



RPN-FOCUSED LITERATURE REVIEW:

A scoping review of research studies focused on
Registered Practical Nurse participants

Nicole A. Guitar PhD, MPT, MSc

Denise M. Connelly, PhD, MSc

September 2022

RPN-focused Literature Review

Team Leads

Annette Weeres, Senior Director,
Professional Practice & Research,
WeRPN

Nancy Snobelen, Research Consultant

Authors

Nicole A. Guitar PhD, MPT, MSc

Denise M. Connelly, PhD, MSc

Corresponding Author:

Nicole Guitar
Faculty of Health and Rehabilitation
Sciences
School of Physical Therapy
Western University
nguitar@uwo.ca

Correspondence Contact Information

Annette Weeres,
WeRPN

5025 Orbitor Dr, Building 5, Suite 200

Mississauga, ON L4W 4Y5

Email: dmartin@werpn.com

Annette Weeres

Email: aweeres@werpn.com

RPN-focused Literature Review: A scoping review of research studies focused on Registered Practical Nurse participants was commissioned by the Registered Practical Nurses Association of Ontario (WeRPN).

All rights reserved. This document may be produced, reproduced, or published in its entirety or in part, without modification, in any form including electronic, for policy, educational and any other non-commercial purpose. The Registered Practical Nurses Association of Ontario (WeRPN) requests citation as the original source.

Citation : Guitar, N, Connelly, D (2022). RPN-focused Literature Review: A scoping review of research studies focused on Registered Practical Nurses. Registered Practical Nurses Association of Ontario (WeRPN).

For any adaptation of this document, permission from the Registered Practical Nurses Association of Ontario (WeRPN) must be obtained.

Direct correspondence regarding this report should be submitted by email to: ppractice@werpn.com

© 2022 Registered Practical Nurses Association of Ontario (WeRPN)

Table of Contents

EXECUTIVE SUMMARY	4
INTRODUCTION	5
OVERVIEW	5
OBJECTIVES OF CURRENT REVIEW.....	6
PURPOSE	6
METHODS.....	7
INCLUSION & EXCLUSION CRITERIA	7
TYPES OF EVIDENCE & INFORMATION SOURCES	7
SEARCH STRATEGY	7
STUDY SELECTION	8
DATA EXTRACTION & QUALITY ASSESSMENT.....	8
DATA SYNTHESIS	8
RESULTS.....	9
STUDY SELECTION & CHARACTERISTICS.....	9
METHODOLOGICAL QUALITY OF THE INCLUDED STUDIES	9
PARTICIPANTS & SETTINGS.....	9
STUDY CHARACTERISTICS	11
NURSING RESEARCH THEMES	11
<i>Nursing Roles</i>	11
<i>Geriatric Nursing</i>	13
<i>Turnover & Retention</i>	13
<i>Mental Health Nursing</i>	14
<i>Diabetes</i>	14
<i>Other</i>	15
DISCUSSION.....	15
IMPLICATIONS	15
LIMITATIONS & GAPS	15
SUMMARY & CONCLUSION.....	16
TABLES AND FIGURES	17
REFERENCES.....	24
APPENDICES.....	26
APPENDIX A – FIGURE 2. PRISMA-SCR CHECKLIST.....	26
APPENDIX B – TABLE 2. BRIEF DESCRIPTION OF STUDIES THAT INCLUDED CANADIAN LPNs (N = 28)	29
APPENDIX C – TABLE 3. BRIEF DESCRIPTION OF STUDIES THAT INCLUDED NON-CANADIAN LPNs (N = 114)	35
APPENDIX D – TABLE 4. BRIEF DESCRIPTION OF STUDIES THAT INCLUDED ENs (N = 149).....	51
APPENDIX E – TABLE 5. BRIEF DESCRIPTION OF STUDIES THAT INCLUDED ASSOCIATE NURSES (N = 2) SORTED.....	70
APPENDIX F – TABLE 6. BRIEF DESCRIPTION OF STUDIES THAT INCLUDED ASSOCIATE DEGREE NURSES (N = 16).....	71

Executive Summary

Five research topic themes were identified in the RPN literature: Nursing Roles, Geriatric Nursing, Nurse Turnover and Retention, Mental Health Nursing and Diabetes.

This is the fourth iteration of the WeRPN Nursing Literature Review.

In this iteration, this review has been conducted as a scoping review, using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR; Tricco et al., 2018). Historically, the aim of these reviews has been to provide the WeRPN with a summary of the latest academic and professional research literature related to the healthcare role of the Registered Practical Nurse (RPN). In this iteration, we also considered the roles of RPN and similar categories nationally and globally: Licensed Practical Nurses (LPNs) in Canada, Enrolled Nurses (ENs) in the United Kingdom, and Associate Nurses (ANs) and Associate Degree Nurses (ADNs) in the United States, Australia and New Zealand. In past WeRPN reviews, it was found that nursing research mostly concerned Registered Nurses (RNs), with some emerging literature from the 2014 review highlighting RPNs and LPNs (Parker, 2014). In 2014, job satisfaction, working conditions and organizational culture remained central issues when discussing work environment settings (Parker, 2014).

In this review of literature published since January 1st, 2013, that included RPNs and/or their similar categories nationally and globally, a total of 18 articles were found to focus on RPNs, 150 on LPNs (Canadian and non-Canadian), 149 on ENs, 2 on ANs and 16 on ADNs. This review focuses heavily on the results of the 18 studies that included RPNs and summarizes the research studies from LPNs, ENs, ANs and ADNs more briefly. RPNs were consistently the least represented in the included studies and were rarely the sole focus of a research study (i.e., only three studies included RPNs as the sole participants). Five research topic themes were identified in the RPN literature: *Nursing Roles, Geriatric Nursing, Nurse Turnover and Retention, Mental Health Nursing and Diabetes.*

The findings of this review can assist with future policy, practice, and research decision-making for RPNs. It is likely that research literature focused on RPNs will increase in the coming years. Since 2020, the COVID-19 Pandemic has brought more attention to, and exacerbated, the disparities in the nursing workforce. Current initiatives such as the WeRPN's Bridging Educational Grants in Nursing (BEGIN), Ontario's Nursing Graduate Guarantee Program, and tri-council Social Sciences and Humanities Research Council awards will prompt researchers to examine nursing during this critical social epoch. Therefore, a rapid increase in RPN funded research over the next 2-years is predicted.

Introduction

Five research topic themes were identified in the RPN literature: Nursing Roles, Geriatric Nursing, Nurse Turnover and Retention, Mental Health Nursing and Diabetes.

Overview

The Registered Practical Nurses Association of Ontario (WeRPN) is the professional body for Registered Practical Nurses (RPNs) in Ontario. Over the past decade, WeRPN has commissioned literature reviews in 2011, 2013 and 2014 (Parker, 2011; 2013; 2014). The aim of previous reviews was to provide WeRPN with a summary of the latest academic, scientific and/or professional research literature available related to the healthcare role of RPNs. To this end, the topics of education curricula, staffing, work environment (e.g., job satisfaction, working conditions, and organizational culture), nurse categorization, nurse regulation, role ambiguity, scope of practice, high functioning nurse teams, models of nursing care, and the role of ENs in different countries of the British Commonwealth have been the primary focus of previous reviews (Parker, 2011; 2013; 2014). In 2022, WeRPN engaged Dr. Nicole Guitar to complete an updated literature review. Please note that this report was written with the intention of producing an upcoming peer-reviewed publication in the *Canadian Journal of Nursing Research*.

Previous reports from WeRPN Nurse Staffing Literature Reviews (Parker, 2011; 2013; 2014) suggest that research involving nurses tends to concentrate on Registered Nurses (RNs) specifically; however, these reports identified that the value of current curricula for all categories of nurses is being debated in the literature. As of 2005, RNs have minimally a university or college level baccalaureate degree in nursing, while RPNs minimally have a college-level diploma in practical nursing. Regulated nurses in Ontario practice within College of Nurses of Ontario (CNO) practice guidelines. According to the College of Nurses of Ontario, RNs and RPNs study from the same body of nursing knowledge and function as autonomous yet collaborative practitioners based on three factors – the client, the nurse and the environment (CNO, RN and RPN practice: The Client, the Nurse and the Environment ISBN 978-1-77116-100-8 Copyright © College of Nurses of Ontario, 2018. Publication 41062). RNs study for a longer period of time allowing for greater foundational knowledge accounting for differences in the level of autonomous practice. Similar yet not equivalent national and global nursing categories (e.g., Licensed Practical Nurses (LPNs) in Canada, Enrolled Nurses (ENs) in the United Kingdom, and Associate Nurses (ANs) and Associate Degree Nurses (ADNs) in the United States, Australia and New Zealand) have varying depth and breadth levels of formal education, skills and practice autonomy. Registered Practical Nurses (RPN) are:

- nurses registered with and regulated by the College of Nurses of Ontario,
- educated and hold a diploma in practical nursing from an accredited Ontario college,
- combine knowledge, skills, and judgement to provide compassionate, informed, and

expert, technical, medical, and virtuous nursing care,

- mostly employed to provide direct care daily to clients, residents, patients and families, and,
- in even greater demand for their service and skills as Ontario's demographics shift.

Today, more than 55,000 RPNs (www.cno/stats) are registered with the College of Nurses of Ontario (CNO) and support patients, clients and residents in hospitals, primary care practices, public health units, community care agencies, long-term care facilities, retirement homes, schools and private practice. In previous reports, job satisfaction, working conditions and organizational culture were central issues when discussing the settings in which nurses work.

Objectives of Current Review

The objective of this scoping review is to understand:

1. The extent and type of research evidence in the literature about RPNs in Canada; and
2. The extent of literature nationally and globally about RPN similar categories (i.e., LPNs, ENs, ANs, and ADNs).

This review will provide WeRPN with a summary of the latest academic and professional research literature available that is related to the healthcare role of RPNs and similar categories nationally and across the globe.

Purpose

The purposes of this report are to:

1. Describe the methods employed in conducting the scoping review and report preparation;
2. Discuss major findings produced for any nursing literature since the 2014 review was published; and
3. Summarize research or commentary pertaining to RPNs and similar categories nationally and globally.



Methods

In alignment with Arksey & O'Malley's (2005) proposed framework, this scoping review was conducted via the following stages: (1) identify research question, (2) identify relevant literature, (3) study selection, (4) data extraction, and (5) data analysis. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR) checklist was also used in the writing of this review (Tricco et al., 2018; see Appendix A). A scoping review methodology was chosen for this study because the aim of the review was to summarize findings from the existing research literature rather than providing a critical appraisal of relevant studies or drawing a conclusion to a specific question (Peters et al., 2020; Tricco et al., 2018).

Inclusion & Exclusion Criteria

The inclusion criteria were: (1) published literature available in English; (2) studies that included RPNs, LPNs, ENs, ANs or ADNs; (3) any organizational, system interventions, exposures, or situations focused on one of these populations in any of the following study designs: literature reviews, primary studies, organizational quality improvement initiatives, reports, and policy and/or position papers. In addition, any grey literature meeting the inclusion criteria were included in the review; grey literature was defined as literature not formally published in a journal article or book, such as dissertations or theses (Higgins & Green, 2011). Research of any study design (e.g., qualitative, quantitative) was included in the review. Any literature that had a sole focus on undergraduate education, pre-registration nurses or nursing students, and/or unregulated workers, without meeting the inclusion criteria above, was excluded. Any literature with a focus on any other type of nurse (e.g., RNs), that did not also meet the inclusion criteria, was excluded. Conference abstracts and editorials were also excluded. Research published prior to January 1st, 2013, was excluded on the basis that previous reviews have been conducted on this topic prior to this timeframe (Parker, 2013; 2014).

Types of Evidence & Information Sources

Computer-aided searches were carried out in the subsequent databases: MEDLINE (Ovid), PsychINFO (Ovid), CINAHL, EMBASE, SCOPUS, and Nursing and Allied Health (Proquest). These databases were used to ensure literature saturation based on the recommendation of a Teaching and Learning University Librarian at The University of Western Ontario. This review was written in accordance with the PRISMA-ScR (Tricco et al., 2018) transparent reporting of scoping reviews recommendations. The review protocol was registered with the Open Science Framework (<https://osf.io>) on January 28, 2022.

Search Strategy

The search strategy was formulated in conjunction with a Teaching and Learning University Librarian on October 8, 2021. The search was conducted on February 4, 2022. The words used in the search of computerized databases included registered practical nurse(s), licensed practical nurse(s), enrolled nurse(s), associate nurse(s) and associate degree nurse(s). All search terms were searched as keywords in addition to each database-specific subject headings, which varied among databases (e.g., SCOPUS' use of keywords only and Medline's use of

subject headings). As subject headings varied between databases, the database-specific search strategies were modified based on the recommendations of a Teaching and Learning University Librarian. No restrictions on language of publication were included in the search. Studies were excluded from the scoping review if they were published prior to January 1st, 2013.

Study Selection

Covidence review management software was used for study screening and selection (www.covidence.org). All citations identified through the database searches were exported and uploaded into Covidence, and duplicates were removed. This review author independently screened the titles and abstracts yielded by the search against the inclusion and exclusion criteria. This author then conducted a full-text review to confirm that the reports met the selection criteria. Additional insight from consultation with WeRPN was obtained when necessary to resolve concerns about literature eligibility. *A priori* it was determined that disagreements would be resolved through discussion; however, no disagreements occurred.

Data Extraction & Quality Assessment

This review's author extracted and charted the data using a data extraction form. Each included study underwent the data extraction process. Hawker et al.'s (2002) quality appraisal criteria was used in this review and ensures consistency in the assessment. The tool consists of nine subscales: abstract and title, introduction and aims, method and data, sampling, data analysis, ethics and bias, results, transferability /generalizability, and implications and usefulness of the study. The items in each subscale are rated on a 4-point ordinal scale described as good (4), fair (3), poor (2), and very poor (1). Each article received a total score within a range of 9-36 (Hawker et al., 2002). A score of 28-36 was associated with good quality articles, 20-27 for fair articles, 10-20 for poor quality articles, and less than 10 for very poor-quality articles. Two authors (NG & DC) independently assessed each included RNP focused study using this scale. When information was unavailable from a publication, the authors of the work were contacted up to two times to request missing or additional data, where required. If a response was not received within 7 business days, missing information was termed "unavailable." In no instance did authors reply to requests for additional information; therefore, some information was determined to be unavailable.

Data Synthesis

For the purposes of data synthesis, results are provided separately for each nursing title (i.e., RPN, LPN, EN, AN and ADN). Summaries of the study details are provided. Common research topics of included papers for RPNs will be used to categorize the included papers in overarching research themes, if applicable.

Results

Study Selection & Characteristics

A summary of the selection process is illustrated in Figure 1. The original search yielded 8356 articles. A total of 2266 duplicates were removed using Covidence software. After review of titles and abstracts of 6090 articles, 556 articles were assessed based on the inclusion criteria established for this scoping review. Studies were separated by nursing title for ease of viewing. Figure 1 details reasons for exclusion.

Methodological Quality of the Included Studies

The two review authors independently assessed study quality using the Hawker and Payne (2002) quality assessment scale. Initial inter-rater reliability of quality scores before discussion to reach consensus was $r = 0.99$. A total of 17 of the 18 studies met criteria for a “good” quality rating. Two studies were rated as “fair” quality (Nowrouzi et al., 2015; Vincent et al., 2006). On average studies scored 31/36, $SD = 3.48$, min, max = 24, 36, on the quality scale (i.e., good quality).

Participants & Settings

A total of 14 of the 18 studies included in the RPN search were prospective research studies (see Table 1 for summary of included studies). Another three studies included were reviews (Chu et al., 2016; Lukewich et al., 2016; Suva et al., 2015) and one commentary was included (College of Nurses of Ontario, 2020). Of the 14 prospective research studies, the range of total participants was 6 (Ziegler, 2021) to 3822 (MacLeod et al., 2022). The range of participants that were RPNs was 1 (Ziegler, 2021) to 585 (Wagner et al., 2013), while the range of participants that were RNs was 0 (Nowrouzi et al., 2015; Swahney et al., 2020; Snobelen, 2016) to 1937 (MacLeod et al., 2022). Some studies also included LPNs ($n = 1313$, MacLeod et al., 2022), Nurse Practitioners ($n = 3$, Ziegler, 2021) and Personal Support Workers ($n = 9$, Vincent et al., 2016; $n = 51$, Sutherland et al. 2020). Across the prospective studies, there was more than double the number of RNs ($n = 7109$) included in the research studies when compared to RPNs ($n = 3357$). Only three of the 18 studies included RPN focused research that did not also include RNs as participants (Nowrouzi et al., 2015; Swahney et al., 2020; Snobelen, 2016).

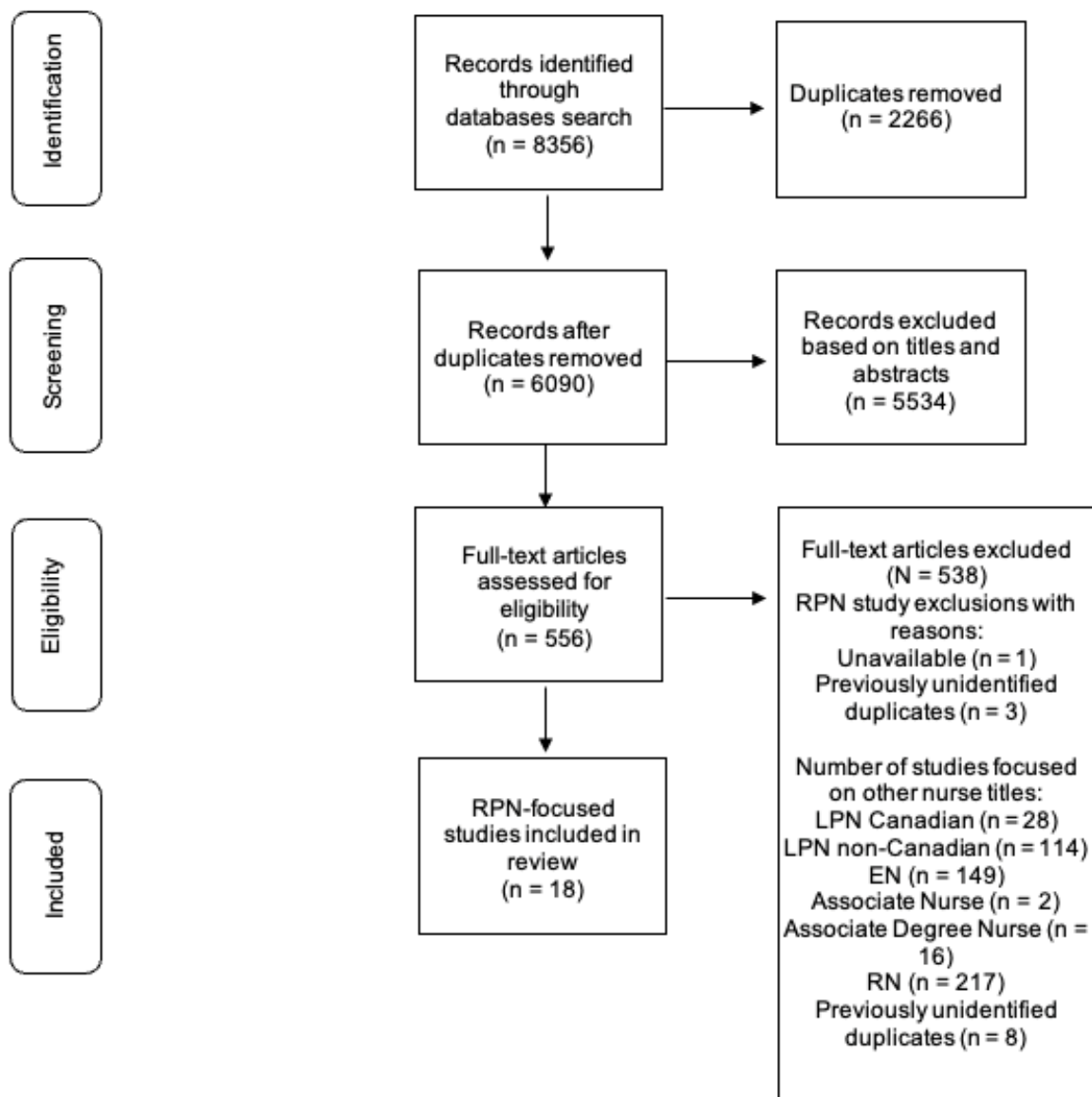


Figure 1. PRISMA Flowchart of Scoping Review process from identification to inclusion.

