing or additional data.

Following the JBI guidelines for scoping review [26], we will not critically appraise the evidence in the included articles, as our objective is to map and characterise the existing literature rather than assess the methodological quality of the studies.

2.5. Data Analysis and Presentation

First, we will report our study selection, both visually and in narrative form, in line with the PRISMA-ScR diagram. Subsequently, we will map the extracted data through descriptive and narrative analyses and categorise it according to the extracted findings. This approach ensures that the data will be presented in line with the objectives and questions defined for this review, addressing characteristics of the included studies (year of publication, countries (described in a figure with a world map), objectives, study designs, sample characteristics), generations studied (if mentioned), settings, definitions of transition, transition period, variables used to study the transition, theories and models used as support, and the gaps and recommendations identified by the authors. Conceptual definitions and theoretical frameworks will be grouped using basic content analysis. Definitions of transition will be extracted verbatim, classified as explicit, implicit, or absent, and grouped by how the transition is characterised (as a process, a period, an event, an experience, or other) and by the transition period studied. Theories and models will be listed by name, grouped into families by focus, and classified by how they are used: not reported, mentioned, or used to inform the study's design, measurement, or interpretation. The final categories and their definitions will be reported with the results (see Appendix E, Table A6). Additional categories may emerge during data extraction and will be included as needed to ensure a thorough analysis of the transition process. Results will be presented for each tier, reporting both the number of publications and the number of unique studies.

2.6. Possible Limitations

Restrictions on languages, databases and sources may introduce selection bias. Heterogeneity in how studies define the transition and its timeframe may limit analysis and comparability. The 12-month window adopted after entering the profession is a pragmatic boundary for mapping, not a theoretical commitment to prior studies. Generation will be charted only when reported by the source and will be treated as exploratory, without comparison. In line with the scoping review methodology, no critical appraisal of the included sources will be conducted. The review will map the literature without assessing the quality of the evidence or the effectiveness of the reported strategies.

3. Expected Outcomes and Dissemination

This protocol outlines a scoping review to be conducted in accordance with JBI methodology, aimed at mapping the existing literature on the transition from the final six months as a nursing student to a newly graduated nurse (the first 12 months of employment). Specifically, the review will examine how this transition has been conceptualised, temporally defined and theoretically framed, as well as how research approaches have evolved across different periods, geographical contexts and study designs. It will also identify the knowledge gaps and research needs reported in the literature. By providing a comprehensive overview of the scope, characteristics, and development of research in this field, the review is expected to inform the design of future primary studies and evidence syntheses. The findings will be reported in accordance with PRISMA-ScR, with updates in OSF and the screening process made public via Rayyan®, and will be submitted to an open access, peer-reviewed international journal. The results will also be disseminated at national and

international nursing conferences and shared with relevant stakeholders, including nurse educators, researchers, professional organisations and healthcare institutions that support newly graduated nurses.

Author Contributions: T.X.: Conceptualisation, Writing—original draft; C.J.S.O.—Validation, Supervision, Writing—review and editing; F.T.—Validation, Supervision, Writing—review and editing; S.C.—Validation, Supervision, Writing—review and editing. All authors have read and agreed to the published version of the manuscript.

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Public Involvement Statement: No public involvement in any aspect of this research.

Guidelines and Standards Statement: The manuscript was drafted in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines.

Use of Artificial Intelligence: The authors declare that they used AI-assisted technology (Grammarly, version 1.123.0.0) to support translation and improve the English quality of the manuscript draft.

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Conflicts of Interest: The authors declare no conflicts of interest.

Abbreviations

The following abbreviations are used in this manuscript:

CINAHL	Cumulative Index to Nursing and Allied Health Literature
JBI	Joanna Briggs Institute
MeSH	Medical Subject Headings
OSF	Open Science Framework
PRISMA-ScR	Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews

Appendix A

Table A1. Summary of previous reviews identified during protocol development addressing the transition to professional practice.

