OPEN

Supporting professional practice transition in undergraduate nursing education: a scoping review protocol

Elizabeth Orr¹ • Meredith Kuipers¹ • Elizabeth Yates² • Kathryn Halverson¹

¹Department of Nursing, Faculty of Applied Health Sciences, Brock University, St. Catharines, ON, Canada, and ²Brock University Library, Brock University, St. Catharines, ON, Canada

ABSTRACT

Objective: This scoping review will describe educational programming that supports undergraduate student nurses' transition to practice and/or enhances practice readiness.

Introduction: The period of transition from nursing student to professional nurse is fraught with challenges stemming from the evolving role and the increasing demands of independent practice. While transition-to-practice programming exists for new graduate nurses, there is less focus on preparing students in their final year of education. A scoping review will identify educational programming delivered to nursing students approaching graduation that facilitates transition-to-practice success and/or improves practice readiness.

Inclusion criteria: This review will consider literature describing educational programming that supports transition-to-practice success and/or practice readiness and that demonstrates evidence of evaluation. Studies that involve primarily pre-licensure, undergraduate, or baccalaureate nursing students will be included. Reports of primary studies, reviews, dissertations and theses, conference proceedings, and nursing trade publications that describe quantitative, qualitative, or mixed methods designs will be included.

Methods: The proposed review will adhere to the JBI methodology for scoping reviews. A comprehensive search will be conducted in CINAHL (EBSCOhost), MEDLINE (Ovid), Healthstar (Ovid), and Nursing and Allied Health (ProQuest) using a search strategy developed in consultation with an expert university librarian. Two independent reviewers will screen articles by title and abstract and assess the full text of each selected citation against inclusion criteria. Quantitative methods (descriptive statistics) and basic qualitative content analysis will be used to analyze the data, and results will be reported in narrative and graphic formats.

Review registration: Open Science Framework https://osf.io/2vsbq/

Keywords: education, new graduate nurses; practice readiness; students, nursing; transition-to-practice

JBI Evid Synth 2025; 23(5):958-966.

Introduction

or student nurses, graduation marks the moment that they leave the relative comfort and security of the supervised academic program and encounter the expectations of independent nursing

Correspondence: Elizabeth Orr, eorr@brocku.ca

This is an open access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

The authors declare no conflict of interest.

DOI: 10.11124/JBIES-24-00180

practice as a professional. For the new graduate nurse (NGN), the transition to practice has been described as a year-long process of transformation of both the professional and personal self. The process is characterized by the experience of 3 stages (doing, being, and knowing) in which the NGN must adjust to the significant changes in their evolving role as a professional nurse, and which demands rapid growth in their clinical skills, cognitive capacity, and self-confidence. The transition to practice is influenced by the NGN's practice readiness, defined as the intersection of cognitive capability, clinical capability, and professional capability. When these attributes coincide at the point of self-efficacy, the

SCOPING REVIEW PROTOCOL E. Orr et al.

NGN develops keen self-awareness and can manifest the outcomes of practice readiness: successful navigation of the transition to professional nurse, confident demonstration of their nursing practice, and provision of safe care for their clients.²

The literature exploring factors affecting practice readiness is skewed toward the negative, often deferring to the perceived deficiencies and challenges faced by the NGN during their transition. For instance, nursing students and NGNs consistently describe feelings of ill-preparedness stemming from inadequacy of clinical practice (both quality and duration) attributable to the academic program and resulting in a self-perception of low clinical competence.^{3,4} Practice readiness is further impacted by negative cognitive patterns and stressors, such as personal feelings of insecurity, anxiety, stress, dissatisfaction, and low self-confidence.^{3–5} This perspective suggests an opportunity for programming to target essential non-clinical aspects of practice readiness.

The transition from student nurse to professional practitioner is complex and can be rife with challenges if proper attention or support is not provided during this delicate time. 1,6 The NGN must learn how to make decisions under pressure while applying the knowledge and skills they have acquired in their undergraduate nursing education in an often fast-paced and unpredictable environment. NGNs must also learn how to navigate the complexities of the health care system, including understanding the roles and responsibilities of different health care providers and working collaboratively with them; communicating effectively with patients and families; managing ethical and legal issues; operating within organizational structures, policies, and procedures; and managing expectations from supervisors and colleagues. These demands must also be balanced with the emotional burdens of the profession, including dealing with patient suffering and death, managing stress and burnout, and developing effective coping strategies.^{9,10}