Demographic characteristics were not consistently reported across studies. Ten of the prospective research studies included a percentage distribution of the sex of their participants. The percentage of female participants ranged from 80.9% (Sutherland, 2020) to 96.0% (Chu et al., 2014). The mean age was reported in only two studies; other studies reported ranges. The mean age (years) therefore ranged from 36.0 (SD = 9.5; Sawhney et al., 2020) to 45.3 (SD = 11.7; Agawal et al., 2014). Other demographic details for RPNs are reported in Table 1. Studies that included Canadian LPNs (i.e., LPNs similar to Ontario RPNs) are summarized in Appendix B Table 2, and studies that included non-Canadian LPNs (i.e., LPNs similar to Ontario Personal Support Workers) are summarized in Appendix C Table 3. Studies that included ENs are available in Appendix D Table 4, studies that included ANs are available in Appendix E Table 5 and studies that included ADNs are available in Appendix F Table 6.

Study Characteristics

RPNs were consistently the least represented in the included studies and were rarely the sole focus of a research study. Only three studies included RPNs as the sole participants (Nowrouzi et al., 2015; Swahney et al., 2020; Snobelen, 2016). One of these studies aimed to investigate the barriers and facilitators to sustaining the nursing workforce, in particular retention factors, (Nowrouzi et al., 2015) through a cross-sectional survey of RPNs working in direct or indirect patient care settings across all specialities in North-Eastern Ontario. Another aimed to examine the effectiveness of simulation education for RPNs regarding assessment of patients receiving epidural analgesia (Swahney et al., 2020). These authors used a workshop with standardized patients and Objective Structured Clinical Examinations (OSCEs) in inpatient surgical units of hospitals. The third study, that only included RPNs as participants, sought to explore specialized competencies (knowledge, skills, abilities and other characteristics) required by inpatient rehabilitation RPNs (Snobelen, 2016) through interviews with RPNs and nursing leadership teams within inpatient rehabilitation units.

Nursing Research Themes

Several of the included papers contain common main research topics, or “themes”. These have been recognized as common categories of research involving RPNs since 2013. Five research themes were identified: *Nursing Roles*, *Geriatric Nursing*, *Nurse Turnover and Retention*, *Mental Health Nursing* and *Diabetes*.

Nursing Roles

Several of the included studies focused on the topic of the “nursing role”. One study of 506 nurses described and compared nurses’ perceptions of role conflict by professional designation [RN vs RPN] in three primary areas of practice (i.e., emergency department, medical unit, and surgical unit; Nowrouzi-Kia et al., 2022). Study authors administered a cross sectional survey to RPNs that identified as a “staff nurse” working in an acute care setting. The survey contained the *Role Conflict Scale*: this scale measures the extent to which an employee experiences competing or conflicting sets of expectations or demands in different situations in the workplace. It is scored from 8-40, with higher scores indicating higher levels of perceived conflict. RN and RPN mean total scale scores on role conflict hovered around the scale’s mid-point after an analysis of covariance; but RNs reported a higher mean score than RPNs in the emergency department, medical unit, and surgical unit. Effect sizes were negligible to medium in magnitude with the largest differences between RNs and RPNs working in the emergency department. Results suggest a need to implement strategies to diminish role conflict for RNs and RPNs, especially in the emergency department (Nowrouzi-Kia et al., 2022).

Further, a different study examined nursing role effectiveness in primary care (Lukewich et al., 2019). In this study, a scoping review was conducted to inform a discussion for the applicability of using the Nursing Role Effectiveness Model (NREM) in primary health care settings through a literature synthesis. The NREM involves understanding the structures (i.e., patients, nurses, and organizations), processes (i.e., independent roles, medical care related roles, and interdependent roles, such as team communication) and outcomes (i.e., nursing-sensitive patient outcomes). A total of 22 articles were included in the authors review that found there is precedence for the use of the NREM to guide research in primary health care.

These authors proposed that the NREM should be modified to incorporate the unique characteristics of the primary health care setting (Lukewich et al., 2019).

An included commentary discussed the recent RPN scope of practice expansions (College of Nurses of Ontario, 2020). The change to RPN scope of practice will allow RPNs to initiate components of four specific controlled acts (i.e., irrigating, probing, and debriding a wound below the dermis, venipuncture, insertion of an instrument, hand or finger beyond the labia majora and/or an artificial opening in the client's body for the purpose of assessing or assisting with health management activities). This means RPNs who have the relevant competence are now able to independently decide that a procedure is required, then safely perform the procedure without an order from a prescriber, thus expanding their role as a nurse.

Snobelen (2016) explored the competencies of inpatient rehabilitation RPNs (Snobelen, 2016) through interviews and found that the specialized rehabilitation knowledge of RPNs included: 1) the rehabilitation process (settings, participants, activities), 2) how to medically manage patients, 3) teach, 4) do all jobs and 5) function in an interprofessional team. Skills required included 1) conserving the health of the patient, 2) interpreting or teaching the patient/family, 3) counselling about their health status, preventative tactics, impact of role change, etc., and 4) integrating newly learned abilities that required practice in real-life tasks/situation. Abilities were described as 1) easing into rehabilitation 2) creating milieu, and 3) maximizing patient effort. The author noted that the RPN is an important, but underutilized, element of inpatient rehabilitation care, highlighting the RPN role in inpatient rehabilitation.

Chu et al. (2016) found a role for nurses as supervisors in LTC. The authors used an integrated review methodology to uncover 22 studies that highlight six nurse structures (e.g., nurses' "perceptions of their supervisory role and authority" as well as their "personal qualities"), and eight organizational structures (e.g., "organizational support (culture) for supervisory and management practices" and "staffing levels"). Six processes of effective supervisory performance were identified, such as "being flexible, understanding, considerate listeners and encourage[ing] staff input" as well as "respect, value, recognize, acknowledge and motivate" the nursing assistants they supervise. These insights inform the nurse role as a supervisor in LTC.

Further, Suva et al. (2015) conducted a systematic review of RPN to RN bridging programs. They found 39 articles that suggest personal, community and school conditions related to preparation for entry, program enrolment, and postgraduate clinical integration influence successful education and professional role transitions for RPN-to-RN bridging students. The authors suggested that providing key transition supports may enhance the potential for successful student transition into and throughout a bridging program.

Lastly, one study scrutinised the role of nurses in the primary care of people who identify as transgender (Ziegler, 2021) using qualitative descriptive methodologies and interviews. Four themes emerged from their data: (1) nursing roles and activities; (2) developing and maintaining competency; (3) mentorship and collaboration and (4) having a safe space. Nurses are important in providing primary care to transgender individuals; but authors argued that the role of RPNs and RNs can still be optimized to allow them to work to their full scope of practice. Altogether, these studies suggest the role of RPNs in Ontario is expanding; but that there is conflict between RNs and RPNs as these roles expand. Supporting nurses to develop capacity in new roles will improve availability and access to care for Ontarians.

Geriatric Nursing

Several other studies centered around the topic of geriatric nursing. Studies included perspectives on geriatric nursing in acute care (Fox et al., 2016) and geriatric nursing learning needs of nurses in acute care (Fox et al., 2015). A cross-sectional survey found scores on the *Geriatric Institutional Assessment Profile* (GIAP) averaged slightly above the midpoint; except for geriatric resources, which was slightly below. RPNs rated the quality of care and the geriatric nursing practice environment higher than RNs. Nurses' perceptions of older people's care and the geriatric nursing practice environment differ by professional designation but not hospital teaching status. Teaching and nonteaching hospitals should both be targeted for geriatric nursing practice environment improvement initiatives. Further, the same authors also investigated geriatric nursing learning needs of nurses in acute care through a survey of 2005 nurses. On the GIAP RNs had higher scores on the geriatric nursing knowledge scale than RPNs. Geriatric nursing was generally regarded as "simple and custodial", even though older people's care is more complex than is generally appreciated, and in the study's context, older people's care was best learned experientially in brief on-site educational sessions (Fox et al., 2015). The authors suggest that educational initiatives should be developed to prepare RNs and RPNs to respond to the needs of an aging hospital population.

Further, another study also explored nurse's disclosure of errors in LTC (Wagner et al., 2013). A cross-sectional descriptive survey was given to a randomly selected sample of RNs and RPNs working in LTC homes in Ontario. Survey questions presented "more" serious (e.g., insulin overdose) and "less" serious (e.g., incorrect medication administration) scenarios. For each scenario, nurses received a comparable set of questions to answer according to what they might do if they were confronted with the same situation. Approximately 50% of nurses might provide full details, the cause of the error, and provide steps in how the error would be prevented if they were in situations as described by the hypothetical scenarios. "Less" serious scenarios had an almost 3 times higher likelihood of an explicit apology (OR 2.97; 95%CI 1.36-6.51, $p = 0.007$). RNs who had more education and a prior history of disclosing a serious error, and agreed with full disclosure, were more likely to respond to disclosing more information about the error than were RPNs.

Lastly, in LTC one study examined nursing roles in end-of-life care for patients living with dementia (Sutherland, 2020). Using an interpretive descriptive methodology with semi-structured interviews, authors uncovered tensions, hierarchical roles, and nurses' minimal involvement in decision-making. The authors suggest a relational approach is needed to account for the interdependency of care and the relationships that LTC home staff have with residents, family care partners, and the sociopolitical environment (Sutherland, 2020).

Turnover & Retention

A number of studies also focused on examination of turnover and retention within the nursing workforce. One study examined turnover of nurses in LTC (Chu et al., 2014) and aimed to describe the relationship between nursing staff turnover in LTC homes and organizational factors consisting of leadership practices and behaviours, supervisory support, burnout, job satisfaction and work environment satisfaction. Using two online surveys, authors received 324 responses that indicated leadership practices and administrator turnover are significant in influencing regulated nurse turnover in LTC. Higher leadership practice scores were significantly ($p < 0.05$) associated with lower nursing turnover; and a one-point increase in a leadership score correlated with a 49% decrease in nursing turnover. Authors advise that LTC

facilities may want to focus on building good leadership and communication as an upstream method to minimize nurse turnover.

The second study examined retention factors among 506 RPNs (Nowrouzi et al., 2015). Study authors administered a cross sectional survey to RPNs working within direct or indirect patient care settings, in all specialities across Northeastern Ontario. Here, authors found that the likelihood of a nurse staying in their job for the next 5 years was higher among nurses aged 46-56 when compared to other age groups. Internal staff development, working in nursing for 14-22.5 years and working less than 1 hour overtime per week were factors associated with the intention to stay in their current role. Understanding a nurse's working environment may contribute to recruitment and retention strategy development.

Mental Health Nursing

Mental health nursing was also a focus among studies included in this review. One study examined structural violence in mental health nursing (i.e., a form of violence wherein some social structure or social institution may harm people by preventing them from meeting their basic needs; Choiniere et al., 2014). Through semi-structured interviews, this study explored how the intersections of gendered, racialized, and neoliberal dynamics reproduce social inequality and shape the violence that nurses face. The study authors concluded that assumptions about gender, race, and care operate in the context of global, neoliberal forces to reinforce, intensify, and create, as well as obscure, structural violence through mechanisms of individualization and normalization (Choiniere et al., 2014). Moreover, MacLeod et al., (2022) examined mental health nursing practices in rural and remote Canada. A cross-sectional survey distributed to 3822 nurses revealed that persons with mental health concerns in rural and remote Canada often receive care from those for whom mental health nursing is only a part of their everyday practice. Thereby, practice and education support tailored for generalist nurses are essential, especially to support nurses in smaller communities, those at risk of violence at work, and those distant from advanced referral centres.

Diabetes

Two studies examined the idea of diabetes and nursing. The first examined diabetes management in LTC through a mixed-methods approach using a cross-sectional survey design with quantitative and open-ended questions (Agarwal et al., 2014). These authors found that medication administration systems and guidelines regarding diabetes management were adequate; RPNs were significantly ($p < 0.05$) more comfortable administering insulin than RNs ($p = 0.048$). Findings suggest RNs and RPNs have different comfort levels and perceptions of diabetes management. The second study included in this review that examined diabetes explored nurses' diabetes management education needs (Vincent et al., 2016). Authors used an online survey to assess knowledge and confidence in six key areas of diabetes care (i.e., nutrition, insulin, oral medications, hypoglycemia, hyperglycemia, and sick-day management). Nurse's self-rated knowledge and confidence was moderate-high, ranging from 46-79% being moderately to very knowledgeable, and from 61-74% being moderately to very confident. PSWs reported significantly ($p < 0.05$) less knowledge and confidence than nurses. Across titles, 85% wanted more education about diabetes; specifically, management of hypo- and hyperglycemias and insulin.

Other

One other study was included in this review that did not fit into one of the above five research themes. It examined epidural analgesia simulation assessment in inpatient surgery (Sawhney et al., 2020). Authors explored the effectiveness of simulation education for RPNs regarding assessment of patients receiving epidural analgesia. The study used a series of workshops and OSCEs to assess 20 RPNs. The number of correct procedures performed by each RPN in the OSCEs significantly increased ($p < 0.05$) during the second OSCE. Improvement was also identified in answers to knowledge questions related to adverse effects of opioids, assessment of sensory blocks, documentation of motor blocks and removal assessment.

Discussion

Implications

It is likely that research literature focused on RPNs will increase in the coming years. Since 2020, the Coronavirus Disease 2019 (COVID-19) pandemic has brought more attention to, and exacerbated, the disparities in the nursing workforce. There are ongoing initiatives to promote nursing research, especially research with RPNs who have been at the forefront of the pandemic as the largest regulated health professional workforce in Ontario (Odom-Forren, 2020). Some examples are the WeRPN's Bridging Educational Grants in Nursing (BEGIN) program (<https://begin.werpn.com>) and the Ontario Nursing Graduate Guarantee Program (https://www.health.gov.on.ca/en/pro/programs/hhrsd/nursing/early_career.aspx).

The WeRPN's BEGIN program was developed in 2022 as part of the government's commitment to recruit nurses to LTC and home and community care (HCC) sectors by supporting PSWs and RPNs to career ladder to RPN and RN, respectively. The BEGIN program has two goals: (1) improve retention of nurses in LTC/HCC sectors; and (2) foster a culture of excellence in LTC/HCC to make these sectors of choice for the nursing profession. Other initiatives are also ongoing. The Ontario Nursing Graduate Guarantee Program was developed in 2007 as a response to the current nursing workforce demands in areas of need to support health system recovery. This program recruits for positions in acute care settings with a focus on supporting needs in critical care as result of COVID-19, as well as in LTC to support staffing needs associated with the LTC staffing plan (<https://files.ontario.ca/mltc-ontario-long-term-care-staffing-plan-2021-2025-en-2020-12-17.pdf>). The COVID-19 pandemic largely impacted Canadian LTC homes, residents, families, and staff (Hsu et al., 2020). More than half of all COVID-19 related deaths in Ontario occurred in LTC homes while only 54% of the health care providers working in LTC agreed that they had feasible workplace strategies for managing the pandemic (Siu et al., 2020). Therefore, many researchers will be examining nursing during this critical social epoch and a rapid increase in RPN funded research over the next 2-years is predicted.

Limitations & Gaps

In Canada, RNs remain the most studied nurse population in current literature. Across the prospective studies in this review, there was more than double the number of RNs ($n = 7109$) included in the research studies when compared to RPNs ($n = 3357$) and only three of the 18

studies included RPN focused research that did not also include RNs as participants (Nowrouzi et al., 2015; Swahney et al., 2020; Snobelen, 2016). This may explain the role clarity and role conflict issues arising in the literature in this review between RPNs and RNs. Further research including and focusing on RPNs is warranted.

Further, low levels of evidence were produced from the studies included in this review. Levels of evidence, sometimes called “hierarchy of evidence” (Burns, Rohrich & Chung, 2011), are assigned to studies based on the methodological quality of their design, validity, and applicability to patient care. These decisions give the "grade (or strength) of recommendation." Levels of evidence range from high (level I) to low (level VII). No level I, II, III, or IV evidence was included this scoping review. which means that no research involving RPNs has been produced in the form of a meta-analysis, randomized controlled trial, evidence-based clinical practice guideline, controlled trials, case-control, or cohort studies since January 1, 2013. Most evidence in this review was from “good” quality (Hawker & Payne, 2002) systematic or scoping reviews of descriptive and qualitative studies (i.e., meta-synthesis), descriptive or qualitative studies, or evidence or opinion of authorities. In this review, cross-sectional studies were the most common.

Summary & Conclusion

In this scoping review a total of 18 articles were found to focus on RPNs, 150 on LPNs, 149 on ENs, 2 on ANs and 16 on ADNs. The RPN focused studies were the main findings, and the studies of other RPN similar national or global categories are provided in the appendices for reference. RPNs were the least represented in the included studies and were only the sole focus of a research study in three of the included 18 articles (Nowrouzi et al., 2015; Swahney et al., 2020; Snobelen, 2016). Five research topic themes were identified from the included papers: *Nursing Roles, Geriatric Nursing, Nurse Turnover and Retention, Mental Health Nursing* and *Diabetes*. The findings of this review can assist with future policy, practice, and research decision-making for RPNs.

Tables and Figures

Table 1. Detailed description of studies that included RPNs (n = 18).