Author	Publication Year	Aims	Review Type	Period Covered	Number of Included Studies	Limitation Relevant to the Present Scoping Review
Raqueno et al. [5]	2025	Mapping strategies designed to assist newly graduated nurses in providing peer support	Systematic Review	May of 2025 without restriction	9	Restricted to a specific type of strategies, in a specific period.
Stratton-Maher et al. [9]	2026	Identify and map existing gaps in nurse education that impact the preparedness of students entering professional practice	Scoping Review	2014 to 2025	81	Focused on students' preparedness, not on the transition as a process.

Table A1. *Cont.*

Author	Publication Year	Aims	Review Type	Period Covered	Number of Included Studies	Limitation Relevant to the Present Scoping Review
Lee et al. [10]	2023	Identify the factors and effective strategies to improve nursing students' readiness for practice	Systematic Review	2012 to 2022	11	Restricted to nursing students
Park et al. [11]	2026	Synthesize evidence on how previous experience in formal paid employment models influences students' and nurses' transition to practice.	Qualitative Systematic Review	No date limit.	12	Based on the experience of students/nurses who had previous paid work. Is a specific population. Limited to English.
Dwyer & Hunter Revell [12]	2016	Identify factors that influence new graduate nurse transition	Literature Review (non-specific)	2001 to June of 2015	42	Based on the newly graduated nurse. The search ends in 2015.
Masamba et al. [13]	2025	Explore the factors that impact early-career nurses thriving at work.	Scoping Review	1985 to 2025	16	Based on the first five years of practice. Does not include the period as a student.
Borromeo et al. [14]	2026	Provide a view on stress, transition to practice and retention in nursing.	Bibliometric Analysis	1981 to 2025	664 documents	Keyword and citation mapping in one database (Web of Science). Does not chart definitions, time window or the use of theory in each study.
Clement & Chappell [15]	2026	Identify system-level patterns associated with inpatient new graduate nurse turnover during the first two years of professional practice.	Scoping Review	2015 to 2025	65	Limited to understanding the factors that shape early-career retention and turnover in the first two years in hospital.
Gardiner & Sheen [16]	2016	Understanding the transition to newly graduated nurse.	Literature Review (non-specific)	2005 to 2015	36	Based on the experience of newly graduated nurses. Does not include student's view. The search ends in 2015, and the research is limited to English.
Van Rooyen et al. [17]	2018	Summarize facilitating transition of final year nursing students to professional nurses.	Integrative Literature Review	2008 to 2017	8	Research limited to guidelines published in English between 2008 and 2017. Restricted to factors that facilitate the transition.
Rush et al. [18]	2019	Identify the best practices of formal new graduate nurse transition programs.	Integrative Literature Review	2000 to 2018	76	Search limited to formal transition programs. A reality that is not transferable between countries.
Järvinen et al. [19]	2018	Identify the factors related to the readiness of students to enter working life.	Scoping Review	2000 to 2017	17	Limited to the factors related to nursing students' readiness to enter working life. Limited to the use of two databases (PubMed and CINAHL).
Baharum et al. [20]	2023	Synthesize the success factors that promote newly graduated nurses' effective transition and adaptation	Scoping Review	2011 to 2020	23	Restricted to a specific theme and period of the transition
See et al. [21]	2023	Synthesize the qualitative studies about experiences of newly graduated nurses transitioning to practice.	Qualitative Systematic Review	2010 to 2022	25	Limited to qualitative studies and English language.

Appendix B

Table A2. Keywords selected considering natural concepts and indexed terms.