There is a recognized need to support the transition to practice of NGNs with programming that aims to facilitate successful transitions and mitigate some of the potential challenges associated with the process. ^{1,11,12} In examining existing support for the transition to practice, the literature provides plenty of examples aimed at NGNs, primarily in the form of transition-to-practice programs lasting 6 to 12 months featuring a period of preceptorship and theoretical

learning, with or without some form of interactive learning (eg, skill and competency development, simulation, interdisciplinary patient rounds, or inservices), and designed to improve clinical competence and safe patient care. The authors of multiple reviews stated that due to the variability in program length, inconsistent description of program interventions, heterogeneity of outcome measures, and use of largely non-validated measurement tools, there was no way to reliably compare interventions, thus generating no conclusive evidence as to what constitutes a meaningful intervention that facilitates the transition to practice. 12–15,17

Few reviews described primary studies that were inclusive of undergraduate student participants. 12,13,15,18,19 Those that included cohorts of students and NGNs did not stratify results into prevs post-graduation cohorts, 13,15 making it difficult to understand where in the transition interventions might have most effect. Only 3 reviews involved studies of undergraduate nursing students exclusively, 12,18,19 and among this subset, only 2 individual primary studies could be identified that specifically targeted non-clinical aspects of practice. 20,21 And while strategies to better prepare students prior to entering professional practice are recommended, including curricular revisions within final year nursing courses, 21,22 there is little guidance on the types of educational strategies and/or specific curricular elements used to support transition to practice within undergraduate nursing programs and the effectiveness of these approaches.

What constitutes an undergraduate or baccalaureate nursing education varies somewhat across jurisdictions. Requisite components generally include a program of education with a prescribed number of hours of training delivered over 4 years (although accelerated programs do exist) by a university or university of applied sciences (ie, 5400 hours of training²³); adherence to elements of a national standard curriculum framework that aims to prepare nurses for the licensing exam and for practice as a registered nurse; and formal accreditation by an authoritative organization (ie, the Canadian Association of Schools of Nursing [CASN], the Commission on Collegiate Nursing Education, the Accreditation Commission for Education in Nursing in the United States, or the Australian Nursing and Midwifery Accreditation Council). Programs are responsible for providing educational and experiential opportunities that enable

enrolled students to successfully acquire the academic knowledge, clinical skills, professional behaviors, and attitudes necessary to enter the nursing profession as a registered nurse.^{24,25}

These qualifications are mapped to entry-to-practice competencies set by the licensing body in each jurisdiction (eg, provincial and territorial regulatory colleges in Canada; state, district, or territorial boards of nursing in the United States; the national Nursing and Midwifery Board of Australia). However, while the expectation exists that nurses completing their education at schools of nursing are practice-ready, the literature is clear that a challenging period of transition occurs for many NGNs, 1,6 even in the context of transition-to-practice programs delivered by employers once the student has completed their academic program. 11,12 Moreover, non-clinical aspects of practice readiness influence transition-to-practice success.3-5 Such topics are included much less often in transition-to-practice programs and, as recently as 2022, "preparation for the emotional demands, turmoil, and complexity in health care systems "26(p.6) remained an educational priority identified by CASN in an environmental scan to inform baccalaureate educational framework needs. Given that standardized tools are available to assess practice readiness among nursing students (ie, Casey-Fink Readiness for Practice Survey), yet reviews of practice readiness among pre-licensure nursing students are lacking in the literature, we see an opportunity to systematically identify and map existing educational programming for the baccalaureate nursing student that facilitates transition-to-practice success.

A preliminary search of CINAHL (EBSCOhost), PubMed, IBI Evidence Synthesis, PROSPERO, Open Science Framework, and Figshare was conducted in November 2023. No registered protocols on this topic were found. One similar review was found that identified interventions targeting the improvement of practice readiness among nursing students, ¹⁹ and the results of that study were specifically mapped to the 10 domains of competency-based practice of the American Association of Colleges of Nursing and included only interventions with evidence of objective measurement. The proposed review is unique because it broadly focuses on identifying interventions with evidence of evaluation, independent of competency-based curriculum requirements, and with special attention to non-clinical aspects of transitionto-practice.

The objective of this scoping review is to systematically search the literature for evidence of transition-to-practice education programming that has been implemented and evaluated within a baccalaureate nursing curriculum, and that has been used to support the transition process for baccalaureate nursing students approaching degree completion.