Author(s) & Location	Study Title	Study Aim(s)	Study Design, Recruitment & Setting	Sample Characteristics	Inclusion & Exclusion Criteria	Intervention(s)	Results & Conclusions	Quality Assessment
Agarwal et al. (2014) Canada	Nurses' perception and comfort level with diabetes management practices in long-term care (LTC).	To explore nurses' perceptions and level of comfort with current diabetes management of patients in long-term care.	Mixed-methods approach using a cross-sectional survey design with quantitative and open-ended questions was used. Nurses were recruited from 9 LTC homes across Ontario in a probably sample. 67% of LTC homes were for-profit, 78% were urban, size ranged from 80-378 beds. All homes provided 24-hr nursing care to residents with a variety of comorbidities.	N = 165 n _{RN} = 77 n _{RPN} = 88 % female = 93.3; Age \bar{x} (SD) = 45.3 (11.7); Highest nursing degree 92.7% diploma, 7.3% degree; Years as a nurse \bar{x} (SD) = 17.3 (12.1); Years employed in LTC \bar{x} (SD) = 7.4 (8.1); Hours worked per week \bar{x} (SD) = 36.1 (11.8) Response rate of 59%, 171 RPNs and 130 RNs were invited to participate.	Not explicitly defined.	Survey that took 10-15 min to complete assessed nurses' comfort with managing diabetes, detecting hypoglycemia, hyperglycemia, blood glucose monitoring guidelines, comfort with insulin administration and diabetes management training. Demographic data were also collected. No interventions in study.	Medication administration system and guidelines regarding diabetes management were adequate; RPNs were significantly (p<0.05) more comfortable administering insulin than RNs (p = 0.048). Findings suggest RNs and RPNs have different comfort levels and perceptions of diabetes management.	Score = 33 Good quality
College of Nurses of Ontario (2020) Canada	Moving forward with RPN scope of practice expansion	To explain the Council approved proposed regulations that will expand the RPN scope of practice.	CNO News Update article	Not applicable	Not applicable	Not applicable	The change will allow RPNs to initiate components of four specific controlled acts. This means RPNs who have the relevant competence will be	Not applicable

							able to independently decide that a procedure is required, then safely perform the procedure without an order from a prescriber.	
Choiniere et al. (2014) Canada	Conceptualizing structural violence in the context of mental health nursing	To explore how the intersection of gendered, racialized, and neoliberal dynamics reproduce social inequality and shape the violence that nurses face.	Qualitative methodology using semi-structured interviews and focus groups with purposively sampled RPNs and RNs. This study is part of a larger study, <i>nurses at risk</i> , with 75 RPNs and RNs. This study uses data from 17 of these nurses. Nurses were recruited into this study through a cross-section of hospital, LTC and community settings in Ontario.	N = 17 n _{RN} = 4 n _{RPN} = 13 % female = 94.1 %working full time = 94.1 % with experience >20 years as a nurse = 64.7 Age 35-44 = 23.5%; 45-54 = 41.1%; 55-64 = 35.2%	Not explicitly defined.	Semi-structured 1.5-2 hr interviews and focus groups were analyzed with a feminist political economy lens and conducted between July 2008-May 2010	Assumptions about gender, race, and care operate in the context of global, neoliberal forces to reinforce, intensify, and create, as well as obscure, structural violence through mechanisms of individualization and normalization. Five themes emerged: risk factors, consequences of risk/violence, evidence of support, the work/practice context of the nurses and social and professional values and norms. Effective redress lies beyond blame shifting between clients/patients and nurses.	Score = 30 Good quality
Chu et al., (2014)	Turnover of regulated	To describe the	Two online surveys were	N = 324 survey responses from	Not explicitly	Using a Stress Process Model,	Leadership practices and	Score = 35

Canada	nurses in long-term care facilities	relationship between nursing staff turnover in LTC homes and organizational factors consisting of leadership practices and behaviours, supervisory support, burnout, job satisfaction and work environment satisfaction.	used: (1) the MOHLTC surveyed administrators and directors of care from all Ontario LTC homes (n=619); (2) all homes (n=191) that completed the administrator survey and agreed to participate in the second survey were stratified according to ownership status of their home: not-for-profit, for-profit and municipal. Within each stratum, a random sample of homes were identified resulting in 76 homes that were sampled.	49 homes. Nursing home facility characteristics: number of beds 140+ = 44.9%, 80-140 = 26.5%, <80 = 28.57%; For-profit = 49.98%, municipal = 24.49%, not-for-profit = 26.53%. Characteristics of study regulated nurses: n _{RPN} = 184 (56.8%); n _{RN} = 140 (43.2%) % female = 96; Age <24 = 3.1%; 25-34 = 17.5%, 35-54 = 2.2; >55 = 27.2.	defined.	surveys were distributed to administrators to measure organizational factors and to regulated nurses to measure personal and job-related sources of stress and workplace support. A linear regression analyzed results. No interventions in study.	administrator turnover are significant in influencing regulated nurse turnover in LTC. Higher leadership practice scores were significantly (p<0.05) associated with lower nursing turnover; a one score increase in leadership correlated with a 49% decrease in nursing turnover. LTC facilities may want to focus on building good leadership and communication as an upstream method to minimize nurse turnover.	Good quality
Chu et al. (2016) Canada	An Integrative Review of the Structures and Processes Related to Nurse Supervisory Performance in Long-Term Care.	To identify the structures and processes related to supervisory performance of regulated nurses in	Integrated review methodology.	N = 22 studies	The inclusion criteria were studies focused on RN or RPN supervisory performance in LTC, which	An electronic search of six databases (Ovid MEDLINE, Ovid embase, EBSCO CINHAL, and Ovid Cochrane Database of Systematic Reviews and	Six nurse structures (e.g., nurses' "perceptions of their supervisory role and authority" as well as their "personal qualities"), and eight organizational structures (e.g., "organizational	Not applicable

LTC.

included a structure or process related to supervisory performance of the nurse.

Cochrane Central Register of Controlled Trials [CENTRAL] for studies published in English between 2000 and September 2015 was conducted by a librarian.

support (culture) for supervisory and management practices" and "staffing levels") were identified. Six processes of effective supervisory performance were identified, such as "being flexible, understanding, considerate listeners and encourage staff input" as well as "respect, value, recognize, acknowledge and motivate" nursing assistants they supervise.

Fox et al. (2016) Canada	Nurses' perspectives on the geriatric nursing practice environment and the quality of older people's care in Ontario acute care hospitals.	To describe nurses' perceptions of the overall quality of care for older people and the geriatric nursing practice environment (e.g. geriatric resources, interprofessional collaboration	A cross-sectional survey using Dillman's tailored design method that included the Geriatric Institutional Assessment Profile (GIAP) subscales was administered to Ontario RNs and RPNs. To assess their perceptions of the quality of care and geriatric nursing.	N = 2005 n _{RN} = 1439 (71.9%) n _{RPN} = 561 (28.1%); Years of experience >25 years = 24.6%; Primary area of practice emergency department = 18.5%, medical unit = 32.9%, intensive care = 22.1%, surgical unit = 20.5% and other = 6.0%; Highest	RNs and RPNs who work on inpatient units or emergency departments of acute care hospitals; were registered in the CNO as active status; worked in the hospital	The GIAP aging-sensitive service delivery, geriatric resource availability, capacity for collaboration, institutional values subscales, and demographic variables were measured. No interventions in study.	Scores on the GIAP averaged slightly above the midpoint except for geriatric resources which was slightly below. RPNs rated the quality of care and the geriatric nursing practice environment higher than RNs; no significant differences (p>0.05) were found by hospital teaching status. Nurses' perceptions of older people's care and	Score = 35 Good quality
-----------------------------	--	---	---	---	--	---	--	----------------------------

n, and organizational value of older people's care) and to examine if these perceptions differ by professional designation and hospital teaching status.

Nurses were randomly selected from the College of Nurses of Ontario (CNO) mailing database using a proportional stratified random sampling strategy.

level of education RPN diploma = 28.1%, RN diploma = 49.3%, Baccalaureate = 22.3%, Master's degree = 0.4%.

sector and acute subsector; had a primary practice area of medicine, surgery, geriatrics, emergency or critical care; had a staff nurse position; and consented to release of their names for research purposes were eligible to participate in the study

the geriatric nursing practice environment differ by professional designation but not hospital teaching status. Teaching and nonteaching hospitals should both be targeted for geriatric nursing practice environment improvement initiatives.

Fox et al. (2015)	A Multi-Method study of the geriatric learning needs of Acute Care hospital nurses in Ontario, Canada	To understand nurses learning needs to prepare them to respond to the priority of increases in age demographics and the accompanying	Two-phased multi-method study that started with a survey that included a geriatric nursing knowledge scale completed by a random sample of nurses in Ontario and was followed by 13 focus group interviews in a qualitative	Survey N = 2005 n _{RN} = 1439 (71.9%) n _{RPN} = 561 (28.1%); % female = 94.9; Highest level of education RPN diploma = 28.1%, RN diploma = 49.3%, Baccalaureate = 22.3%, Master's degree = 0.4%; number with	Inclusion criteria were nurses (RPNs and RNs) with active CNO licenses who indicate an Ontario acute care hospital as their practice location	The Geriatric Nursing Knowledge Scale of the Geriatric Institutional Assessment Profile was included in the survey with demographic characteristics. Focus groups had 3-7 participants per group and lasted	RNs had higher scores on the geriatric nursing knowledge scale than RPNs. Geriatric nursing is generally regarded as simple and custodial, older people's care is more complex than is generally appreciated, and in the current context, older people's care is best learned	Score = 32 Good quality
-------------------	---	--	---	--	---	---	---	--------------------------------

functional decline and related complications during hospitalization.	descriptive study.	<p>additional geriatrics education = 514 (25.6%), number with CAN certification in gerontological nursing = 21 (1.1%); experience in nursing >25 years = 480, 21-25 = 255, 16-20 = 254, 11-15 = 220, 6-10 = 307, 2-5 = 287, <2 = 151.</p> <p>Focus Groups N = 57; n_{RN} = 33(57.8%) n_{RPN} = 24(42.2%); % female = 94.7; Highest level of education RPN diploma = 43.7% RN diploma = 38.5%, Baccalaureate = 17.5%, Master's degree = 0.0%; number with additional geriatrics education = 18 (31.5%)</p>	staff nurse as their position; emergency, medicine, surgery, geriatrics, or critical care as their primary area of practice; and consent to CNO to release their names and home addresses for research purposes.	75-140 min.	experientially and in brief on-site educational sessions. Educational initiatives should be developed to prepare RNs and RPNs to respond to the needs of the aging hospital population.
--	--------------------	---	--	-------------	---

Lukewich et al. (2019) Canada	Exploring the utility of the Nursing Role Effectiveness Model in	To inform a discussion for the applicability of using the	Scoping Review	N = 22 studies that cited or used the NREM were identified in the review. Only	Articles were included if they discussed	Joanna Briggs Institute methodology was used and Allied and	There is precedence for the use of the NREM to guide research in primary health care.	Not applicable
----------------------------------	--	---	----------------	--	--	---	---	----------------

evaluating nursing contributions in primary health care: A scoping review

Nursing Role Effectiveness Model (NREM) in the primary health care setting through a synthesis of the literature that has used the model in all health care sectors. The NREM was developed to assist with the challenging tasks of assessing and contribution of nursing to quality care and outcomes in a multidimensional health care environment (i.e., considering the structures, processes, and outcomes).

2 studies were focused on the primary health care setting.

any aspect of the NREM in health care research that presented information related to any nursing registration designation, such as NP, RN, LPN, RPN and considered quantitative and qualitative study designs, including expert opinions and reports. Studies had to be published before September 2018 and published in English.

Complementary Medicine, CINHAL, embase, Mosby's Nursing Consult, ProQuest Dissertations and Theses, PsycINFO, PubMed and MEDLINE were used. Google scholar, nursing websites (e.g., Canadian Nurses Association) and reference lists of all relevant articles were also searched. No interventions in study.

The NREM should be modified to incorporate the unique characteristics of the primary health care setting.

MacLead et al. (2022) Canada	Mental health nursing practice in rural and remote Canada: Insights from a national survey.	To explore the characteristics and context of practice of RNs, LPNs and RPNs in rural and remote Canada, who provide care to those experiencing mental health concerns.	The Nursing Practice in Rural and Remote Canada (RRNII) pan-Canadian cross-sectional survey collected information about work community characteristics, practice responsibilities, and workplace factors, with open-ended questions from nurses working in rural and remote communities.	N = 3822 n _{RN} = 1937 n _{RPN} = 207 n _{LPN} = 1313 Indicated mental health as their sole area of nursing practice = 388; 54.4% of nurses who indicated their primary area of practice was mental health (n=182) only were RPNs; % female = 85.4; age <35 = 15.9; 35-44 = 13.2; 45-54 = 30.2; >54 = 37.4.	Nurses employed as staff nurses, managers, and clinical nurse specialists who indicated that mental health was an area of current practice were eligible.	The survey was mailed and available for completion in paper or online. Data were analyzed with Chi Square and t-tests. Open-ended questions were coded for similarities and differences. No interventions in study.	Persons with mental health concerns in rural and remote Canada often receive care from those for whom mental health nursing is only part of their everyday practice – practice and education supports tailored for generalist nurses are essential, especially to support nurses in smaller communities, those at risk of violence and those distant from advanced referral centres.	Score = 31 Good quality
Nowrouzi-Kia et al. (2022) Canada	The Comparison of Role Conflict Among Registered Nurses and Registered Practical Nurses Working in Acute Care Hospitals in Ontario Canada.	To describe and compare nurses' perceptions of role conflict by professional designation [RN vs RPN] in three primary areas of practice (i.e., emergency department,	Cross-sectional survey of a random sample of RNs and RPNs working as staff nurses in acute care hospitals in Ontario, Canada that used the Dillman Tailored Design Method to measure nurses' work environments, roles and demographic and occupational	N = 1981 n _{RN} = 1427, % female _{RN} = 94.8, %; n _{RPN} = 554, % female _{RPN} = 94.9, highest level of education in nursing: RPN diploma = 554, RN diploma = 985, RN baccalaureate = 445, master's degree = 8	Nurses were eligible if: (1) they were actively registered with the CNO, (2) Ontario was their clinical practice location, (3) they were employed in an acute care hospital, (4) their	Role conflict was measured by the Role Conflict Scale, which measures the extent to which an employee experiences competing or conflicting sets of expectations or demands in different situations at the workplace. No interventions in study.	RN and RPN mean total scale scores on role conflict hovered around the scale's mid-point (2.72-3.22); but RNs reported a higher mean score than RPNs in the emergency department (3.22 vs 2.81, medical unit (2.95 vs. 2.81) and surgical unit (2.90 vs. 2.72). Effect sizes were negligible to medium in magnitude with the	Score = 34 Good quality

<p>medical unit and surgical unit)</p>	<p>characteristics. Nurses were randomly selected from the CNO database and provided a mailed introductory letter.</p>	<p>position was as a staff nurse providing direct patient care, and (5) their primary area of practice was emergency department, medical unit or surgical unit.</p>	<p>largest differences between RNs and RPNs working in the emergency department. Results suggest a need to implement strategies to diminish role conflict for RNs and RPNs.</p>
--	--	---	---

<p>Nowrouzi et al. (2015)</p>	<p>An examination of retention factors among registered nurses in north-eastern Ontario, Canada</p>	<p>To investigate the barriers and facilitators to sustaining the nursing workforce, in particular retention factors, in north-eastern Ontario, Canada,</p>	<p>A cross sectional self-administered questionnaire that assessed demographics, nursing education, employment, factors influencing recruitment and retention, knowledge of workplace recruitment and retention policies, and aware of community engagement in the recruitment of nurses was sent to random RPN addresses</p>	<p>N = 506; % female = 93.3; Age 23-38 = 117 (23.5%), 39-48 = 122 (24.5%), 49-55 = 121 (24.3%), ≥56 = 138 (27.7%), Highest attained nursing education as RPN diploma = 81.8%, intending to stay in position for next 5-years = 339 (70.5%)</p>	<p>RPNs working in direct or indirect patient care settings in all specialities across North Eastern Ontario.</p>	<p>Logistic regression was used to determine “intent to stay” in relation to the following three categories: demographic, and job and career satisfaction.</p>	<p>The likelihood of staying in their job for the next 5 years among nurses aged 46-56 were greater than in other age groups. Internal staff development, working in nursing for 14-22.5 years and working less than 1 hour overtime per week were factors associated with the intention to stay. Understanding the working environment may contribute to recruitment and retention strategy development.</p>	<p>Score = 24 Fair quality</p>
-------------------------------	---	---	---	--	---	--	---	------------------------------------

were retrieved from the CNO and surveys were mailed.

Sawhney et al. (2020)	The Effect of Simulation on Practical Nurses' Assessment of Epidural Analgesia.	To examine the effectiveness of simulation education for RPNs regarding assessment of patients receiving epidural analgesia.	This study included a workshop with standardized patients with a convenience sample of RPNs recruited by a research assistant from an inpatient surgical unit at a hospital in southern Ontario, Canada. Workshops took place at a hospital's education center in a room with a two-way mirror for OSCE observation.	N = 20 RPNs Mean age (SD) = 36(9.5); mean years practicing as an RPN (SD) = 7.6 (7.2); mean years of experience caring for patients with epidural analgesia (SD) = 3.6 (2.6)	RPNs were eligible to participate if they worked on the inpatient surgical unit and had completed the standard didactic epidural analgesia education during their new-hire orientation to the unit.	The 4 hr workshop involved participating in an Objective Structured Clinical Examination (OSCE), a knowledge questionnaire, a lecture and practice time. As second workshop included another OSCE, knowledge questionnaire and debriefing.	The number of correct procedures performed by each RPN significantly increased (p<0.05) during the second OSCE. Improvement was also identified in answers to knowledge questions related to adverse effects of opioids, assessment of sensory block, documentation of motor block and removal assessment. Resources are needed to guide RPNs when abnormal findings are observed.	Score = 28 Good quality
Snobelen (2016) Canada	Registered practical nurses in inpatient rehabilitation settings: A competency framework.	To explore specialized competencies required by inpatient rehabilitation RPNs.	Face-to-face interviews of one-hour interviews with nursing leadership teams, and interviews with peer-nominated RPNs, with demographic characteristics,	N = 21 Age range = 25-64, years of rehab experience = 2-37	RPNs employed on inpatient rehabilitation units in four hospitals in southwestern Ontario, Canada.	Interviews of peer-nominated RPNs, with demographic characteristics, and behavioural-event stories were analysed with deductive and inductive content analysis based on an	Specialized rehabilitation knowledge included: 1) the rehabilitation process (settings, participants, activities), 2) how to medically manage patients, 3) teach, 4) do all jobs and 5) function in an	Score = 36 Good quality

and behavioural-event stories were conducted in a descriptive qualitative research design. Four hospitals were chosen for recruitment based on proximity, size, and type.

adapted rehabilitation process model and interventions framework from a literature review.

interprofessional team. Skills included 1) conserving the health of the patient, 2) interpreting or teaching the patient/family, 3) counselling about their health status, preventative tactics, impact of role change, etc., and 4) integrating newly learned abilities that required practice in real-life tasks/situation. Abilities were described as 1) easing into rehabilitation 2) creating milieu, and 3) maximizing patient effort. The RPN is an important but underutilized element of inpatient rehabilitation care. Further research to establish a specialized competency model and a practical process of certification for rehabilitation RPNs is needed.