Keywords	Natural Concepts	MeSH (Medical Subject Headings)	CINAHL (Cumulative Index to Nursing and Allied Health Literature)
Keyword 1	novice OR "newly graduat*" OR "new graduat*" OR "recent* graduat*" OR student* OR graduat* OR "nursing student" OR "final-year" OR "internship" OR "newly qualified" OR "early career"	"students, nursing" OR nurses	"students, nursing, baccalaureate" OR "novice nurses"
Keyword 2	"transition* to practice" OR "transition* into practice" OR "transition-to-practice" OR "transition shock" OR "reality shock" OR "professional transition*" OR "professional sociali*" OR "practice transition*" OR onboarding OR "role transition*" OR "student to nurse" OR "student-to-nurse"	--------	----------
Keyword 3	nurs*	nursing	"nursing practice"

Appendix C

We conducted a preliminary search in MEDLINE (via PubMed) on 20 July 2026 to develop and test the search strategy, and rebuilt it on 16 November 2026, after the reviewers' and editors' comments. The search strategy combined both natural and index terms related to the three concepts: (1) newly graduated nurse; (2) transition; (3) nurs*. We used Boolean operators to combine the search blocks. No restrictions on the year or language of publication were imposed in this phase.

Table A3. Query strategy developed for MEDLINE (via PubMed) on 16 November of 2026.

Search No.	Query	Records Retrieved
# 1	(novice[Title/Abstract] OR "newly graduat*"[Title/Abstract] OR "new graduat*"[Title/Abstract] OR "recent* graduat*"[Title/Abstract] OR student*[Title/Abstract] OR graduat*[Title/Abstract] OR "nursing student"[Title/Abstract] OR "final-year"[Title/Abstract] OR "in-ternship"[Title/Abstract] OR "newly qualified"[Title/Abstract] OR "early career"[Title/Abstract]) OR ("students, nursing" OR nurses[MeSH Terms])	639,143
# 2	"transition* to practice"[Title/Abstract] OR "transition* into practice"[Title/Abstract] OR "transition-to-practice"[Title/Abstract] OR "transition shock"[All Fields] OR "reality shock"[Title/Abstract] OR "professional transition*"[Title/Abstract] OR "professional sociali*"[Title/Abstract] OR "practice transition*"[Title/Abstract] OR "onboarding"[Title/Abstract] OR "role transition*"[Title/Abstract] OR "student-to-nurse"[Title/Abstract] OR "student-to-nurse"[Title/Abstract]	3890
# 3	nurs*[Title/Abstract] OR nursing[MeSH Terms]	755,737
# 4	("novice"[Title/Abstract] OR "newly graduat*"[Title/Abstract] OR "new graduat*"[Title/Abstract] OR "recent* graduat*"[Title/Abstract] OR "student*"[Title/Abstract] OR "graduat*"[Title/Abstract] OR "nursing student"[Title/Abstract] OR "final-year"[Title/Abstract] OR "internship"[Title/Abstract] OR "newly qualified"[Title/Abstract] OR "early career"[Title/Abstract] OR ("students nursing"[All Fields] OR "nurses"[MeSH Terms])) AND ("transition* to practice"[Title/Abstract] OR "transition* into practice"[Title/Abstract] OR "transition-to-practice"[Title/Abstract] OR "transition shock"[All Fields] OR "reality shock"[Title/Abstract] OR "professional transition*"[Title/Abstract] OR "professional sociali*"[Title/Abstract] OR "practice transition*"[Title/Abstract] OR "onboarding"[Title/Abstract] OR "role transition*"[Title/Abstract] OR "student-to-nurse"[Title/Abstract] OR "student-to-nurse"[Title/Abstract]) AND ("nurs*"[Title/Abstract] OR "nursing"[MeSH Terms])	1526

Appendix D

Table A4. Query strategy developed for the databases included in this scoping review. We conducted the search in these databases on 16 November 2026.