Review questions

- i) What educational programming is included in undergraduate or baccalaureate nursing education to support transition to practice and/or enhance practice readiness for students approaching degree completion?
- ii) What aspects of transition to practice or practice readiness are addressed by the educational programming (eg, cognitive capability, clinical capability, resilience, coping)?
- iii) What are the specific attributes of programming implemented to support transition to practice and/or enhance practice readiness (eg, curricular concepts, instructional strategies)?
- iv) What methods of evaluation (eg, study design, tools, outcome measures) have been used to measure the success of programming implemented to support transition to practice and/or enhance practice readiness?

Inclusion criteria

Participants

This review will consider studies that include prelicensure nursing students enrolled in an undergraduate or baccalaureate nursing program. Studies focused solely on NGNs (eg, degree complete and/or postlicensure) or nursing students enrolled in a bridging program (eg, students who have previously been licensed as a practicing nurse) will not be considered for this review. Studies that include both pre- and post-licensure populations will be included, and the data for pre-licensure nursing students will be extracted. No limits will be placed on age, gender, or sex.

Concept

This review will consider studies that describe the implementation and evaluation of educational programming (eg, academic programs, courses, other curricular interventions) aimed at supporting transition to practice and/or practice readiness for baccalaureate

nursing students. Programming may support transition success or practice readiness broadly or focus on specific aspects (eg, socialization, stress management, cognitive capability).

Context

This review will consider studies that are specific to nursing education within baccalaureate degree programs (BN, BScN) at an accredited university/college (or international equivalents).

Types of sources

This scoping review will consider primary studies, reviews, dissertations and theses, conference proceedings, and nursing trade publications. Primary studies may be experimental or quasi-experimental study designs, including randomized controlled trials, nonrandomized controlled trials, before and after studies, and interrupted time-series studies. In addition, both analytical and descriptive observational studies will be considered for inclusion; for example, case studies, cross-sectional studies, and cohort studies. Qualitative and mixed methods studies that meet the inclusion criteria will also be considered.

Methods

The proposed scoping review will be conducted in accordance with the JBI methodology for scoping reviews²⁷ and reported in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR).²⁸

Search strategy

The search strategy will aim to locate both published and preprint primary studies, reviews, dissertations and theses, conference proceedings, and nursing trade publications. An initial limited search of CINAHL (EBSCOhost), PubMed, and *JBI Evidence Synthesis* was undertaken to identify articles on the topic. The text words contained in the titles and abstracts of relevant articles, and the index terms used to describe the articles, were used to develop a full search strategy for CINAHL via EBSCOhost (Appendix I). The search strategy, including all identified keywords and index terms, will be adapted for each included information source. The reference lists of articles included in the review will be screened for additional papers.

The search will be conducted without language limitations. Articles published from database inception

to the present will be included. Database inception was chosen strategically as the lower limit of the search date to capture any reports published since the founding of the first baccalaureate nursing programs took place before 1920 in both the United States and Canada. The CINAHL search strategy, including all identified keywords and subject headings, will be adapted for each additional included academic literature database: MEDLINE (Ovid), Healthstar (Ovid), and Nursing and Allied Health (ProQuest). A modified version of the database search strategy will be used to retrieve dissertations and theses and preprint articles via search engines (eg, Bielefield Search Engine) and relevant online collections (eg, Europe PMC, Web of Science Core Collection).

The draft search strategy for CINAHL was submitted for peer review by a second librarian in accordance with the Peer Review of Electronic Search Strategies (PRESS) guidelines.²⁹ The peer-reviewed search strategy is included in Appendix I.

Study selection

After completing the search, identified citations will be organized and imported into Covidence (Veritas Health Innovation, Melbourne, Australia) and duplicates removed. Following a pilot test, 2 or more independent reviewers will conduct a thorough screening of titles and abstracts in Covidence, using predefined inclusion criteria. Potentially relevant sources will then be retrieved in full and imported into Covidence. A detailed examination of the full text of each citation will be completed by 2 or more independent reviewers and assessed against the inclusion criteria. Disagreements among reviewers will be addressed through discussion or, if needed, consultation with an additional reviewer. The reasons for excluding sources at the full-text stage will be documented and included in an appendix within the final scoping review. The study selection process and outcomes will be presented in a PRISMA flow diagram, 30 providing a clear overview of the scoping review methodology.