Sutherland (2020)	Structures, tensions, and processes	To examine LTC home staff's	Interpretive descriptive study with semi-	N = 21 N _{PSW} = 9 N _{RPN} = 8	Inclusion criteria were: (1)	A voice-centered relational approach was	Rooted in dichotomies between medical	Score = 32 Good quality
-------------------	-------------------------------------	-----------------------------	---	--	------------------------------	--	---------------------------------------	----------------------------

Canada	shaping long-term care home staff's role in end-of-life decision-making for residents with dementia	perspective of their role in end-of-life decision-making for residents with dementia.	structured interviews and a focus group with PSW and nurse participants recruited from two not-for-profit LTC homes in an urban centre. Interested participants contacted the researcher to arrange an appointment to meet and explain the study risks and benefits and obtain consent. Interviews were conducted in private rooms provided by the LTC homes.	n _{RN} = 4 % female = 80.9 Age range = 27-65 Full-time employment = 16, Part-time employment = 5; Number of participants with >10 years' experience working in LTC homes = 15	employed for a minimum of 1 years in the facility and (2) speak conversational English.	used to analyze the interview transcripts and focus group data. All interviews were tape recorded and transcribed verbatim.	and social care paradigms, ideologies of rationality and professionalism created tensions, hierarchical roles, and staff's minimal involvement in decision-making. A relational approach is needed to account for the interdependency of care and the relationships that LTC home staff have with residents, family care partners, and the sociopolitical environment.	
Suva et al. (2015) Canada	Systematic review: Bridging the gap in RPN-to-RN transitions.	To review the evidence examining the influences of successful education and professional role transition for RPNs pursuing baccalaureate degree	Systematic review of papers published between 1995 and 2014 that evaluated students' education and professional role transitions from RPN to RN.	N = 39 papers were selected that observed or studied the change or transition in designation RPN to RN, or its equivalent, through bridging programs and analyzed thematically according to Meleis, Sawyer, Im, Hilfinger Messias and	Papers were included if they (1) were written in English, (2) involved a change or transition in nurse designation from RPN to RN, and (3) included the words "practical	The Cochrane Database of Systematic Reviews, CINHAL, embase, PsycINFO, MEDLINE, Joanna Briggs, and ERIC were used. No interventions in study.	Personal, community and school conditions related to preparation for entry, program enrolment and postgraduate clinical integration influence successful education and professional role transitions for RPN-to-RN bridging students. Providing key transition	Not applicable

		in nursing (BScN) and RN licensure through RPN-to-RN bridging programs		Schumacher's transition model.	nurses" or designation equivalent in the title or full text.		supports may enhance the potential for successful student transition into and throughout a bridging program, but further research is necessary to enhance this understanding and to recommend best practices for optimising students' success.	
Vincent et al., (2016) Canada	Knowledge confidence and desire for further diabetes-management education among nurses and personal support workers in long-term care	To assess the knowledge confidence and desire for additional diabetes education among nurses and PSWs in the LTC setting.	Online survey assessing knowledge and confidence in 6 key areas of diabetes care (nutrition, insulin, oral medications, hypoglycemia, hyperglycemia, and sick-day management) with nurses and PSWs recruited from 2 LTC facilities in the Kitchener-Waterloo area.	N = 89 N _{PSW} = 51 N _{RPN} = 24 N _{RN} = 12 % female = 94.3, mean age = 43.6	Not explicitly defined.	Descriptive statistics and one-way ANOVAs assessed survey responses. No interventions in study.	Self-rated knowledge and confidence were moderate-high ranging from 46-79% being moderately to very knowledgeable and from 61-74% being moderately to very confident. PSWs reported significantly (p<0.05) less knowledge and confidence than nurses. Across titles, 85% wanted more education about diabetes (specifically, management of hypo- and hyperglycemias and insulin)	Score = 26 Fair quality
Wagner et	Nurses'	To report	A cross-	N = 1180	Participants	Survey	Approximately 50%	Score = 32

al. (2013) The United States	disclosure of error scenarios in nursing homes.	how nurses would disclose hypothetical errors that occur in nursing home (NH) settings (i.e., LTC).	sectional descriptive survey was given to randomly selected sample of RNs and RPNs working in NH settings in Ontario, Canada.	nRPN = 585 nRN = 595 Approximately 2800 full and part-time RNs and RPNs were mailed (via the list available through the College of Nurses of Ontario) with follow-up reminders. This represented a random sample of 2800 people from the list of 14500. Response rate = 49.6%; Years as a nurse \bar{x} (SD) = 20(11.55); 13.7% had a baccalaureate degree or higher	had to be a nurse working in long-term care.	questions presented "more" serious (e.g., insulin overdose) and "less" serious scenarios (e.g., incorrect medication administration). For each scenario, nurses received a comparable set of questions to answer according to what they might do if they were confronted with the same situation. No interventions in study.	of nurses might provide full details and the cause of the error and provide steps in how the error would be prevented if they were in situations as described by the hypothetical scenarios. "Less" serious scenarios had an almost 3 times higher likelihood of an explicit apology (OR 2.97; 95%CI 1.36-6.51, p = 0.007). RNs who had more education and a prior history of disclosing a serious error, and agreed with full disclosure, were more likely to respond to disclosing more information about the error.	Good quality
Ziegler (2021) Canada	The integral role of nurses in primary care for transgender people: A qualitative descriptive study.	To understand nursing activities, training and key supports needed to provide primary care to transgender	Qualitative descriptive methodology semi-structured interviews were conducted with RNs, RPNS and NPs that were purposively sampled. Recruitment occurred	N = 6 nNP = 3 nRPN = 1 nRN = 2	Individuals were eligible to participate if they were a NP, RN or RPN currently involved in the delivery of primary care	Interviews (45-90 min in length) explored nurses' educational preparedness and experience with transgender patients, programme demographics and the roles and activities of	Four themes emerged: (1) nursing roles and activities; (2) developing and maintaining competency; (3) mentorship and collaboration and (4) having a safe space. Nurses are important in	Score = 33 Good quality

individuals through two organisations that provided primary care services to all individuals regardless of gender identity.

services with transgender individuals and were fluent in English. the nurses.

providing primary care to transgender individuals; but the role of RPNs and RNs can still be optimized to allow them to work to their full scope of practice. Supporting nurses to develop capacity in this area will improve access to care for transgender individuals.

Note. RN = Registered Nurse; RPN = Registered Practical Nurse; NP = Nurse Practitioner; GIAP = Geriatric Institutional Assessment Profile; MOHLTC = Ministry of Health and Long-term Care; LTC = long-term care; CINHAL = Cumulative Index to Nursing and Allied Health Literature; ERIC = Education Resources Information Center. *Hawker et al.'s (2002) appraisal criteria ensures consistency in the assessment. The tool consists of nine subscales: abstract and title, introduction and aims, method and data, sampling, data analysis, ethics and bias, results, transferability /generalizability, and implications and usefulness of the study. The items in each subscale are rated on a 4-point ordinal scale described as good (4), fair (3), poor (2), and very poor (1). Each article received a total score within a range of 9-36 (Hawker et al., 2002). A score of 28-36 was associated with good quality articles, 20-27 for fair articles, 10-20 for poor quality articles, and less than 10 for very poor-quality articles.

References

- Agarwal, G., Sherifali, D., Kaasalainen, S., Dolovich, L., & Akhtar-Danesh, N. (2014). Nurses' perception and comfort level with diabetes management practices in long-term care. *Canadian Journal of Diabetes*, 38(5), 314-319.
- Akers, J., Aguiar-Ibáñez, R., & Baba-Akbari, A., 2009. Systematic reviews: CRD's guidance for undertaking reviews in health care. Retrieved from https://hero.epa.gov/hero/index.cfm/reference/details/reference_id/4955544
- Altman, D. G., 1990. Practical statistics for medical research. CRC press.
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
- Bossuyt, P. M., Reitsma, J. B., Bruns, D. E., Gatsonis, C. A., Glasziou, P. P., Irwig, L. M., ... & De Vet, H. C. (2003). Towards complete and accurate reporting of studies of diagnostic accuracy: the STARD initiative. *Radiology*, 226(1), 24-28.
- Burns, P. B., Rohrich, R. J., & Chung, K. C. (2011). The levels of evidence and their role in evidence-based medicine. *Plastic and Reconstructive Surgery*, 128(1), 305.
- Choiniere, J. A., MacDonnell, J. A., Campbell, A. L., & Smele, S. (2014). Conceptualizing structural violence in the context of mental health nursing. *Nursing inquiry*, 21(1), 39-50.
- Chu, C. H., Ploeg, J., Wong, R., Blain, J., & McGilton, K. S. (2016). An integrative review of the structures and processes related to nurse supervisory performance in long-term care. *Worldviews on Evidence-Based Nursing*, 13(6), 411-419.
- Chu, C. H., Wodchis, W. P., & McGilton, K. S. (2014). Turnover of regulated nurses in long-term care facilities. *Journal of Nursing Management*, 22(5), 553-562.
- College of Nurses of Ontario (CNO; 2020). Moving forward with RPN scope of practice expansion. Retrieved July 28th, 2022 from <https://www.cno.org/en/learn-about-standards-guidelines/magazines-newsletters/the-standard/October-2020/Moving-forward-with-RPN-scope-of-practice-expansion/>
- Covidence systematic review software, Veritas Health Innovation, Melbourne, Australia. Available at www.covidence.org
- Fox, M. T., Butler, J. I., Persaud, M., Tregunno, D., Sidani, S., & McCague, H. (2016). A multi- method study of the geriatric learning needs of acute care hospital nurses in Ontario, Canada. *Research in Nursing & Health*, 39(1), 66-76.
- Fox, M. T., Sidani, S., Butler, J. I., & Tregunno, D. (2017). Nurses' perspectives on the geriatric nursing practice environment and the quality of older people's care in ontario acute care hospitals. *Canadian Journal of Nursing Research*, 49(2), 94-100.
- Hawker, S., Payne, S., Kerr, C., Hardey, M., & Powell, J. (2002). Appraising the evidence: reviewing disparate data systematically. *Qualitative health research*, 12(9), 1284-1299.
- Higgins, J.P.T. & Green, S. (Eds.). (2011). 6.2.3 Unpublished and ongoing studies In *Cochrane Handbook for Systematic Reviews of Interventions Version 5.1.0* [updated March 2011]. The Cochrane Collaboration. Available from www.handbook.cochrane.org.
- Hsu, A. T., Lane, N., Sinha, S., Dunning, J., Dhuper, M., Kahiel, Z., & Sveistrup, H. (2020). Understanding the impact of COVID-19 on residents of Canada's long-term care homes – ongoing challenges and policy responses. *International Long Term Care Policy Network*, June, 15. <https://ltccovid.org/wp-content/uploads/2020/04/LTC-COVID19-situation-in-Canada-22-April-2020-1.pdf>
- IBM Corp. (2017). IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.
- International journal of social research methodology, 8(1), 19-32. <https://doi.org/10.1080/1364557032000119616>
- Khan, K. S., Kunz, R., Kleijnen, J., & Antes, G. (2003). Five steps to conducting a systematic review. *Journal of the royal society of medicine*, 96(3), 118-121.

- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *biometrics*, 159-174.
- Lukewich, J. A., Tranmer, J. E., Kirkland, M. C., & Walsh, A. J. (2019). Exploring the utility of the Nursing Role Effectiveness Model in evaluating nursing contributions in primary health care: A scoping review. *Nursing Open*, 6(3), 685-697.
- MacLeod, M. L., Penz, K. L., Banner, D., Jahner, S., Koren, I., Thomlinson, A., ... & Labrecque, M. E. (2022). Mental health nursing practice in rural and remote Canada: Insights from a national survey. *International Journal of Mental Health Nursing*, 31(1), 128-141.
- McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochemia medica*, 22(3), 276-282.
- Mokink, L. B., Terwee, C. B., Patrick, D. L., Alonso, J., Stratford, P. W., Knol, D. L., ... & de Vet, H. C. (2012). COSMIN checklist manual. Amsterdam: University Medical Center.
- Murray, L., Salis, C., Martin, N., & Dralle, J. (2018). The use of standardised short-term and working memory tests in aphasia research: a systematic review. *Neuropsychological rehabilitation*, 28(3), 309-351.
- Nowrouzi-Kia, B., Fox, M. T., Sidani, S., Dahlke, S., & Tregunno, D. (2022). The Comparison of Role Conflict Among Registered Nurses and Registered Practical Nurses Working in Acute Care Hospitals in Ontario Canada. *Canadian Journal of Nursing Research*, 54(2), 112-120.
- Nowrouzi, B., Rukholm, E., Larivière, M., Carter, L., Koren, I., & Mian, O. (2015). An examination of retention factors among registered practical nurses in north-eastern Ontario, Canada. *Rural and Remote Health*, 15(2), 93-101.
- Odom-Forren, J. (2020). Nursing Resilience in the World of COVID-19. *Journal of Perianesthesia Nursing*, 35(6), 555–556. <https://doi.org/10.1016/j.jopan.2020.10.005>
- Parker, R. O. (2013). 2013 Nurse Staffing Literature Review. The Registered Practical Nurses Association of Ontario.
- Parker, R. O. (2014). 2014 Nurse Staffing Literature Review. The Registered Practical Nurses Association of Ontario.
- Peters MD, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil H. Chapter 11: scoping reviews (2020 version). *JBI manual for evidence synthesis*, JBI. 2020;2020.
- Sawhney, M., Wong, M., Jussaume, L., & Bowry, R. (2020). The Effect of Simulation on Practical Nurses' Assessment of Epidural Analgesia. *Medsurg Nursing*, 29(5), 333-340.
- Siu, H. Y. H., Kristof, L., Elston, D., Hafid, A., & Mather, F. (2020). A cross-sectional survey assessing the preparedness of the long-term care sector to respond to the COVID-19 pandemic in Ontario, Canada. *BMC geriatrics*, 20(1), 1-9.
- Snobelen, N. (2016). Registered practical nurses in inpatient rehabilitation settings: A competency framework. Central Michigan University.
- Sutherland, N. (2020). Structures, tensions, and processes shaping long-term care home staff's role in end of life decision-making for residents with dementia. *Journal of Aging Studies*, 54, 100874.
- Suva, G., Sager, S., Mina, E. S., Sinclair, N., Lloyd, M., Bajnok, I., & Xiao, S. (2015). Systematic review: Bridging the gap in RPN-to-RN transitions. *Journal of Nursing Scholarship*, 47(4), 363-370.
- Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, Moher D, Peters MD, Horsley T, Weeks L, Hempel S. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Annals of internal medicine*. 2018 Oct 2;169(7):467-73.
- Vincent, C., Hall, P., Ebsary, S., Hannay, S., Hayes-Cardinal, L., & Husein, N. (2016). Knowledge confidence and desire for further diabetes-management education among nurses and personal support workers in long-term care. *Canadian Journal of Diabetes*, 40(3), 226-233.
- Wagner, L. M., Harkness, K., Hébert, P. C., & Gallagher, T. H. (2013). Nurses' disclosure of error scenarios in nursing homes. *Nursing outlook*, 61(1), 43-50.
- Ziegler, E. (2021). The integral role of nurses in primary care for transgender people: A qualitative descriptive study. *Journal of Nursing Management*, 29(1), 95-103.

Appendices

Appendix A – Figure 2. PRISMA-ScR checklist

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.	1
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.	3
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.	5
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.	6
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.	8

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
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.	7
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.	8
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	8
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	9
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.	9
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	9
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).	NA
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	9-10
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.	8
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	10

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	NA
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.	10-12
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	13-20
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.	22-23
Limitations	20	Discuss the limitations of the scoping review process.	21-22
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.	22-23
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.	1

JBIC = 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).

Appendix B – Table 2. Brief description of studies that included Canadian LPNs (n = 28)

Table 2. Brief description of studies that included Canadian LPNs (n = 28) sorted alphabetically by first authors' last name.					
Authors	Country of Authors	Year	Title	Journal of Publication	APA Citation
Whitmore, Carly; Baxter, Pamela E; Kaasalainen, Sharon; Ploeg, Jenny	Canada	2019	The Similarities and Differences in Transition to Practice Experiences for New-Graduate RNs and Practical Nurses in Long-term Care.	The Journal of nursing administration	Whitmore, C., Baxter, P. E., Kaasalainen, S., & Ploeg, J. (2019). The Similarities and Differences in Transition to Practice Experiences for New-Graduate RNs and Practical Nurses in Long-term Care. <i>JONA: The Journal of Nursing Administration</i> , 49(12), 586-590.
Vohra, J. U., Brazil, K., & Szala-Meneok, K.	Canada	2013	THE LAST WORD. To be part of the family.	Canadian Nurse	Vohra, J. U., Brazil, K., & Szala-Meneok, K. (2006). The last word: family members' descriptions of end-of-life care in long-term care facilities. <i>Journal of palliative care</i> , 22(1), 33-39.
Wadson, Kelley; Phillips, Leah Adeline	Canada	2018	Information literacy skills and training of licensed practical nurses in Alberta, Canada: results of a survey.	Health Information and Libraries Journal	Wadson, K., & Phillips, L. A. (2018). Information literacy skills and training of licensed practical nurses in Alberta, Canada: results of a survey. <i>Health Information & Libraries Journal</i> , 35(2), 141-159.
Tarnowski, Glenda Joyce; Bateman, Teresa; Stanger, Linda; Phillips, Leah Adeline	Canada	2017	Update of Licensed Practical Nurse Competencies in Alberta.	Journal of Nursing Regulation	Tarnowski, G. J., Bateman, T., Stanger, L., & Phillips, L. A. (2017). Update of licensed practical nurse competencies in Alberta. <i>Journal of Nursing Regulation</i> , 8(2), 17-22.
Stewart, Norma J; MacLeod, Martha L P; Kosteniuk, Julie G; Olynick, Janna; Penz, Kelly L; Karunanayake, Chandima P; Kulig, Judith C; Labrecque, Mary Ellen; Morgan, Debra G	Canada	2020	The importance of organizational commitment in rural nurses' intent to leave.	Journal of Advanced Nursing	Stewart, N. J., MacLeod, M. L., Kosteniuk, J. G., Olynick, J., Penz, K. L., Karunanayake, C. P., ... & Morgan, D. G. (2020). The importance of organizational commitment in rural nurses' intent to leave. <i>Journal of Advanced Nursing</i> , 76(12), 3398-3417.

Table 2. Brief description of studies that included Canadian LPNs (n = 28) sorted alphabetically by first authors' last name.					
Squires, Janet E; Baumbusch, Jennifer; Demery Varin, Melissa; MacDonald, Ibo; Chamberlain, Stephanie; Bostrom, Anne-Marie; Thompson, Genevieve; Cummings, Greta; Estabrooks, Carole A	Canada	2019	A Profile of Regulated Nurses Employed in Canadian Long-Term Care Facilities.	Canadian journal on aging = La revue canadienne du vieillissement	Squires, J. E., Baumbusch, J., Varin, M. D., MacDonald, I., Chamberlain, S., Boström, A. M., ... & Estabrooks, C. A. (2019). A profile of regulated nurses employed in Canadian long-term care facilities. <i>Canadian Journal on Aging/La revue canadienne du vieillissement</i> , 38(2), 130-142.
Sawhney, Monakshi; Wong, Michelle	Canada	2020	The Effect of Simulation on Practical Nurses' Assessment of Epidural Analgesia.	MEDSURG Nursing	Sawhney, M., Wong, M., Jussaume, L., & Bowry, R. (2020). The Effect of Simulation on Practical Nurses' Assessment of Epidural Analgesia. <i>Medsurg Nursing</i> , 29(5), 333-340.
Prentice, Dawn; Moore, Jane; Crawford, Joanne; Lankshear, Sara; Limoges, Jacqueline	Canada	2020	Collaboration among Registered Nurses and Licensed Practical Nurses: A Scoping Review of Practice Guidelines.	Nursing Research and Practice	Prentice, D., Moore, J., Crawford, J., Lankshear, S., & Limoges, J. (2020). Collaboration among registered nurses and licensed practical nurses: a scoping review of practice guidelines. <i>Nursing Research and Practice</i> , 2020.
Phillips, Leah; Neumeier, Melanie	Canada	2018	Building Capacity for Evidence-Based Practice: Understanding How Licensed Practical Nurses (LPNs) Source Knowledge.	Worldviews on Evidence-based Nursing	Phillips, L., & Neumeier, M. (2018). Building Capacity for Evidence-Based Practice: Understanding How Licensed Practical Nurses (LPNs) Source Knowledge. <i>Worldviews on Evidence-Based Nursing</i> , 15(4), 290-295.
Nourpanah, Shiva; Bourgeault, Ivy; Jackson, Lois; Price, Sheri; Barber, Pauline Gardiner; Leiter, Michael P	Canada	2018	Intersecting Policy Contexts of Employment-Related Geographical Mobility of Healthcare Workers: The Case of Nova Scotia, Canada.	Healthcare Policy = Politiques De Sante	Nourpanah, S., Bourgeault, I., Jackson, L., Price, S., Barber, P. G., & Leiter, M. P. (2018). Intersecting policy contexts of employment-related geographical mobility of healthcare workers: the case of Nova Scotia, Canada. <i>Healthcare Policy</i> , 14(2), 12.
Mathews, Maria; Ryan, Dana	Canada	2015	Financial Recruitment Incentive Programs for Nursing Personnel in Canada.	Nursing leadership (Toronto, Ont.)	Mathews, M., & Ryan, D. (2015). Financial Recruitment Incentive Programs for Nursing Personnel in Canada. <i>Nursing Leadership (Toronto, Ont.)</i> , 28(1), 41-52.