Databases	Query (Search Conducted: 16 November 2026)	Records Retrieved
MEDLINE (Via PubMed)	(“novice”[Title/Abstract] OR “newly graduat*”[Title/Abstract] OR “new graduat*”[Title/Abstract] OR “recent* graduat*”[Title/Abstract] OR “student*”[Title/Abstract] OR “graduat*”[Title/Abstract] OR “nursing student”[Title/Abstract] OR “final-year”[Title/Abstract] OR “internship”[Title/Abstract] OR “newly qualified”[Title/Abstract] OR “early career”[Title/Abstract] OR (“students nursing”[All Fields] OR “nurses”[MeSH Terms])) AND (“transition* to practice”[Title/Abstract] OR “transition* into practice”[Title/Abstract] OR “transition-to-practice”[Title/Abstract] OR “transition shock”[All Fields] OR “reality shock”[Title/Abstract] OR “professional transition*”[Title/Abstract] OR “professional sociali*”[Title/Abstract] OR “practice transition*”[Title/Abstract] OR “onboarding”[Title/Abstract] OR “role transition*”[Title/Abstract] OR “student-to-nurse”[Title/Abstract] OR “student-to-nurse”[Title/Abstract]) AND (“nurs*”[Title/Abstract] OR “nursing”[MeSH Terms])	1526
CINAHL Complete (Via EBSCOhost)	(((XB (novice OR “newly graduat*” OR “new graduat*” OR “recent* graduat*” OR student* OR graduat* OR “nursing student” OR “final-year” OR “internship” OR “newly qualified” OR “early career”) OR MH (“students, nursing, baccalaureate” OR “novice nurses”))) AND ((XB (“transition* to practice” OR “transition* into practice” OR “transition-to-practice” OR “transition shock” OR “reality shock” OR “professional transition*” OR “professional sociali*” OR “practice transition*” OR onboarding OR “role transition*” OR “student to nurse” OR “student-to-nurse”))) AND ((XB (nurs*) OR MH (“nursing practice”)))	1445
Scopus (Via Elsevier)	((TITLE-ABS-KEY (novice OR “newly graduat*” OR “new graduat*” OR “recent* graduat*” OR student* OR graduat* OR “nursing student” OR “final-year” OR “internship” OR “newly qualified” OR “early career”)) AND (TITLE-ABS-KEY (“transition* to practice” OR “transition* into practice” OR “transition-to-practice” OR “transition shock “ OR “reality shock” OR “professional transition*” OR “professional sociali*” OR “practice transition*” OR onboarding OR “role transition*” OR “student to nurse” OR “student-to-nurse”)) AND (TITLE-ABS-KEY (nurs*))	1760
Web of Science Core Collection (Via Clarivate)	(TS=(novice OR “newly graduat*” OR “new graduat*” OR “recent* graduat*” OR student* OR graduat* OR “nursing student” OR “final-year” OR “internship” OR “newly qualified” OR “early career”)) AND (TS=(“transition* to practice” OR “transition* into practice” OR “transition-to-practice” OR “transition shock “OR “reality shock” OR “professional transition*” OR “professional sociali*” OR “practice transition*” OR onboarding OR “role transition*” OR “student to nurse” OR “student-to-nurse”)) AND (TS=(nurs*))	1327
ERIC (Via ProQuest)	title(novice OR “newly graduat*” OR “new graduat*” OR “recent* graduat*” OR student* OR graduat* OR “nursing student” OR “final-year” OR “internship” OR “newly qualified” OR “early career”) AND abstract(“transition* to practice” OR “transition* into practice” OR “transition-to-practice” OR “transition shock “ OR “reality shock” OR “professional transition*” OR “professional sociali*” OR “practice transition*” OR onboarding OR “role transition*” OR “student to nurse” OR “student-to-nurse”) AND title(nurs*)	151
PsycINFO (Via EBSCOhost)	XB (novice OR “newly graduat*” OR “new graduat*” OR “recent* graduat*” OR student* OR graduat* OR “nursing student” OR “final-year” OR “internship” OR “newly qualified” OR “early career”) AND XB (“transition* to practice” OR “transition* into practice” OR “transition-to-practice” OR “transition shock “OR “reality shock” OR “professional transition*” OR “professional sociali*” OR “practice transition*” OR onboarding OR “role transition*” OR “student to nurse” OR “student-to-nurse”) AND XB (nurs*)	492

Table A5. Query strategy developed for grey literature.