Articles published in English will be included for full-text review. Given the similarity in the structure of nursing education among English-speaking countries, such as Canada, the United States, the UK, and Australia, as well as some European countries, it is anticipated that most relevant literature will originate from these locales and be published in English. Therefore, the likelihood of generating inclusion bias from an English-language restriction is low.

Data extraction

Data will be extracted from the included papers by 2 independent reviewers using a data extraction tool developed by the authors. Specific details about each paper, including author, year, country, study type/ design, and participants will be extracted. Additionally, data relevant to the review concept will also be extracted; for example, details about the contents and delivery of programming or interventions, aspects of practice readiness and transition to practice, and factors related to implementation. A draft data extraction tool is provided (Appendix II), and will be modified and revised as necessary during the process of data extraction, with the final tool and comments about iterations presented in the full scoping review. Any disagreements that arise between the reviewers during the extraction phase will be resolved through discussion or with an additional reviewer. Authors of papers will be contacted, where necessary, to request missing or additional data.

Data analysis and presentation

Following data extraction, the results will be mapped by descriptive statistics (frequency counts) and presented graphically (eg, tables, charts, and/or figures), where appropriate. A narrative summary will accompany quantitative results. Basic qualitative content analysis will be conducted to identify key characteristics of educational programming interventions³¹; reviewers will take a deductive approach to content analysis, based on the framework of practice readiness described by Mirza *et al.*² The presented results will correspond directly to the overall objective of the review, which is to map the existing educational programming used to support transition to practice and/or practice readiness in the baccalaureate nursing context.

Funding

This study was funded by the Brock University Chancellor's Chair in Teaching Excellence awarded to EO. The funders had no role in the design or writing of this protocol and will not be involved in the execution of the review.

Author contributions

EO contributed to conceptualization, methodology, writing, and editing. EY contributed to conceptualization, methodology, search strategy, writing,

and editing. MK and KH contributed to conceptualization, writing, and editing. All authors reviewed and edited the final manuscript.

References

- Duchscher JB. A process of becoming: the stages of new nursing graduate professional role transition. J Contin Educ Nurs 2008;39(10):441–450.
- Mirza N, Manankil-Rankin L, Prentice D, Hagerman L-A, Draenos C. Practice readiness of new nursing graduates: a concept analysis. Nurse Educ Pract 2019;37:68.
- Järvinen T, Eklöf N, Salminen L. Factors related to nursing students' readiness to enter working life – a scoping literature review. Nurse Educ Pract 2018;29:191–199.
- Lee T, Damiran D, Konlan KD, Ji Y, Yoon YS, Ji H. Factors related to readiness for practice among undergraduate nursing students: a systematic review. Nurse Educ Pract 2023;69:103614.
- Masso M, Sim J, Halcomb E, Thompson C. Practice readiness of new graduate nurses and factors influencing practice readiness: a scoping review of reviews. Int J Nurs Stud 2022;129:104208.
- Hampton KB, Smeltzer SC, Ross JG. The transition from nursing student to practicing nurse: an integrative review of transition to practice programs. Nurse Educ Pract 2021;52:103031.
- 7. Laschinger HK, Cummings G, Leiter M, Wong C, MacPhee M, Ritchie J, et al. Starting out: a time-lagged study of new graduate nurses' transition to practice. Int J Nurs Stud 2016:57:82–95.
- 8. Urban RW, Barnes DM. Transition to practice: the lived experience of new graduate nurses in early solo flight. J Nurse Profess Devel 2020;36(2):74–81.
- Ankers MD, Barton CA, Parry YK. A phenomenological exploration of graduate nurse transition to professional practice within a transition to practice program. Collegian 2018;25(3):319–325.
- Boamah SA, Read EA, Spence Laschinger HK. Factors influencing new graduate nurse burnout development, job satisfaction and patient care quality: a time-lagged study. J Adv Nurs 2017;73(5):1182–1195.
- 11. Alspach JR, Wingo N, Polancich S, Pernell G, Parris K. Factors influencing new graduate registered nurses' transition to practice. J Nurs Educ Pract 2023;13(7):25–32.
- Hampton KB, Smeltzer SC, Ross JG. Evaluating the transition from nursing student to practicing nurse: an integrative review. J Prof Nurs 2020;36(6):551–559.
- Abusubhiah M, Walshe N, Creedon R, Noonan B, Hegarty J. Self-efficacy in the context of nursing education and transition to practice as a registered practitioner: a systematic review. Nurs Open 2023;10(10):6650–6667.
- Aldosari N, Pryjmachuk S, Cooke H. Newly qualified nurses' transition from learning to doing: a scoping review. Int J Nurs Stud 2021;113:103792.