Table 2. Brief description of studies that included Canadian LPNs (n = 28) sorted alphabetically by first authors' last name.					
Malicki, A., Vergara, F. H., Van de Castle, B., Goyeneche, P., Mann, S., Preston Scott, M., ... & Whalen, M	Canada	2016	Gamification in nursing jurisprudence	ProQuest Dissertations and Theses	Malicki, A., Vergara, F. H., Van de Castle, B., Goyeneche, P., Mann, S., Preston Scott, M., ... & Whalen, M. (2020). Gamification in nursing education: an integrative literature review. <i>The Journal of Continuing Education in Nursing</i> , 51(11), 509-515.
MacLeod, Martha L.P.; Penz, Kelly L.; Banner, Davina; Jahner, Sharleen; Koren, Irene; Thomlinson, Alexandra; Moffitt, Pertice; Labrecque, Mary Ellen	Canada	2021	Mental health nursing practice in rural and remote Canada: Insights from a national survey	International Journal of Mental Health Nursing	MacLeod, M. L., Penz, K. L., Banner, D., Jahner, S., Koren, I., Thomlinson, A., ... & Labrecque, M. E. (2022). Mental health nursing practice in rural and remote Canada: Insights from a national survey. <i>International Journal of Mental Health Nursing</i> , 31(1), 128-141.
MacLeod, Martha LP, PhD, RN; Stewart, Norma J, PhD; Kosteniuk, Julie G, PhD; Penz, Kelly L, PhD, RN; Olynick, Janna, MSc; Karunanayake, Chandima P, PhD; Banner, Davina, PhD, RN; Wilson, Erin, PhD, NP(F); Kulig, Judith C, PhD, RN; Labrecque, Mary Ellen, RN(NP), PhD; Moffitt, Pertice, PhD; Jahner, Sharleen, MN, RN; Garraway, Leana, MA	Canada	2019	Rural and Remote Licensed Practical Nurses' Perception of Working Below Their Legislated Scope of Practice	Nursing Leadership	MacLeod, M. L., Stewart, N. J., Kosteniuk, J. G., Penz, K. L., Olynick, J., Karunanayake, C. P., ... & Garraway, L. (2019). Rural and remote licensed practical nurses' perceptions of working below their legislated scope of practice. <i>Nurs Leadersh</i> , 32, 8-19.

Table 2. Brief description of studies that included Canadian LPNs (n = 28) sorted alphabetically by first authors' last name.					
MacLeod, Martha L P; Penz, Kelly L; Banner, Davina; Jahner, Sharleen; Koren, Irene; Thomlinson, Alexandra; Moffitt, Pertice; Labrecque, Mary Ellen	Canada	2022	Mental health nursing practice in rural and remote Canada: Insights from a national survey.	International Journal of Mental Health Nursing	MacLeod, M. L., Penz, K. L., Banner, D., Jahner, S., Koren, I., Thomlinson, A., ... & Labrecque, M. E. (2022). Mental health nursing practice in rural and remote Canada: Insights from a national survey. International Journal of Mental Health Nursing, 31(1), 128-141.
MacLeod, Martha L P; Stewart, Norma J; Kosteniuk, Julie G; Penz, Kelly L; Olynick, Janna; Karunanayake, Chandima P; Banner, Davina; Wilson, Erin; Kulig, Judith C; Labrecque, Mary Ellen; Moffitt, Pertice; Jahner, Sharleen; Garraway, Leana	Canada	2019	Rural and Remote Licensed Practical Nurses' Perceptions of Working Below Their Legislated Scope of Practice.	Nursing leadership (Toronto, Ont.)	MacLeod, M. L., Stewart, N. J., Kosteniuk, J. G., Penz, K. L., Olynick, J., Karunanayake, C. P., ... & Garraway, L. (2019). Rural and remote licensed practical nurses' perceptions of working below their legislated scope of practice. Nurs Leadersh, 32, 8-19.
MacLeod, Martha L P; Zimmer, Lela V; Kosteniuk, Julie G; Penz, Kelly L; Stewart, Norma J	Canada	2021	The meaning of nursing practice for nurses who are retired yet continue to work in a rural or remote community.	BMC Nursing	MacLeod, M. L., Zimmer, L. V., Kosteniuk, J. G., Penz, K. L., & Stewart, N. J. (2021). The meaning of nursing practice for nurses who are retired yet continue to work in a rural or remote community. BMC nursing, 20(1), 1-13.
Lukewich, Julia A; Tranmer, Joan E; Kirkland, Megan C; Walsh, Anna J	Canada	2019	Exploring the utility of the Nursing Role Effectiveness Model in evaluating nursing contributions in primary health care: A scoping review.	Nursing OPEN	Lukewich, J. A., Tranmer, J. E., Kirkland, M. C., & Walsh, A. J. (2019). Exploring the utility of the Nursing Role Effectiveness Model in evaluating nursing contributions in primary health care: A scoping review. Nursing Open, 6(3), 685-697.

Table 2. Brief description of studies that included Canadian LPNs (n = 28) sorted alphabetically by first authors' last name.					
Kosteniuk, Julie; Stewart, Norma J; Wilson, Erin C; Penz, Kelly L; Martin-Misener, Ruth; Morgan, Debra G; Karunanayake, Chandima; MacLeod, Martha L P	Canada	2019	Communication tools and sources of education and information: a national survey of rural and remote nurses.	Journal of the Medical Library Association: JMLA	Kosteniuk, J., Stewart, N. J., Wilson, E. C., Penz, K. L., Martin-Misener, R., Morgan, D. G., ... & MacLeod, M. L. (2019). Communication tools and sources of education and information: a national survey of rural and remote nurses. Journal of the Medical Library Association: JMLA, 107(4), 538.
Janzen, Katherine J; Melrose, Sherri; Gordon, Kathryn; Miller, Jean	Canada	2013	"RN means real nurse": perceptions of being a "real" nurse in a post-LPN-BN bridging program.	Nursing forum	Janzen, K. J., Melrose, S., Gordon, K., & Miller, J. (2013, July). "RN Means Real Nurse": Perceptions of Being a "Real" Nurse in a Post-LPN–BN Bridging Program. In Nursing forum (Vol. 48, No. 3, pp. 165-173).
Hunter, Kathleen F.; Dahlke, Sherry; Negrin, Kelly; Kalogirou, Maya Reshef; Fox, Mary; Antonio, Natasha; Buckborough, Neena; Morgan, Angela; Wagg, Adrian	Canada	2019	The feasibility of implementing education on older person care to practice on medical units: Nurses' perceptions and the influence of practice context.	International Journal of Older People Nursing	Hunter, K. F., Dahlke, S., Negrin, K., Kalogirou, M. R., Fox, M., Antonio, N., ... & Wagg, A. (2019). The feasibility of implementing education on older person care to practice on medical units: Nurses' perceptions and the influence of practice context. International Journal of Older People Nursing, 14(4), e12265.
Havaei, Farinaz; MacPhee, Maura; Dahinten, V Susan	Canada	2016	RNs and LPNs: emotional exhaustion and intention to leave.	Journal of Nursing Management	Havaei, F., MacPhee, M., & Susan Dahinten, V. (2016). RN s and LPN s: emotional exhaustion and intention to leave. Journal of nursing management, 24(3), 393-399.
Harris, Alexandra; Hall, Linda McGillis; Price, Sheri; Lalonde, Michelle; Andrews, Gavin; MacDonald-Rencz, Sandra	Canada	2013	LPN perspectives of factors that affect nurse mobility in Canada.	Nursing leadership (Toronto, Ont.)	Harris, A., Hall, L. M., Price, S., Lalonde, M., Andrews, G., & MacDonald-Rencz, S. (2013). LPN perspectives of factors that affect nurse mobility in Canada. Nursing Leadership (Toronto, Ont.), 26, 70-78.

Author(s)	Country	Year	Title	Journal	Reference
Fraser, Kimberly; Punjani, Neelam Saleem; Wilkey, Beth; Labonte, Susan; Lartey, Sarah; Gubersky, Janine; Nickoriuk, Kimberly; Joseph, Joseph; Szejmae; Younus, Sarah; Miklavcic, John	Canada	2019	Optimizing Licensed Practical Nurses in Home Care: Their Role, Scope and Opportunities.	Nursing leadership (Toronto, Ont.)	Fraser, K., Punjani, N. S., Wilkey, B., Labonte, S., Lartey, S., Gubersky, J., ... & Miklavcic, J. (2019). Optimizing licensed practical nurses in home care: Their role, scope and opportunities. <i>Canadian Journal of Nursing Leadership</i> , 32(1), 42-59.
El Hussein, Mohamed; Hirst, Sandra; Osuji, Joseph	Canada	2019	Professional Socialization: A Grounded Theory of the Clinical Reasoning Processes That RNs and LPNs Use to Recognize Delirium.	Clinical Nursing Research	El Hussein, M., Hirst, S., & Osuji, J. (2019). Professional socialization: A grounded theory of the clinical reasoning processes that RNs and LPNs use to recognize delirium. <i>Clinical Nursing Research</i> , 28(3), 321-339.
Caspar, Sienna; Cooke, Heather A; O'Rourke, Norm; MacDonald, Stuart W S	Canada	2013	Influence of individual and contextual characteristics on the provision of individualized care in long-term care facilities.	The Gerontologist	Caspar, S., Cooke, H. A., O'Rourke, N., & MacDonald, S. W. (2013). Influence of individual and contextual characteristics on the provision of individualized care in long-term care facilities. <i>The Gerontologist</i> , 53(5), 790-800.
Astrakianakis, George; Chow, Yat; Hodgson, Murray; Haddock, Maureen; Ratner, Pamela	Canada		0421 Noise-Induced Stress among Primary Care Workers in Long Term Care Facilities in British Columbia, Canada.	Occupational & Environmental Medicine	Astrakianakis, G., Chow, Y., Hodgson, M., Haddock, M., & Ratner, P. (2014). 0421 Noise-Induced Stress among Primary Care Workers in Long Term Care Facilities in British Columbia, Canada. <i>Occupational and Environmental Medicine</i> , 71(Suppl 1), A54-A54.
Arain, Mubashir; Deutschlander, Siegrid; Rostami, Mahnoush; Suter, Esther	Canada	2016	Should Health Care Aides Assist With Medications in Long-Term Care?.	Gerontology & Geriatric Medicine	Arain, M., Deutschlander, S., Rostami, M., & Suter, E. (2016). Should Health Care Aides Assist With Medications in Long-Term Care?. <i>Gerontology and Geriatric Medicine</i> , 2, 2333721416649130.

Appendix C – Table 3. Brief description of studies that included non-Canadian LPNs (n = 114)

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Authors	Country of Authors	Year	Title	Journal of Publication	APA Citation
Abate, Betelehem; VanGraafeiland, Brigit	United States	2019	Improving Education and Communication in an Assisted Living Facility to Reduce Avoidable Emergency Department Transfers: A Quality Improvement Project.	Journal of Gerontological Nursing	Abate, B., & VanGraafeiland, B. (2019). Improving education and communication in an assisted living facility to reduce avoidable emergency department transfers: A quality improvement project. <i>Journal of gerontological nursing</i> , 45(5), 23-29.
Abusalem, Said; Polivka, Barbara; Coty, Mary-Beth; Crawford, Timothy N; Furman, Christian D; Alaradi, Maryam	United States	2021	The Relationship Between Culture of Safety and Rate of Adverse Events in Long-Term Care Facilities.	Journal of Patient Safety	Abusalem, S., Polivka, B., Coty, M. B., Crawford, T. N., Furman, C. D., & Alaradi, M. (2021). The relationship between culture of safety and rate of adverse events in long-term care facilities. <i>Journal of patient safety</i> , 17(4), 299-304.
Adams, Jewel; Kaplow, Roberta; Dominy, Janet; Stroud, Bridgett	United States	2015	Beyond a Band-Aid™ Approach: An Internal Agency Solution to Nurse Staffing	Nursing Economics	Adams, J., Kaplow, R., Dominy, J., & Stroud, B. (2015). Beyond a Band-Aid® approach: an internal agency solution to nurse staffing. <i>Nursing Economics</i> , 33(1), 51.
Alexander, Gregory L.; Steege, Linsey M.; Pasupathy, Kalyan S.; Wise, Keely	United States	2015	Case studies of IT sophistication in nursing homes: A mixed method approach to examine communication strategies about pressure ulcer prevention practices	International Journal of Industrial Ergonomics	Alexander, G. L., Steege, L. M., Pasupathy, K. S., & Wise, K. (2015). Case studies of IT sophistication in nursing homes: a mixed method approach to examine communication strategies about pressure ulcer prevention practices. <i>International Journal of Industrial Ergonomics</i> , 49, 156-166.
Altare Sarik, Danielle; Kutney-Lee, Ann	United States	2016	Nurse Staffing Makes the Difference: Understanding Surgical Patient Outcomes as a Function of Nursing Skill Mix...28th Annual Scientific Session, June 2-6, 2017, Baltimore, Maryland	Nursing Research	Sarik, D. A., & Kutney-Lee, A. (2016, March). Nurse Staffing Makes the Difference: Understanding Surgical Patient Outcomes as a Function of Nursing Skill Mix. In <i>Nursing Research</i> (Vol. 65, No. 2, pp. E63-E63). TWO COMMERCE SQ, 2001 MARKET ST, PHILADELPHIA, PA 19103 USA: LIPPINCOTT WILLIAMS & WILKINS.
Archbald-Pannone, Laurie	United States	2014	Survey of C. difficile-Specific Infection Control Policies in Local Long-Term Care Facilities.	International Journal of Clinical Medicine	Archbald-Pannone, L. (2014). Survey of C. difficile-specific infection control policies in local long-term care facilities. <i>International journal of clinical medicine</i> , 5(7), 414.

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Arnetz, Judith E; Zhdanova, Ludmila; Arnetz, Bengt B	Sweden	2016	Patient Involvement: A New Source of Stress in Health Care Work?.	Health Communication	Arnetz, J. E., Zhdanova, L., & Arnetz, B. B. (2016). Patient involvement: a new source of stress in health care work?. Health communication, 31(12), 1566-1572.
Beeber, Anna S; Zimmerman, Sheryl; Reed, David; Mitchell, C Madeline; Sloane, Philip D; Harris-Wallace, Brandy; Perez, Rosa; Schumacher, John G	United States	2014	Licensed nurse staffing and health service availability in residential care and assisted living.	Journal of the American Geriatrics Society	Beeber, A. S., Zimmerman, S., Reed, D., Mitchell, C. M., Sloane, P. D., Harris-Wallace, B., ... & Schumacher, J. G. (2014). Licensed nurse staffing and health service availability in residential care and assisted living. Journal of the American Geriatrics Society, 62(5), 805-811.
Berklan, James M.	United States	2017	RN, LPN salaries on the rise.	McKnight's Long-Term Care News	Aiken, L. H., Blendon, R. J., & Rogers, D. E. (1981). The shortage of hospital nurses: A new perspective.
Bogner, Hillary R; de Vries, Heather F; Kaye, Elise M; Morales, Knashawn H	United States	2013	Pilot trial of a licensed practical nurse intervention for hypertension and depression.	Family Medicine	Bogner, H. R., de Vries, H. F., Kaye, M. E. M., & Morales, K. H. (2013). Pilot trial of a licensed practical nurse intervention for hypertension and depression. Family medicine, 45(5), 323.
Bonfim, Daiana; Mafra, Ana Carolina Cintra Nunes; da Costa Palacio, Danielle; Rewa, Talita	Brazil	2022	Assessment of staffing needs for registered nurses and licensed practical nurses at primary care units in Brazil using Workload Indicators of Staffing Need (WISN) method.	Human Resources for Health	Bonfim, D., Mafra, A. C. C. N., da Costa Palacio, D., & Rewa, T. (2022). Assessment of staffing needs for registered nurses and licensed practical nurses at primary care units in Brazil using Workload Indicators of Staffing Need (WISN) method. Human Resources for Health, 19(1), 1-10.
Bouwmeester, Kathy	United States	2018	Critical Reflections	The Canadian Journal of Critical Care Nursing	Mittelman, J. H. (Ed.). (1996). Globalization: critical reflections (Vol. 9). Boulder, CO: Lynne Rienner.
Burroughs, Jon; Smith, Ron	United States	2021	Data-Driven Population Health Shapes a New Model of Primary Care	Journal of Healthcare Management	Burroughs, J., & Smith, R. (2021). Data-Driven Population Health Shapes a New Model of Primary Care. Journal of Healthcare Management, 66(1), 9-13.
Cecil-Riddle, Kimberly	United States	2014	Nurses' Knowledge and Perceptions of Rapid Response Teams in a Psychiatric Facility.	Nurses' Knowledge & Perceptions of Rapid Response Teams in a Psychiatric Facility	Cecil-Riddle, K. (2014). Nurses' Knowledge and Perceptions of Rapid Response Teams in a Psychiatric Facility (Doctoral dissertation, Walden University).