Databases	Query (Search Conducted: 16 November 2026)	Records Retrieved
RCAAP (Via EBSCO Discovery Service)	((TI (nurs* OR enferm*) OR AB (nurs* OR enferm*) OR SU (nurs* OR enferm*)) AND (TI ("transition* to practice" OR "transition* into practice" OR "transition-to-practice" OR "transition shock "OR "reality shock" OR "professional transition*" OR "professional sociali*" OR "practice transition*" OR onboarding OR "role transition*" OR "student to nurse" OR "student-to-nurse"OR transição) OR AB ("transition* to practice" OR "transition* into practice" OR "transition-to-practice" OR "transition shock "OR "reality shock" OR "professional transition*" OR "professional sociali*" OR "practice transition*" OR onboarding OR "role transition*" OR "student to nurse" OR "student-to-nurse"OR transição) OR SU ("transition* to practice" OR "transition* into practice" OR "transition-to-practice" OR "transition shock "OR "reality shock" OR "professional transition*" OR "professional sociali*" OR "practice transition*" OR onboarding OR "role transition*" OR "student to nurse" OR "student-to-nurse"OR transição)) AND (TI (novice OR "newly graduat*" OR "new graduat*" OR "recent* graduat*" OR student* OR graduat* OR "nursing student" OR "final-year" OR "newly qualified" OR "early career" OR jovem OR recém-graduado* OR estudante* OR "último ano*" OR graduado*) OR AB (novice OR "newly graduat*" OR "new graduat*" OR "recent* graduat*" OR student* OR graduat* OR "nursing student" OR "final-year" OR "newly qualified" OR "early career" OR jovem OR recém-graduado* OR estudante* OR "último ano*" OR graduado*) OR SU (novice OR "newly graduat*" OR "new graduat*" OR "recent* graduat*" OR student* OR graduat* OR "nursing student" OR "final-year" OR "newly qualified" OR "early career" OR jovem OR recém-graduado* OR estudante* OR "último ano*" OR graduado*)))	189
ProQuest Dissertations & Theses Citation Index (Web of Science)	(Title (((novice OR "newly graduat*" OR "new graduat*" OR "recent* graduat*" OR student* OR graduat* OR "nursing student" OR "final-year" OR "internship" OR "newly qualified" OR "early career"))) AND "transition* to practice" OR "transition* into practice" OR "transition-to-practice" OR "transition shock "OR "reality shock" OR "professional transition*" OR "professional sociali*" OR "practice transition*" OR onboarding OR "role transition*" OR "student to nurse" OR "student-to-nurse"AND Title((nurs*))	297
Open Dissertations (Via EBSCOhost)	TI (novice OR "newly graduat*" OR "new graduat*" OR "recent* graduat*" OR student* OR graduat* OR "nursing student" OR "final-year" OR "internship" OR "newly qualified" OR "early career") AND TI ("transition* to practice" OR "transition* into practice" OR "transition-to-practice" OR "transition shock" OR "reality shock" OR "professional transition*" OR "professional sociali*" OR "practice transition*" OR onboarding OR "role transition*" OR "student to nurse" OR "student-to-nurse") AND TI (nurs*)	27

Appendix E

Table A6. Draft of data extraction matrix.

Main Field	Extraction Items
Literature ID	1. Reference Number 2. Authors 3. Year 4. Country 5. Title 6. Type of article/Study design 7. Research study ID 8. DOI
Source tier (select)	☐ Primary ☐ Review ☐ Non-empirical and grey literature

Table A6. *Cont.*

Main Field	Extraction Items
Aim of the study	
Sample Characteristics	
Type of Participants/Generation (if mentioned)	
Setting	
Definition of Transition used	Definition (verbatim, when present) ▫ Explicit ▫ Implicit ▫ Absent
Characterisation of Transition	▫ Process ▫ Period ▫ Event ▫ Experience ▫ Other
Transition Period	Period Studied with start and end points
Theories or models	Name (when present) ▫ Not reported ▫ Mentioned only ▫ Used to inform ▫ Design ▫ Measurement ▫ Interpretation
Study Variables	
Gaps and recommendations	

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