- Edward KL, Ousey K, Playle J, Giandinoto JA. Are new nurses work ready - the impact of preceptorship. An integrative systematic review. J Prof Nurs 2017;33(5):326–333.
- Kenny A, Dickson-Swift V, McKenna L, Charette M, Rush KL, Stacey G, et al. Interventions to support graduate nurse transition to practice and associated outcomes: a systematic review. Nurse Educ Today 2021;100:104860.
- Rogers S, Redley B, Rawson H. Developing work readiness in graduate nurses undertaking transition to practice programs: an integrative review. Nurse Educ Today 2021;105: 105034.
- 18. Kaihlanen AM, Haavisto E, Strandell-Laine C, Salminen L. Facilitating the transition from a nursing student to a Registered Nurse in the final clinical practicum: a scoping literature review. Scand J Caring Sci 2018;32(2):466–477.
- Shatto B, Meyer G, Krieger M, Kreienkamp MJ, Kendall A, Breitbach N. Educational interventions to improve graduating nursing students' practice readiness: a systematic review. Nurse Educ 2022;47(2):E24.
- Beanlands H, McCay E, Fredericks S, Newman K, Rose D, Santa Mina E, et al. Decreasing stress and supporting emotional well-being among senior nursing students: a pilot test of an evidence-based intervention. Nurse Educ Today 2019;76:222–227.
- 21. Meyer G, Shatto B, Delicath T, von der Lancken S. Effect of curriculum revision on graduates' transition to practice. Nurse Educ 2017;42(3):127–132.
- 22. Lavoie-Tremblay M, Sanzone L, Aubé T, Bigras C, Cyr G, Primeau G. A university/healthcare institution mentorship programme: improving transition to practice for students. J Nurs Manag 2020;28(3):586–594.
- Schnelli A, Steiner LM, Bonetti L, Levati S, Desmedt M. A bachelor's degree for entering the nursing profession: a scoping review for supporting informed health care policies. Int J Nurs Stud Adv 2024;6:100171.

- 24. Ontario Universities Application Centre. Essential requirements for study in baccalaureate nursing programs in Ontario [internet]. OUAC; 2024 [cited 2024 Aug 1]. Available from: https://www.ouac.on.ca/quide/nursing-essential/.
- 25. American Association of Colleges of Nursing. Baccalaureate education [internet]. AACN; n.d. [cited 2024 Aug 1]. Available from: https://www.aacnnursing.org/students/nursing-education-pathways/baccalaureate-education.
- Canadian Association of Schools of Nursing. National Nursing Educational Framework Baccalaureate [internet]. CASN;
 2022 [cited 2024 Aug 1]. Available from: https://www.casn.ca/wp-content/uploads/2022/12/National-Nursing-Education-Framework_2023_EN_Baccalaureate.pdf.
- Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil H. Scoping reviews. In: Aromataris E, Munn Z, editors. JBI Manual for Evidence Synthesis [internet]. JBI; 2020 [cited 2024 Feb 1]. Available from: https://synthesismanual.jbi. global.
- 28. 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(7):467–473.
- Canadian Agency for Drugs and Technologies in Health. PRESS – Peer Review of Electronic Search Strategies: 2015 Guideline Explanation and Elaboration (PRESS E&E) [internet]. CADTH; 2016 [cited 2024 Jan 11]. Available from: https://www.cda-amc.ca/sites/default/files/pdf/CP0015_PRESS_Update_Report_2016.pdf.
- Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71.
- 31. Pollock D, Peters MDJ, Khalil H, McInerney P, Alexander L, Tricco AC, *et al.* Recommendations for the extraction, analysis, and presentation of results in scoping reviews. JBI Evid Synth 2023;21(3):520–532.