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Chatman, Blanche	United States	2013	Elders aging in place and transitioning to an assisted living facility	Dissertation Abstracts International: Section B: The Sciences and Engineering	Chatman, B. (2012). Elders aging in place and transitioning to an assisted living facility (Doctoral dissertation, University of Phoenix).
Chiaki Kinouchi; Yuko Takayama; Eiko Suzuki; Mayumi Sato	Japan		Causal Model of Work Engagement among Registered Nurses and Licensed Practical Nurses Working in Long-Term Care Contexts in Japan.	GSTF Journal of Nursing & Health Care	Kinouchi, C., Takayama, Y., Sato, M., & Suzuki, E. (2020). Causal Model of Work Engagement among Registered Nurses and Licensed Practical Nurses Working in Long-Term Care Contexts in Japan. <i>GSTF Journal of Nursing and Health Care (JNHC)</i> , 4(1).
Christopher, Karen	United States	2021	A double bind of relational care: Nurses' narratives of caregiving at work and at home	Gender Issues	Christopher, K. (2022). A Double Bind of Relational Care: Nurses' Narratives of Caregiving at Work and at Home. <i>Gender Issues</i> , 39(2), 220-235.
Claiborne, Denise Michelle	United States	2016	Application of a theory-based educational intervention to increase the frequency of performing oral health assessments on children among advanced practice registered nurses and nurses.	Old Dominion University Digital Commons Community & Environmental Health Theses & Dissertations	Claiborne, D. M. (2016). Application of a theory-based educational intervention to increase the frequency of performing oral health assessments on children among advanced practice registered nurses and nurses. Old Dominion University.
Colilla, Suzanne S	United States	2014	Telephone Communication Between Providers in Skilled Nursing Facilities: Development of a Grounded Theory.	Carlow University Theses & Dissertations	Colilla, S. S. (2014). Telephone Communication Between Providers in Skilled Nursing Facilities: Development of a Grounded Theory (Doctoral dissertation, Carlow University).
Corabian, Paula; Yan, Charles; Armijo-Olivo, Susan; Guo, Bing	United States	2019	OP48 Nursing Requirements In Long-Term Care: A Health Technology Assessment	International Journal of Technology Assessment in Health Care	Corabian, P., Yan, C., Armijo-Olivo, S., & Guo, B. (2019). OP48 Nursing Requirements In Long-Term Care: A Health Technology Assessment. <i>International Journal of Technology Assessment in Health Care</i> , 35(S1), 11-12.
Corazzini, Kirsten N; Anderson, Ruth A; Mueller, Christine; Thorpe, Joshua M; McConnell, Eleanor S	United States	2013	Licensed practical nurse scope of practice and quality of nursing home care.	Nursing Research	Corazzini, K. N., Anderson, R. A., Mueller, C., Thorpe, J. M., & McConnell, E. S. (2013). Licensed practical nurse scope of practice and quality of nursing home care. <i>Nursing Research</i> , 62(5), 315-324.
Corazzini, Kirsten N; Mueller,	United States	2013	Pain medication management in nursing homes and nursing scope of practice.	Journal of Gerontological Nursing	Corazzini, K. N., Mueller, C., Anderson, R. A., Day, L., Hunt-McKinney, S., & Porter, K. (2013). Pain medication management in

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Christine; Anderson, Ruth A; Day, Lisa; Hunt-McKinney, Selina; Porter, Kristie					nursing homes and nursing scope of practice. <i>Journal of Gerontological Nursing</i> , 39(4), 40-46.
Corazzini, Kirsten N.; Anderson, Ruth A.; McConnell, Eleanor S.; Mueller, Christine; Day, Lisa; Porter, Kristie	United States	2013	Perceptions of Nursing Practice Scale Pilot Study: Directors of Nursing in Nursing Homes.	<i>Journal of Nursing Regulation</i>	Corazzini, K. N., Anderson, R. A., McConnell, E. S., Mueller, C., Day, L., & Porter, K. (2013). Perceptions of nursing practice scale pilot study: Directors of nursing in nursing homes. <i>Journal of Nursing Regulation</i> , 4(3), 4-10.
Corazzini, Kirsten N.; Anderson, Ruth A.; Mueller, Christine; Hunt-McKinney, Selina; Day, Lisa; Porter, Kristie	United States	2013	Understanding RN and LPN Patterns of Practice in Nursing Homes.	<i>Journal of Nursing Regulation</i>	Corazzini, K. N., Anderson, R. A., Mueller, C., Hunt-McKinney, S., Day, L., & Porter, K. (2013). Understanding RN and LPN patterns of practice in nursing homes. <i>Journal of Nursing Regulation</i> , 4(1), 14-18.
Cross, Heidi Huddleston; Roe, Cheryl A.; Dongliang Wang	United States	2014	Staff Nurse Confidence in Their Skills and Knowledge and Barriers to Caring for Patients With Ostomies.	<i>Journal of Wound, Ostomy & Continence Nursing</i>	Cross, H. H., Roe, C. A., & Wang, D. (2014). Staff nurse confidence in their skills and knowledge and barriers to caring for patients with ostomies. <i>Journal of Wound Ostomy & Continence Nursing</i> , 41(6), 560-565.
Cuddy, Janet Brooke	United States	2015	Development of an Evidence-Based Nursing Orientation Program for a Community Health System	ProQuest Dissertations and Theses	Cuddy, J. B. (2015). Development of an evidence-based nursing orientation program for a community health system.
Dolan, Emily D; Mohr, David; Lempa, Michele; Joos, Sandra; Fihn, Stephan D; Nelson, Karin M; Helfrich, Christian D	United States	2015	Using a single item to measure burnout in primary care staff: a psychometric evaluation.	<i>Journal of General Internal Medicine</i>	Dolan, E. D., Mohr, D., Lempa, M., Joos, S., Fihn, S. D., Nelson, K. M., & Helfrich, C. D. (2015). Using a single item to measure burnout in primary care staff: a psychometric evaluation. <i>Journal of general internal medicine</i> , 30(5), 582-587.
Dyck, Mary J.; Novotny, Nancy	United States	2018	Exploring Reported Practice Habits of Registered Nurses and Licensed Practical Nurses at Illinois Nursing Homes.	<i>Journal of Nursing Regulation</i>	Dyck, M. J., & Novotny, N. (2018). Exploring reported practice habits of registered nurses and licensed practical nurses at Illinois

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
					nursing homes. <i>Journal of Nursing Regulation</i> , 9(2), 18-30.
Dyer, Dianne	United States	2013	President's Update.	Alberta RN	Cook, J. A. (2006). Employment barriers for persons with psychiatric disabilities: Update of a report for the President's Commission. <i>Psychiatric services</i> , 57(10), 1391-1405.
Eastman, Gail B	United States	2013	The Relationship between Psychological Capital and Workplace Bullying for Nurses.	Relationship Between Psychological Capital & Workplace Bullying for Nurses	Eastman, G. B. (2013). The relationship between psychological capital and workplace bullying for nurses. Northcentral University.
Enemuoh, Chiamaka J	United States	2013	Implementation of telehealth for rural patients with congestive heart failure: Evaluation of healthcare access and outcome.	College of St Scholastic Dissertations & Theses	Enemuoh, C. J. (2013). Implementation of telehealth for rural patients with congestive heart failure: evaluation of healthcare access and outcome (Doctoral dissertation, The College of St. Scholastica).
Eyles	United States	2021	Education Moment: Can I "Challenge" the NCLEX-PN Exam?	Nursing Newsletter	Eyles, M. O. (2013). Mosby's Comprehensive Review of Practical Nursing for the NCLEX-PN® Exam-E-Book.
Fanus, Karen, BSN, RN, MSHSA, NE-BC, OCN; Huddleston, Roseann, BSN, RN, CRNI, OCN; Wisotzkey, Susanlee, PhD, BA, BSN, RN, HNB-BC, NE-B; Hempling, Ronald, MD	United States	2014	Embracing a culture of safety by decreasing medication errors	Nursing Management	Fanus, K., Huddleston, R., Wisotzkey, S., & Hempling, R. (2014). Embracing a culture of safety by decreasing medication errors. <i>Nursing Management</i> , 45(3), 16-19.
Filipova, Anna A	United States	2018	Countering Unprofessional Behaviors Among Nurses in the Workplace.	The Journal of Nursing Administration	Filipova, A. A. (2018). Countering unprofessional behaviors among nurses in the workplace. <i>JONA: The Journal of Nursing Administration</i> , 48(10), 487-494.
Franklin, Tammy Lea	United States	2019	Educating nurses about a nurse residency program	Dissertation Abstracts International: Section B: The Sciences and Engineering	Franklin, T. L. (2019). Educating Nurses About a Nurse Residency Program (Doctoral dissertation, Walden University).

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Galvin, Shelley L; Grandy, Rebecca; Woodall, Tasha; Parlier, Anna Beth; Thach, Sarah; Landis, Suzanne E	United States	2017	Improved Utilization of Preventive Services Among Patients Following Team-Based Annual Wellness Visits.	North Carolina medical journal	Galvin, S. L., Grandy, R., Woodall, T., Parlier, A. B., Thach, S., & Landis, S. E. (2017). Improved utilization of preventive services among patients following team-based annual wellness visits. <i>North Carolina Medical Journal</i> , 78(5), 287-295.
Garbin, Margery G; Chmielewski, Christine M	United States	2013	Job analysis and role delineation: LPN/LVNs and hemodialysis technicians.	Nephrology Nursing Journal: Journal of the American Nephrology Nurses' Association	Garbin, M. G., & Chmielewski, C. M. (2013). Job analysis and role delineation: LPN/LVNs and hemodialysis technicians. <i>Nephrology Nursing Journal</i> , 40(3).
Garcia, Janelle T.	United States	2016	Assessing weight bias in nurses toward obese patients and its effect on quality of care	Dissertation Abstracts International Section A: Humanities and Social Sciences	Garcia, J. T. (2012). Assessing weight bias in nurses toward obese patients and its effect on quality of care (Doctoral dissertation, University of Florida).
Guitard, Virgil	United States	2017	What is the Difference Between the Assignment and the Delegation of Nursing Care?	Info Nursing	Weydt, A. (2010). Developing delegation skills. <i>OJIN: The Online Journal of Issues in Nursing</i> , 15(2), 1.
Han, Xinxin; Pittman, Patricia; Barnow, Burt	China	2021	Alternative Approaches to Ensuring Adequate Nurse Staffing: The Effect of State Legislation on Hospital Nurse Staffing.	Medical Care	Han, X., Pittman, P., & Barnow, B. (2021). Alternative Approaches to Ensuring Adequate Nurse Staffing: The Effect of State Legislation on Hospital Nurse Staffing. <i>Medical care</i> , 59(10 Suppl 5), S463.
Harden, J Taylor; Burger, Sarah Greene	United States	2015	They Are Called Nursing Homes for a Reason: RN Staffing in Long-Term Care Facilities.	Journal of Gerontological Nursing	Harden, J. T., & Burger, S. G. (2015). They are called nursing homes for a reason: RN staffing in long-term care facilities. <i>Journal of Gerontological Nursing</i> , 41(12), 15-20.
Harrod, Molly; Montoya, Ana; Mody, Lona; McGuirk, Helen; Winter, Suzanne; Chopra, Vineet	United States	2016	Challenges for Nurses Caring for Individuals with Peripherally Inserted Central Catheters in Skilled Nursing Facilities.	Journal of the American Geriatrics Society	Harrod, M., Montoya, A., Mody, L., McGuirk, H., Winter, S., & Chopra, V. (2016). Challenges for nurses caring for individuals with peripherally inserted central catheters in skilled nursing facilities. <i>Journal of the American Geriatrics Society</i> , 64(10), 2059-2064.
Hawk, Terry; White, Elizabeth M; Bishnoi, Courtney; Schwartz,	United States	2022	Facility characteristics and costs associated with meeting proposed minimum staffing levels in skilled nursing facilities.	Journal of the American Geriatrics Society	Hawk, T., White, E. M., Bishnoi, C., Schwartz, L. B., Baier, R. R., & Gifford, D. R. (2022). Facility characteristics and costs associated with meeting proposed minimum staffing levels in skilled nursing facilities.

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Lindsay B; Baier, Rosa R; Gifford, David R					Journal of the American Geriatrics Society, 70(4), 1198-1207.
Hoag, Debra K.	Unites States	2016	The transition experiences of graduates of a synchronous online LPN to RN program	ProQuest Dissertations and Theses	Hoag, D. K. (2016). The transition experiences of graduates of a synchronous online LPN to RN program (Doctoral dissertation, University of Phoenix).
Huey-Ming Tzeng	Unites States	2016	Understanding Inpatient Injurious Fall Rates Using Medicare's Hospital Compare Data.	MEDSURG Nursing	Tzeng, H. M., Hu, H. M., & Yin, C. Y. (2016). Understanding inpatient injurious fall rates using medicare's hospital compare data. <i>Medsurg Nursing</i> , 25(4), 255.
Huun, Kathleen M; Kummerow, Andreas; Jenkins, Jacob T	United States	2021	Educating and Transitioning a Diverse Nursing Workforce: LPN to BSN.	Journal of continuing education in nursing	Huun, K. M., Kummerow, A., & Jenkins, J. T. (2021). Educating and Transitioning a Diverse Nursing Workforce: LPN to BSN. <i>The Journal of Continuing Education in Nursing</i> , 52(12), 558-564.
Igland, Jannicke; Potrebny, Thomas; Bendixen, Bente E; Haugstvedt, Anne; Espehaug, Birgitte; Titlestad, Kristine B; Graverholt, Birgitte	Norway	2021	Translation and validation of the Alberta Context Tool for use in Norwegian nursing homes.	PloS one	Igland, J., Potrebny, T., Bendixen, B. E., Haugstvedt, A., Espehaug, B., Titlestad, K. B., & Graverholt, B. (2021). Translation and validation of the Alberta Context Tool for use in Norwegian nursing homes. <i>PloS one</i> , 16(10), e0258099.
Johnson, Samantha; Bott, Marjorie J	United States	2016	Communication with Residents and Families in Nursing Homes at the End of Life.	Journal of Hospice and Palliative Nursing	Johnson, S., & Bott, M. J. (2016). Communication with residents and families in nursing homes at the end of life. <i>Journal of hospice and palliative nursing: JHPN: the official journal of the Hospice and Palliative Nurses Association</i> , 18(2), 124.
Jones, April	United States	2015	Organisational commitment in nurses: is it dependent on age or education?.	Nursing Management	Jones, A. (2015). Organisational commitment in nurses: is it dependent on age or education?. <i>Nursing Management</i> , 21(9).
Jones, April Lavette	United States	2015	Generational cohort differences in types of organizational commitment among nurses in alabama	Dissertation Abstracts International: Section B: The Sciences and Engineering	Jones, A. L. (2014). Generational cohort differences in types of organizational commitment among nurses in Alabama (Doctoral dissertation, Walden University).

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Jones, Cheryl B; McCollum, Meriel; Tran, Alberta K; Toles, Mark; Knafl, George J	United States	2021	Supporting the Dynamic Careers of Licensed Practical Nurses: A Strategy to Bolster the Long-Term Care Nurse Workforce.	Policy, Politics & Nursing Practice	Jones, C. B., McCollum, M., Tran, A. K., Toles, M., & Knafl, G. J. (2021). Supporting the Dynamic Careers of Licensed Practical Nurses: A Strategy to Bolster the Long-Term Care Nurse Workforce. <i>Policy, Politics, & Nursing Practice</i> , 22(4), 297-309.
Jones, Cheryl B; Toles, Mark; Knafl, George J; Beeber, Anna S	United States	2018	An untapped resource in the nursing workforce: Licensed practical nurses who transition to become registered nurses.	Nursing Outlook	Jones, C. B., Toles, M., Knafl, G. J., & Beeber, A. S. (2018). An untapped resource in the nursing workforce: Licensed practical nurses who transition to become registered nurses. <i>Nursing Outlook</i> , 66(1), 46-55.
Jones, Julie Savage	United States	2016	The lived experience of transition to practice for the new graduate licensed practical nurse working in long term care.	Lived Experience of Transition to Practice for the New Graduate Licensed Practical Nurse Working in Long Term Care	Jones, J. S. (2016). The lived experience of transition to practice for the new graduate licensed practical nurse working in long term care. The University of Alabama.
Kalanek, Constance	United States	2013	A message from the Executive Director.	Dakota Nurse Connection	Tibaijuka, A. K. (2006). A message from the Executive Director. <i>Habitat debate</i> , 12(2), 12.
Knauer, Rebekah Jean	United States	2018	Compassion Fatigue and Demographic Factors in Licensed Practical Nurses and Registered Nurses Providing Direct Client Care at a Pediatric Convalescent Center in a Midwestern City.	Compassion Fatigue & Demographic Factors In Licensed Practical Nurses & Registered Nurses Providing Direct Client Care At A Pediatric Convalescent Center In A Midwestern City	Knauer, R. J. (2018). Compassion Fatigue and Demographic Factors in Licensed Practical Nurses and Registered Nurses Providing Direct Client Care at a Pediatric Convalescent Center in a Midwestern City (Doctoral dissertation, Spalding University).
Knecht, Patricia	United States	2014	Demystifying job satisfaction in long-term care: The voices of licensed practical nurses.	Demystifying Job Satisfaction in Long-term Care: The Voices of Licensed Practical Nurses	Knecht, P. (2014). Demystifying job satisfaction in long-term care: The voices of licensed practical nurses. The Pennsylvania State University.
Konetzka, R Tamara; Lasater, Karen	United States	2018	Are Recessions Good for Staffing in Nursing Homes?.	American Journal of Health Economics	Konetzka, R. T., Lasater, K. B., Norton, E. C., & Werner, R. M. (2018). Are recessions good for staffing in nursing homes?.

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
B; Norton, Edward C; Werner, Rachel M					American journal of health economics, 4(4), 411-432.
Koovits, Keddi A.	United States	2019	The Influence of Current Curriculum in Certified Nursing Assistant Programs on Patient Health Outcomes: Skill Development and Delivery of Patient Centered Care in Long Term Settings in New Jersey	ProQuest Dissertations and Theses	Koovits, K. A. (2019). The Influence of Current Curriculum in Certified Nursing Assistant Programs on Patient Health Outcomes: Skill Development and Delivery of Patient Centered Care in Long Term Settings in New Jersey (Doctoral dissertation, Kean University).
Krein, Sarah L; Turnwald, Molly; Anderson, Barry; Maust, Donovan T	United States	2022	"Sometimes it's not about the money... it's the way you treat people...": A Qualitative Study of Nursing Home Staff Turnover.	Journal of the American Medical Directors Association	Krein, S. L., Turnwald, M., Anderson, B., & Maust, D. T. (2022). "Sometimes it's not about the money... it's the way you treat people...": A Qualitative Study of Nursing Home Staff Turnover. Journal of the American Medical Directors Association.
Landrey, Alison R; Harder, Valerie S; Sandoval, Marie B; King, John G; Ziegelman, David S; MacLean, Charles D	United States	2018	Utilization Outcomes of a Pilot Primary Care Team Redesign.	Health services Research and Managerial Epidemiology	Landrey, A. R., Harder, V. S., Sandoval, M. B., King, J. G., Ziegelman, D. S., & MacLean, C. D. (2018). Utilization outcomes of a pilot primary care team redesign. Health Services Research and Managerial Epidemiology, 5, 2333392818789844.
Lee, Sarah J	United States	2021	Improving critical thinking, confidence, & skills in Basic Life Support through simulation training for non-critical care unit nursing staff	Diversity and Equality in Health and Care	Lee, S. J. (2020). Improving critical thinking, confidence, & skills in Basic Life Support through simulation training for non-critical care unit nursing staff. Diversity and Equality in Health and Care, 17(6).
Leigh, J Paul; Markis, Carrie A; Iosif, Ana-Maria; Romano, Patrick S	United States	2015	California's nurse-to-patient ratio law and occupational injury.	International Archives of Occupational and Environmental Health	Leigh, J. P., Markis, C. A., Iosif, A. M., & Romano, P. S. (2015). California's nurse-to-patient ratio law and occupational injury. International archives of occupational and environmental health, 88(4), 477-484.
Lerner, Nancy B.; Johantgen, Meg; Trinkoff, Alison M.; Storr, Carla L.; Han, Kihye	United States	2014	Are Nursing Home Survey Deficiencies Higher in Facilities With Greater Staff Turnover.	Journal of the American Medical Directors Association	Lerner, N. B., Johantgen, M., Trinkoff, A. M., Storr, C. L., & Han, K. (2014). Are nursing home survey deficiencies higher in facilities with greater staff turnover. Journal of the American Medical Directors Association, 15(2), 102-107.
Li, Suhui; Pittman, Patricia; Han,	United States	2017	Nurse-Related Clinical Nonlicensed Personnel in U.S.	Health Services Research	Li, S., Pittman, P., Han, X., & Lowe, T. J. (2017). Nurse-related clinical nonlicensed personnel in US hospitals and their