Appendix I: Search strategy

CINAHL Complete (EBSCOhost)

Search conducted: February 6, 2024

Search ID#	Search terms	Results retrieved
S1	TI (Nurs* N3 student*) N3 graduat* OR AB (Nurs* N3 student*) N3 graduat*	1767
S2	TI (Nurs* N3 student*) N3 "degree completion" OR AB (Nurs* N3 student*) N3 "degree completion"	8
S3	graduat* N3 nurs* OR AB graduat* N3 nurs*	
S4	TI (((final OR last OR culminat*) N3 year) N3 (Nurs* N3 student*))) OR AB (((final OR last OR culminat*) N3 year) N3 (Nurs* N3 student*)))	
S5	(MH "New Graduate Nurses")	
S6	(MH "Novice Nurses")	
57	(MH "Students, Nursing, Baccalaureate+")	
58	(MH "Students+")	180,041
59	(MH "Nursing as a Profession+")	299,868
S10	S8 AND S9	
S11	TI (Curricul* OR Course* OR Training OR Simulation OR* Immersi* OR Program*) OR AB (Curricul* OR Course* OR Training OR Simulation OR* Immersi* OR Program*)	756,441
S12	TI (Clinical N3 (training OR placement* OR practicum*)) OR AB (Clinical N3 (training OR placement* OR practicum*))	11,377
S13	TI Education* N3 program* OR AB Education* N3 program*	44,213
514	TI Didactic N3 workshop* OR AB Didactic N3 workshop*	107
S15	TI ((Virtual OR online OR web) N3 scenario*) OR AB ((Virtual OR online OR web) N3 scenario*)	273
S16	TI ((Service OR experiential OR co-op* OR cooperative) N3 (learning OR education OR placement*)) OR AB ((Service OR experiential OR co-op* OR cooperative) N3 (learning OR education OR placement*))	13,155
S17	TI intern* OR AB intern*	
S18	TI Role N3 model* OR AB Role N3 model*	8029
519	TI Mentor* OR AB Mentor*	17,289
S20	TI Residency OR AB Residency	13,599
521	(MH "Schools, Nursing")	13,016
522	(MH "Education, Nursing, Baccalaureate+")	12,867
523	(MH "Curriculum+")	47,952
524	(MH "Course Content")	7228
525	(MH "Education, Clinical+")	19,723
526	(MH "Education, Nonprofessional+")	160,267
527	(MH "Learning Methods+")	29,075
528	(MH "Teaching Methods+")	133,057
529	(MH "Online Education")	4493
530	(MH "Internship and Residency+")	21,003
31	(MH "Role Models")	4250
532	(MH "Mentorship")	18,226
533	TI (Practice N3 (readiness OR ready OR Prepar* OR Transition*)) OR AB (Practice N3 (readiness OR ready OR Prepar* OR Transition*))	6589
534	TI (Career N3 (plann* OR development OR prepar* OR readiness OR ready OR Transition*)) OR AB (Career N3 (plann* OR development OR prepar* OR readiness OR ready OR Transition*))	4502
S35	TI ((Transition* OR Entry) N3 (practice OR career OR work*))OR AB((Transition* OR Entry) N3 (practice OR career OR work*))	5731
S36	TI Transition* N3 program* OR AB Transition* N3 program*	2600

(Continued)					
Search ID#	Search terms	Results retrieved			
S37	(MH "Entry Into Practice")	2247			
S38	(MH "Transitional Programs")	4097			
S39	(MH "Professional Identity")	2599			
S40	(MH "New Graduate Role")	492			
S41	S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40	23,534			
S42	S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32	1,287,558			
S43	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S10	31,326			
S44	TI Apprentice* OR AB Apprentice*	1370			
S45	S42 OR S44	1,287,984			
S46	TI pregraduate N3 (Nurs* N3 student*) OR AB pregraduate N3 (Nurs* N3 student*)	6			
S47	TI novice N3 nurs* OR AB novice N3 nurs*	1333			
S48	TI Prelicensure N3 nurs* OR AB Prelicensure N3 nurs*	679			
S49	S43 OR S46 OR S47 OR S48	32,313			
S50	TI Externship* OR AB Externship*	195			
S51	S45 OR S50	1,288,028			
S52	S41 AND S49 AND S51	2094			

Appendix II: Draft data extraction instrument

Author (year)	Country	Study type/design	Participants
Type of intervention	Participation: mandatory or voluntary	Description of intervention	
Aspect of practice readiness addressed ^a	Aspect of non-clinical transition to practice addressed ^b	Implementation factors ^c	Outcomes measured

^aAspects of practice readiness include cognitive capability, clinical capability, and professional capability. ²
^bNon-clinical aspects of transition include socialization, stress management, and transition shock. ⁶
^cImplementation factors include organizational, cultural, logistical, financial, or individual components that play a role in the effective implementation of the intervention/initiative.