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Xinxin; Lowe, Timothy John			Hospitals and Their Relationship with Nurse Staffing Levels.		relationship with nurse staffing levels. Health services research, 52, 422-436.
Loes, Chad N; Tobin, Mary B	United States	2020	Organizational Trust, Psychological Empowerment, and Organizational Commitment Among Licensed Practical Nurses.	Nursing Administration Quarterly	Loes, C. N., & Tobin, M. B. (2020). Organizational trust, psychological empowerment, and organizational commitment among licensed practical nurses. Nursing Administration Quarterly, 44(2), 179-187.
Loes, Chad N; Tobin, Mary B	United States	2018	Interpersonal Conflict and Organizational Commitment Among Licensed Practical Nurses.	The Health Care Manager	Loes, C. N., & Tobin, M. B. (2018). Interpersonal conflict and organizational commitment among licensed practical nurses. The Health Care Manager, 37(2), 175-182.
Loomer, Lacey; Grabowski, David C; Yu, Huizi; Gandhi, Ashvin	United States	2021	Association between nursing home staff turnover and infection control citations.	Health Services Research	Loomer, L., Grabowski, D. C., Yu, H., & Gandhi, A. (2022). Association between nursing home staff turnover and infection control citations. Health services research, 57(2), 322-332.
Ludwick, Ruth; Baughman, Kristin R; Jarjoura, David; Kropp, Denise J	United States	2018	CE: Original Research: Advance Care Planning: An Exploration of the Beliefs, Self-Efficacy, Education, and Practices of RNs and LPNs.	The American Journal Of Nursing	Ludwick, R., Baughman, K. R., Jarjoura, D., & Kropp, D. J. (2018). CE: original research: advance care planning: an exploration of the beliefs, self-efficacy, education, and practices of RNs and LPNs. AJN The American Journal of Nursing, 118(12), 26-32.
Lurie, Lobel	United States	2016	Strategic Planning for Future Delivery of Care: Onboarding Foreign-Educated Nurses.	Nurse Leader	Lurie, L. (2016). Strategic planning for future delivery of care: onboarding foreign-educated nurses. Nurse Leader, 14(6), 427-432.
Maningo, Marie Jay, PhD, RN, NE-BC, FACHE; Panthofer, Nancy, MSN, RN, NE-BC	United States	2018	Appropriate Delegation in Ambulatory Care Nursing Practice	AAACN Viewpoint	Nancy Panthofer, M. S. N. (2018). Appropriate Delegation in Ambulatory Care Nursing Practice. AAACN Viewpoint, 40(1), 14-15.
Marselas, Kimberly	Turkey	2018	Study: RNs better trained to identify high-risk Rx errors.	McKnight's Long-Term Care News	Tang, F. I., Sheu, S. J., Yu, S., Wei, I. L., & Chen, C. H. (2007). Nurses relate the contributing factors involved in medication errors. Journal of clinical nursing, 16(3), 447-457.
McBride, Cina	United States	2016	Untraditional nursing.	Nursing	McBride, C. (2016). Untraditional nursing. Nursing 2020, 46(5), 46-47.
McCullough, J Mac; Sunenshine,	United States	2020	Association of Presence of a School Nurse With Increased Sixth-Grade Immunization Rates in	The Journal of school nursing : the official	McCullough, J. M., Sunenshine, R., Rusinak, R., Mead, P., & England, B. (2020). Association of Presence of a School Nurse

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Rebecca; Rusinak, Ramona; Mead, Patty; England, Bob			Low-Income Arizona Schools in 2014-2015.	publication of the National Association of School Nurses	With Increased Sixth-Grade Immunization Rates in Low-Income Arizona Schools in 2014–2015. The Journal of School Nursing, 36(5), 360-368.
Merandi, Jenna; Liao, Nancy; Lewe, Dorcas; Morvay, Shelly; Stewart, Barb; Catt, Charline; Scott, Susan D	United States	2017	Deployment of a Second Victim Peer Support Program: A Replication Study.	Pediatric Quality & Safety	Merandi, J., Liao, N., Lewe, D., Morvay, S., Stewart, B., Catt, C., & Scott, S. D. (2017). Deployment of a second victim peer support program: a replication study. Pediatric quality & safety, 2(4).
Miri, Kheizaran; Mohammadi, Eesa; Vanaki, Zohreh	Iran	2021	Trend in the role of licensed practical nurses in health care system: A situational analysis.	Nursing Forum	Miri, K., Mohammadi, E., & Vanaki, Z. (2021, January). Trend in the role of licensed practical nurses in health care system: A situational analysis. In Nursing Forum (Vol. 56, No. 1, pp. 9-18).
Mix, Dennis	United States	2021	Assessing the impact of simulation in prelicensure practical nursing programs on safety and infection control	Dissertation Abstracts International: Section B: The Sciences and Engineering	Mix, D. (2020). Assessing the Impact of Simulation in Prelicensure Practical Nursing Programs on Safety and Infection Control (Doctoral dissertation, McKendree University).
Moreira, Roberta F C; Sato, Tatiana O; Foltran, Fabiana A; Silva, Luciana C C B; Coury, Helenice J C G	Brazil	2014	Prevalence of musculoskeletal symptoms in hospital nurse technicians and licensed practical nurses: associations with demographic factors.	Brazilian Journal Of Physical Therapy	Moreira, R. F., Sato, T. O., Foltran, F. A., Silva, L. C., & Coury, H. J. (2014). Prevalence of musculoskeletal symptoms in hospital nurse technicians and licensed practical nurses: associations with demographic factors. Brazilian journal of physical therapy, 18, 323-333.
Mueller, Christine; Duan, Yinfei; Vogelsmeier, Amy; Anderson, Ruth; McConnell, Eleanor; Corazzini, Kirsten	United States	2018	Interchangeability of Licensed Nurses in Nursing Homes: Perspectives of Directors of Nursing.	Nursing Outlook	Mueller, C., Duan, Y., Vogelsmeier, A., Anderson, R., McConnell, E., & Corazzini, K. (2018). Interchangeability of licensed nurses in nursing homes: Perspectives of directors of nursing. Nursing outlook, 66(6), 560-569.
Nelson, Joan M; Cook, Paul F; Ingram, Jennifer C	United States	2014	Utility of the theory of planned behavior to predict nursing staff blood pressure monitoring behaviours.	Journal Of Clinical Nursing	Nelson, J. M., Cook, P. F., & Ingram, J. C. (2014). Utility of the theory of planned behavior to predict nursing staff blood

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
					pressure monitoring behaviours. Journal of clinical nursing, 23(3-4), 461-470.
O'Keefe, Cathleen	United States	2014	The authority for certain clinical tasks performed by unlicensed patient care technicians and LPNs/LVNs in the hemodialysis setting: a review.	Nephrology Nursing Journal : Journal Of The American Nephrology Nurses' Association	O'Keefe, C. (2014). The authority for certain clinical tasks performed by unlicensed patient care technicians and LPNs/LVNs in the hemodialysis setting: A review. Nephrol Nurs J, 41(3), 247-254.
Otero, Linda	United States	2017	Professional Values of Licensed Practical Nurses and Time Post Initial Licensure: A Correlational Study	Proquest Dissertations and Theses	Otero, L. (2017). Professional Values of Licensed Practical Nurses and Time Post Initial Licensure: A Correlational Study (Doctoral dissertation, University of Phoenix).
Patrician, Patricia A; McCarthy, Mary S; Swiger, Pauline; Raju, Dheeraj; Breckenridge-Sproat, Sara; Su, Xiaogang; Randall, Kelly H; Loan, Lori A	United States	2017	Association of Temporal Variations in Staffing With Hospital-Acquired Pressure Injury in Military Hospitals.	Research in Nursing & Health	Patrician, P. A., McCarthy, M. S., Swiger, P., Raju, D., Breckenridge-Sproat, S., Su, X., ... & Loan, L. A. (2017). Association of temporal variations in staffing with hospital-acquired pressure injury in military hospitals. Research in Nursing & Health, 40(2), 111-119.
Patrician, Patricia A.	United States	2015	Workload Intensity, the Nursing Practice Environment, and Adverse Events.	Workload Intensity, the Nursing Practice Environment & Adverse Events	Patrician, P. A. (2014). Workload Intensity, The Nursing Practice Environment, and Adverse Events. ALABAMA UNIV IN BIRMINGHAM.
Peeler, Mary L.	United States	2015	Exploration of Work Environmental Factors That Affect Nurse Job Satisfaction in a Hospital Setting	ProQuest Dissertations and Theses	Peeler, M. L. (2015). Exploration of work environmental factors that affect nurse job satisfaction in a hospital setting. Gardner-Webb University.
Piscotty, Ronald; Kalisch, Beatrice	United States	2014	Lost opportunities...the challenges of "missed nursing care".	Nursing Management	Piscotty, R., & Kalisch, B. (2014). Lost opportunities... the challenges of "missed nursing care". Nursing Management, 45(10), 40-44.
Ramsey, Ann Marie; Brennan, Sarah; Stricker, Adam; Riek, Kurt; Brown, Dana; Gurtowsky,	United States	2018	Emergency airway and ventilator procedures for community based home care staff validation of an educational program.	Pediatric Pulmonology	Ramsey, A. M., Brennan, S., Stricker, A., Riek, K., Brown, D., Gurtowsky, R., ... & Filbrun, A. G. (2018). Emergency airway and ventilator procedures for community based home care staff validation of an educational program. Pediatric Pulmonology, 53(3), 374-380.

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Rachel; Sturza, Julie; Filbrun, Amy Goldstein					
Richardson, W. S., & Burdette	United States	2021	PRACTICE CORNER	The Nursing Voice	Richardson, W. S., & Burdette, S. D. (2003). Practice corner: taking evidence in hand. <i>BMJ Evidence-Based Medicine</i> , 8(1), 4-6.
Rome, Vincent; Harris-Kojetin, Lauren; Carder, Paula	United States	2019	Variation in Licensed Nurse Staffing Characteristics by State Requirements in Residential Care.	Research in Gerontological Nursing	Rome, V., Harris-Kojetin, L., & Carder, P. (2019). Variation in licensed nurse staffing characteristics by state requirements in residential care. <i>Research in gerontological nursing</i> , 12(1), 27-33.
Sellers, Kathleen; Riley, Moira; Denny, Danielle; Rogers, Doreen; Havener, Jeanne-Marie; Rathbone, Tasha; Gomez-Di Cesare, Caroline	United States	2019	Retention of Nurses in a Rural Environment: The Impact of Job Satisfaction, Resilience, Grit, Engagement, and Rural Fit.	Online Journal of Rural Nursing & Health Care	Sellers, K., Riley, M., Denny, D., Rogers, D., Havener, J. M., Rathbone, T., & Gomez-Di Cesare, C. (2019). Retention of nurses in a rural environment: The impact of job satisfaction, resilience, grit, engagement, and rural fit. <i>Online journal of Rural nursing and Health care</i> , 4-42.
Shekelle, Paul G.; Begashaw, Meron	United States	2021	AIM 2020 challenge on efficient super-resolution: Methods and results.	In European Conference on Computer Vision	Zhang, K., Danelljan, M., Li, Y., Timofte, R., Liu, J., Tang, J., ... & Micheloni, C. (2020, August). AIM 2020 challenge on efficient super-resolution: Methods and results. In <i>European Conference on Computer Vision</i> (pp. 5-40). Springer, Cham.
Shin, Juh Hyun	South Korea	2013	Relationship between nursing staffing and quality of life in nursing homes.	Contemporary nurse	Hyun Shin, J. (2013). Relationship between nursing staffing and quality of life in nursing homes. <i>Contemporary Nurse</i> , 44(2), 133-143.
Shin, Juh Hyun; Park, Taesung; Huh, Ik-soo	South Korea	2014	Nursing Staffing and Quality of Life in Western New York Nursing Homes.	Western Journal of Nursing Research	Shin, J. H., Park, T., & Huh, I. S. (2014). Nursing staffing and quality of life in western New York nursing homes. <i>Western Journal of Nursing Research</i> , 36(6), 788-805.
Siegel, Elena O.; Bettega, Kristen; Bakerjian, Debra; Sikma, Suzanne	United States	2018	Leadership in Nursing Homes: Directors of Nursing Aligning Practice With Regulations.	Journal of Gerontological Nursing	Siegel, E. O., Bettega, K., Bakerjian, D., & Sikma, S. (2018). Leadership in nursing homes: Directors of nursing aligning practice with regulations. <i>Journal of Gerontological Nursing</i> , 44(6), 10-14.
Slade Jr, Richard B.	United States	2013	Understanding the role of stress and burnout in employees at nursing facilities for the elderly.	Understanding the Role of Stress & Burnout	Slade Jr, R. B. (2013). Understanding the role of stress and burnout in employees at

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
				in Employees at Nursing Facilities for the Elderly	nursing facilities for the elderly (Doctoral dissertation, Capella University).
Smiley, Richard A.; Ruttinger, Clark; Oliveira, Carrie M.; Hudson, Laura R.; Allgeyer, Richard; Reneau, Kyrani A.; Silvestre, Josephine H.; Alexander, Maryann	United States	2021	The 2020 National Nursing Workforce Survey.	Journal of Nursing Regulation	Smiley, R. A., Ruttinger, C., Oliveira, C. M., Hudson, L. R., Allgeyer, R., Reneau, K. A., ... & Alexander, M. (2021). The 2020 national nursing workforce survey. <i>Journal of Nursing Regulation</i> , 12(1), S1-S96.
Sobotka, Sarah A; Hall, David E; Thurm, Cary; Gay, James; Berry, Jay G	United States	2022	Home Health Care Utilization in Children With Medicaid.	Pediatrics	Sobotka, S. A., Hall, D. E., Thurm, C., Gay, J., & Berry, J. G. (2022). Home Health Care Utilization in Children With Medicaid. <i>Pediatrics</i> , 149(2).
Stewart, Kenda R; Stewart, Greg L; Lampman, Michelle; Wakefield, Bonnie; Rosenthal, Gary; Solimeo, Samantha L	United States	2015	Implications of the Patient-Centered Medical Home for Nursing Practice.	The Journal of Nursing Administration	Stewart, K. R., Stewart, G. L., Lampman, M. M., Wakefield, B., Rosenthal, G., & Solimeo, S. L. (2015). Implications of the patient centered medical home for nursing practice. <i>The Journal of nursing administration</i> , 45(11), 569.
Tai, Teresa Wai Chi; Bame, Sherry I	United States	2017	Organizational and Community Factors Associated With Magnet Status of U.S. Hospitals.	Journal Of Healthcare Management / American College Of Healthcare Executives	Tai, T. W. C., & Bame, S. I. (2017). Organizational and community factors associated with Magnet status of US hospitals. <i>Journal of Healthcare Management</i> , 62(1), 62-76.
Uchida-Nakakoji, Mayuko; Stone, Patricia W; Schmitt, Susan K; Phibbs, Ciaran S	United States	2015	Nurse workforce characteristics and infection risk in VA Community Living Centers: a longitudinal analysis.	Medical Care	Uchida-Nakakoji, M., Stone, P. W., Schmitt, S. K., & Phibbs, C. S. (2015). Nurse workforce characteristics and infection risk in VA community living centers: a longitudinal analysis. <i>Medical care</i> , 53(3), 261.

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Unroe, Kathleen T; Cagle, John G; Lane, Kathleen A; Callahan, Christopher M; Miller, Susan C	United States	2015	Nursing Home Staff Palliative Care Knowledge and Practices: Results of a Large Survey of Frontline Workers.	Journal of Pain and Symptom Management	Unroe, K. T., Cagle, J. G., Lane, K. A., Callahan, C. M., & Miller, S. C. (2015). Nursing home staff palliative care knowledge and practices: results of a large survey of frontline workers. <i>Journal of pain and symptom management</i> , 50(5), 622-629.
Van Houtven, Courtney Harold; DePasquale, Nicole; Coe, Norma B	United States	2020	Essential Long-Term Care Workers Commonly Hold Second Jobs and Double- or Triple-Duty Caregiving Roles.	Journal of the American Geriatrics Society	Van Houtven, C. H., DePasquale, N., & Coe, N. B. (2020). Essential long-term care workers commonly hold second jobs and double-or triple-duty caregiving roles. <i>Journal of the American Geriatrics Society</i> , 68(8), 1657-1660.
Vogelsmeier, Amy; Anderson, Ruth A; Anbari, Allison; Ganong, Lawrence; Farag, Amany; Niemeyer, MaryAnn	United States	2017	A qualitative study describing nursing home nurses sensemaking to detect medication order discrepancies.	BMC Health Services Research	Vogelsmeier, A., Anderson, R. A., Anbari, A., Ganong, L., Farag, A., & Niemeyer, M. (2017). A qualitative study describing nursing home nurses sensemaking to detect medication order discrepancies. <i>BMC health services research</i> , 17(1), 1-11.
Wallen, Andrea; McKay, Linda; Santos, Ellen; LaFrance, Holly; Veith, Rose M	United States	2017	Actualization of a Seamless Nursing Program: Licensed Practical Nurse to Baccalaureate Registered Nurse.	Nurse Educator	Wallen, A., McKay, L., Santos, E., LaFrance, H., & Veith, R. M. (2017). Actualization of a seamless nursing program: Licensed practical nurse to baccalaureate registered nurse. <i>Nurse Educator</i> , 42(5), 263-266.
Walsh, Judith E; Lane, Sandi J; Troyer, Jennifer L	United States	2014	Impact of medication aide use on skilled nursing facility quality.	The Gerontologist	Walsh, J. E., Lane, S. J., & Troyer, J. L. (2014). Impact of medication aide use on skilled nursing facility quality. <i>The Gerontologist</i> , 54(6), 976-988.
Weaver, Susan H.; de Cordova, Pamela B.; Leger, Amanda; Cadmus, Edna	United States	2021	Licensed Practical Nurse Workforce in New Jersey as Described by LPNs and Employers.	Journal of Nursing Regulation	Weaver, S. H., de Cordova, P. B., Leger, A., & Cadmus, E. (2021). Licensed practical nurse workforce in New Jersey as described by LPNs and employers. <i>Journal of nursing regulation</i> , 12(1), 60-70.
Weech-Maldonado, Robert; Pradhan, Rohit; Dayama, Neeraj; Lord, Justin; Gupta, Shivani	United States	2019	Nursing Home Quality and Financial Performance: Is There a Business Case for Quality?.	Inquiry: a journal of medical care organization, provision and financing	Weech-Maldonado, R., Pradhan, R., Dayama, N., Lord, J., & Gupta, S. (2019). Nursing home quality and financial performance: Is there a business case for quality?. <i>Inquiry: The Journal of Health Care Organization, Provision, and Financing</i> , 56, 0046958018825191.

Table 3. Brief description of studies that included non-Canadian LPNs (n = 114) sorted alphabetically by first authors' last name.					
Weidlich C	United States	2013	CPSP as a Mediator or Resiliency and Coping among Military Healthcare.	Cpsp as a Mediator or Resiliency & Coping Among Military Healthcare	Weidlich, C. (2013). CPSP as a Mediator or Resiliency and Coping among Military Healthcare. MIAMI UNIV CORAL GABLES FL.
Weidlich, Christopher P; Ugarriza, Doris N	United States	2015	A pilot study examining the impact of care provider support program on resiliency, coping, and compassion fatigue in military health care providers.	Military medicine	Weidlich, C. P., & Ugarriza, D. N. (2015). A pilot study examining the impact of care provider support program on resiliency, coping, and compassion fatigue in military health care providers. Military medicine, 180(3), 290-295.
Wheeler, Tena R	United States	2015	Changes in thinking: The transformation from licensed practical nurse to associate degree nurse.	Capella University Dissertations & Theses	Wheeler, T. R. (2015). Changes in thinking: The transformation from licensed practical nurse to associate degree nurse. Capella University.
White, Elizabeth, Woodford, Erin, Britton, Julie, Newberry, Lynn Pabico, Christine,	United States	2020	Nursing practice environment and care quality in nursing homes	Nursing Management	White, E., Woodford, E., Britton, J., Newberry, L. W., & Pabico, C. (2020). Nursing practice environment and care quality in nursing homes. Nursing management, 51(6), 9-12.
Yang, Bo Kyum; Carter, Mary W; Trinkoff, Alison M; Nelson, Hubert W	United States	2021	Nurse Staffing and Skill Mix Patterns in Relation to Resident Care Outcomes in US Nursing Homes.	Journal of the American Medical Directors Association	Yang, B. K., Carter, M. W., Trinkoff, A. M., & Nelson, H. W. (2021). Nurse staffing and skill mix patterns in relation to resident care outcomes in US nursing homes. Journal of the American Medical Directors Association, 22(5), 1081-1087.
Yoder, Laura A G; Xin, Wenjun; Norris, Keith C; Yan, Guofen	United States	2013	Patient care staffing levels and facility characteristics in U.S. hemodialysis facilities.	American Journal of Kidney Disease	Yoder, L. A., Xin, W., Norris, K. C., & Yan, G. (2013). Patient care staffing levels and facility characteristics in US hemodialysis facilities. American journal of kidney diseases, 62(6), 1130-1140.
Moulton, P., & Wakefield, M.	United States	2013	South Dakota Center for Nursing Workforce: 2013 Report on South Dakota's Nursing Workforce.	Dakota Nurse Connection	Moulton, P., & Wakefield, M. (2003). Characteristics of North Dakota's Nursing Workforce: A Status Report.
Zhang, Yuan; Punnett, Laura; Mawn, Barbara; Gore, Rebecca	United States	2016	Working Conditions and Mental Health of Nursing Staff in Nursing Homes.	Issues in Mental Health Nursing	Zhang, Y., Punnett, L., Mawn, B., & Gore, R. (2016). Working conditions and mental health of nursing staff in nursing homes. Issues in mental health nursing, 37(7), 485-492.

Appendix D – Table 4. Brief description of studies that included ENs (n = 149)

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Authors	Year	Title	Journal Of Publication	APA Citation
Andersson, Maria; Hall-Lord, Marie Louise; Wilde-Larsson, Bodil; Persenius, Mona	2013	Patient photographs--a landmark for the ICU staff: a descriptive study.	Intensive & Critical Care Nursing	Andersson, M., Hall-Lord, M. L., Wilde-Larsson, B., & Persenius, M. (2013). Patient photographs—A landmark for the ICU staff: A descriptive study. <i>Intensive and Critical Care Nursing</i> , 29(4), 193-201.
Andersson, Sofia; Lindqvist, Olav; Furst, Carl-Johan; Brannstrom, Margareta	2018	Care professional's experiences about using Liverpool Care Pathway in end-of-life care in residential care homes.	Scandinavian Journal Of Caring Sciences	Andersson, S., Lindqvist, O., Fürst, C. J., & Brännström, M. (2018). Care professional's experiences about using Liverpool Care Pathway in end-of-life care in residential care homes. <i>Scandinavian journal of caring sciences</i> , 32(1), 299-308.
Andrews, Sharon M; Dipnall, Joanna F; Tichawangana, Rumbidzai; Hayes, Kathryn J; Fitzgerald, Janna Anneke; Siddall, Philip; Poulos, Christopher; Cunningham, Colm	2019	An Exploration of Pain Documentation for People Living with Dementia in Aged Care Services.	Pain Management Nursing: Official Journal Of The American Society Of Pain Management Nurses	Andrews, S. M., Dipnall, J. F., Tichawangana, R., Hayes, K. J., Fitzgerald, J. A., Siddall, P., ... & Cunningham, C. (2019). An exploration of pain documentation for people living with dementia in aged care services. <i>Pain Management Nursing</i> , 20(5), 475-481.
Arjun, S. D.; Matlakala, M. C.; Mavundla, T. R.	2013	Enrolled Nurses' Experiences Of Caring For Multi Drug Resistant Tuberculosis Patients In The Kwa-Zulu Natal Province Of South Africa.	Africa Journal Of Nursing & Midwifery	Arjun, S. D., Matlakala, M. C., & Mavundla, T. R. (2013). Enrolled nurses' experiences of caring for multi-drug resistant tuberculosis patients in the Kwa-Zulu Natal Province of South Africa. <i>Africa Journal of Nursing and Midwifery</i> , 15(1), 54-67.
Ash, Kylie; Yates, Patsy	2017	Preparing ENs To Meet Palliative Care Needs.	Australian Nursing & Midwifery Journal	Ash, K., & Yates, P. (2017). Preparing ENs to meet palliative care needs. <i>Australian Nursing and Midwifery Journal</i> , 25(6), 38.
Atee, Mustafa; Hoti, Kreshnik; Parsons, Richard; Hughes, Jeffery D	2018	A novel pain assessment tool incorporating automated facial analysis: interrater reliability in advanced dementia.	Clinical Interventions In Aging	Atee, M., Hoti, K., Parsons, R., & Hughes, J. D. (2018). A novel pain assessment tool incorporating automated facial analysis: interrater reliability in advanced dementia. <i>Clinical interventions in aging</i> , 13, 1245.
Barakat-Johnson, Michelle; Barnett, Catherine; Wand, Timothy; White, Kathryn	2018	Knowledge and Attitudes of Nurses Toward Pressure Injury Prevention: A Cross-Sectional Multisite Study.	Journal Of Wound, Ostomy, And Continence Nursing : Official Publication Of	Barakat-Johnson, M., Barnett, C., Wand, T., & White, K. (2018). Knowledge and attitudes of nurses toward pressure injury prevention: a cross-sectional multisite study. <i>Journal of Wound Ostomy & Continence Nursing</i> , 45(3), 233-237.

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
			The Wound, Ostomy And Continence Nurses Society	
Barnfield, Jakqui; Cross, Wendy; McCauley, Kay	2018	Therapeutic optimism and attitudes among medical and surgical nurses towards attempted suicide.	International Journal Of Mental Health Nursing	Barnfield, J., Cross, W., & McCauley, K. (2018). Therapeutic optimism and attitudes among medical and surgical nurses towards attempted suicide. <i>International Journal of mental health nursing</i> , 27(6), 1826-1833.
Bawate, Charles; Callender-Carter, Sylvia T; Nsajju, Ben; Bwayo, Denis	2016	Factors affecting adherence to national malaria treatment guidelines in management of malaria among public healthcare workers in Kamuli District, Uganda.	Malaria Journal	Bawate, C., Callender-Carter, S. T., Nsajju, B., & Bwayo, D. (2016). Factors affecting adherence to national malaria treatment guidelines in management of malaria among public healthcare workers in Kamuli District, Uganda. <i>Malaria journal</i> , 15(1), 1-10.
Blair, Wendy; Rolls, Suzanne	2019	Working within your scope of practice	Kai Tiaki : Nursing New Zealand	Blair, W., & Rolls, S. (2019). Working within your scope of practice. <i>Kai Tiaki: Nursing New Zealand</i> , 25(4), 32-32.
Blay, Nicole; Smith, Louise E.	2020	An integrative review of Enrolled Nurse recruitment and retention.	Collegian	Blay, N., & Smith, L. E. (2020). An integrative review of Enrolled Nurse recruitment and retention. <i>Collegian</i> , 27(1), 89-94.
Brown, Canice; Baker, Mark; Jessup, Melanie; Marshall, Andrea P	2015	EN2RN - transitioning to a new scope of practice.	Contemporary Nurse	Brown, C., Baker, M., Jessup, M., & Marshall, A. P. (2015). EN2RN—transitioning to a new scope of practice. <i>Contemporary Nurse</i> , 50(2-3), 196-205.
Bryce, Julianne; Foley, Elizabeth; Reeves, Julie	2018	Pressure Injuries Are Not Inevitable	Australian Nursing And Midwifery Journal	Bryce, J., Foley, E., & Reeves, J. (2018). Pressure injuries are not inevitable. <i>Australian Nursing and Midwifery Journal</i> , 26(1), 31.
Carnes, Debra; Kilpatrick, Sue; Iedema, Rick	2015	Aged-care nurses in rural Tasmanian clinical settings more likely to think hypothetical medication error would be reported and disclosed compared to hospital and community nurses.	The Australian Journal Of Rural Health	Carnes, D., Kilpatrick, S., & Iedema, R. (2015). Aged-care nurses in rural Tasmanian clinical settings more likely to think hypothetical medication error would be reported and disclosed compared to hospital and community nurses. <i>Australian Journal of Rural Health</i> , 23(6), 346-351.
Chen, Esa Y H; Bell, J Simon; Ilomaki, Jenni; Corlis, Megan; Hogan, Michelle E; Caporale, Tessa; Van Emden, Jan; Westbrook, Johanna I; Hilmer, Sarah N; Sluggett, Janet K	2021	Medication administration in Australian residential aged care: A time-and-motion study.	Journal Of Evaluation In Clinical Practice	Chen, E. Y., Bell, J. S., Ilomäki, J., Corlis, M., Hogan, M. E., Caporale, T., ... & Sluggett, J. K. (2021). Medication administration in Australian residential aged care: A time-and-motion study. <i>Journal of Evaluation in Clinical Practice</i> , 27(1), 103-110.

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Cheung, Kin; Ching, Shirley Siu Yin	2014	Job satisfaction among nursing personnel in Hong Kong: a questionnaire survey.	Journal Of Nursing Management	Cheung, K., & Ching, S. S. Y. (2014). Job satisfaction among nursing personnel in Hong Kong: a questionnaire survey. <i>Journal of Nursing Management</i> , 22(5), 664-675.
Chua, W L; Mackey, S; Ng, E K C; Liaw, S Y	2013	Front line nurses' experiences with deteriorating ward patients: a qualitative study.	International Nursing Review	Chua, W. L., Mackey, S., Ng, E. K. C., & Liaw, S. Y. (2013). Front line nurses' experiences with deteriorating ward patients: a qualitative study. <i>International nursing review</i> , 60(4), 501-509.
Chua, Wei Ling; Legido-Quigley, Helena; Ng, Pei Yi; McKenna, Lisa; Hassan, Norasyikin Binte; Liaw, Sok Ying	2019	Seeing the whole picture in enrolled and registered nurses' experiences in recognizing clinical deterioration in general ward patients: A qualitative study.	International Journal Of Nursing Studies	Chua, W. L., Legido-Quigley, H., Ng, P. Y., McKenna, L., Hassan, N. B., & Liaw, S. Y. (2019). Seeing the whole picture in enrolled and registered nurses' experiences in recognizing clinical deterioration in general ward patients: A qualitative study. <i>International journal of nursing studies</i> , 95, 56-64.
Chua, Wei Ling; Rahim, Nur Rasyidah Binte Abdul; McKenna, Lisa; Ho, Jasmine Tze Yin; Liaw, Sok Ying	2022	Intraprofessional collaboration between enrolled and registered nurses in the care of clinically deteriorating ward patients: A qualitative study.	Australian Critical Care: Official Journal Of The Confederation Of Australian Critical Care Nurses	Chua, W. L., Rahim, N. R. B. A., McKenna, L., Ho, J. T. Y., & Liaw, S. Y. (2022). Intraprofessional collaboration between enrolled and registered nurses in the care of clinically deteriorating ward patients: A qualitative study. <i>Australian Critical Care</i> , 35(1), 81-88.
Cortis, L. J., McKinnon, R. A., & Anderson, C.	2014	Making palliative care everyone's business	Australian Nursing And Midwifery Journal	Cortis, L. J., McKinnon, R. A., & Anderson, C. (2013). Palliative care is everyone's business, including pharmacists. <i>American Journal of Pharmaceutical Education</i> , 77(2).
Cowin, Leanne S	2013	Collegial relationship breakdown: a qualitative exploration of nurses in acute care settings.	Collegian (Royal College Of Nursing, Australia)	Cowin, L. S., & Eagar, S. C. (2013). Collegial relationship breakdown: a qualitative exploration of nurses in acute care settings. <i>Collegian</i> , 20(2), 115-121.
Cox, June; Prendergast, Sean	2014	Evolving, expanding and consolidating the enrolled nurse scope of practice.	Australian Nursing & Midwifery Journal	Cox, J., & Prendergast, S. (2014). Evolving, expanding and consolidating the enrolled nurse scope of practice. <i>Australian Nursing and Midwifery Journal</i> , 21(7), 5.
Cronfalk, Berit Seiger; Ternestedt, Britt-Marie; Larsson, Lise-Lotte Franklin; Henriksen, Eva; Norberg, Astrid; Osterlind, Jane	2015	Utilization of palliative care principles in nursing home care: Educational interventions.	Palliative & Supportive Care	Cronfalk, B. S., Ternestedt, B. M., Larsson, L. L. F., Henriksen, E., Norberg, A., & Österlind, J. (2015). Utilization of palliative care principles in nursing home care: Educational interventions. <i>Palliative & Supportive Care</i> , 13(6), 1745-1753.

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Curryer, Cassie; Russo, Philip L; Kiernan, Martin; Wares, Karen D; Smith, Kate; Mitchell, Brett G	2021	Environmental hygiene, knowledge and cleaning practice: a phenomenological study of nurses and midwives during COVID-19.	American Journal Of Infection Control	Curryer, C., Russo, P. L., Kiernan, M., Wares, K. D., Smith, K., & Mitchell, B. G. (2021). Environmental hygiene, knowledge and cleaning practice: a phenomenological study of nurses and midwives during COVID-19. American journal of infection control, 49(9), 1123-1128.
Cusack, Lynette; Kennewell, Louise; Smith, Morgan; Dennett, Lydia; Cummins, Bernadette; Pratt, Debra	2015	Advanced skills for enrolled nurses: a developing classification.	Australian Journal Of Advanced Nursing	Cusack, L., Smith, M., Cummins, B., Kennewell, L., Dennett, L., & Pratt, D. (2015). Advanced skills for enrolled nurses: a developing classification. Australian Journal of Advanced Nursing, The, 32(4), 40-46.
Dalton, Lisa; Campbell, Steven; Bull, Rosalind	2018	Preparing the nursing workforce for the next era: Re-classifying and reframing enrolled nursing knowledge.	Collegian	Dalton, L., Campbell, S., & Bull, R. (2018). Preparing the nursing workforce for the next era: Re-classifying and reframing enrolled nursing knowledge. Collegian, 25(2), 237-240.
Danielsson, Marita; Nilsen, Per; Rutberg, Hans; Arestedt, Kristofer	2019	A National Study of Patient Safety Culture in Hospitals in Sweden.	Journal Of Patient Safety	Danielsson, M., Nilsen, P., Rutberg, H., & Årestedt, K. (2019). A national study of patient safety culture in hospitals in Sweden. Journal of patient safety, 15(4), 328.
Davis, Kate; White, Sarahlouise; Stephenson, Matthew	2016	The influence of workplace culture on nurses' learning experiences: a systematic review of qualitative evidence.	JBI Database Of Systematic Reviews And Implementation Reports	Davis, K., White, S., & Stephenson, M. (2016). The influence of workplace culture on nurses' learning experiences: a systematic review of qualitative evidence. JBI Evidence Synthesis, 14(6), 274-346.
Dean, Erin	2013	'I love hands-on care'.	Nursing Standard (Royal College Of Nursing (Great Britain) : 1987)	Levine, C., & Zuckerman, C. (2000). Hands on/hands off: Why health care professionals depend on families but keep them at arm's length. Journal of Law, Medicine & Ethics, 28(1), 5-18.
Dimitrelis, Sofia; Perry, Lin; Gallagher, Robyn; Duffield, Christine; Sibbritt, David; Nicholls, Rachel; Xu, Xiaoyue	2017	Does nurses' role, health or symptoms influence their personal use of ingestible complementary and alternative medicines?.	Complementary Therapies In Medicine	Dimitrelis, S., Perry, L., Gallagher, R., Duffield, C., Sibbritt, D., Nicholls, R., & Xu, X. (2017). Does nurses' role, health or symptoms influence their personal use of ingestible complementary and alternative medicines?. Complementary Therapies in Medicine, 35, 39-46.
Ellis, Julie M; Rawson, Helen	2015	Nurses' and personal care assistants' role in improving the relocation of older people into nursing homes.	Journal Of Clinical Nursing	Ellis, J. M., & Rawson, H. (2015). Nurses' and personal care assistants' role in improving the relocation of older people into nursing homes. Journal of Clinical Nursing, 24(13-14), 2005-2013.
Endacott, Ruth; O'Connor, Margaret; Williams, Allison;	2018	Roles and functions of enrolled nurses in Australia: Perspectives	Journal Of Clinical Nursing	Endacott, R., O'Connor, M., Williams, A., Wood, P., McKenna, L., Griffiths, D., ... &

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Wood, Pamela; McKenna, Lisa; Griffiths, Debra; Moss, Cheryle; Della, Phillip; Cross, Wendy		of enrolled nurses and registered nurses.		Cross, W. (2018). Roles and functions of enrolled nurses in Australia: Perspectives of enrolled nurses and registered nurses. <i>Journal of Clinical Nursing</i> , 27(5-6), e913-e920.
Ericson-Lidman, Eva; Norberg, Astrid; Persson, Birgitta; Strandberg, Gunilla	2013	Healthcare personnel's experiences of situations in municipal elderly care that generate troubled conscience.	Scandinavian Journal Of Caring Sciences	Ericson-Lidman, E., Norberg, A., Persson, B., & Strandberg, G. (2013). Healthcare personnel's experiences of situations in municipal elderly care that generate troubled conscience. <i>Scandinavian Journal of Caring Sciences</i> , 27(2), 215-223.
Eriksson, Karin; Forsgren, Emma; Hartelius, Lena; Saldert, Charlotta	2016	Communication partner training of enrolled nurses working in nursing homes with people with communication disorders caused by stroke or Parkinson's disease.	Disability And Rehabilitation	Eriksson, K., Forsgren, E., Hartelius, L., & Saldert, C. (2016). Communication partner training of enrolled nurses working in nursing homes with people with communication disorders caused by stroke or Parkinson's disease. <i>Disability and Rehabilitation</i> , 38(12), 1187-1203.
Eriksson, Karin; Hartelius, Lena; Saldert, Charlotta	2016	Participant characteristics and observed support in conversations involving people with communication disorders.	International Journal Of Speech-Language Pathology	Eriksson, K., Hartelius, L., & Saldert, C. (2016). Participant characteristics and observed support in conversations involving people with communication disorders. <i>International Journal of Speech-Language Pathology</i> , 18(5), 439-449.
Faithfull-Byrne, Annette; Thompson, Lorraine; Welch, Tony; Williamson, Moira; Schafer, Keppel; Hallinan, Claire	2017	Back to the future: A practice led transition program from Assistant in Nursing to Enrolled Nurse.	Nurse Education In Practice	Faithfull-Byrne, A., Thompson, L., Welch, T., Williamson, M., & Hallinan, C. (2017). Back to the future: A practice led transition program from Assistant in Nursing to Enrolled Nurse. <i>Nurse education in practice</i> , 22, 83-88.
Fairweather, M.	2021	New medicines and poisons framework in Queensland	Inscope	Fairweather, M. (2020). A modernised approach to medicines and poisons regulation in Queensland. <i>Australian Health Law Bulletin</i> , 28(5/6), 108-110.
Forsgren, Emma; Skott, Carola; Hartelius, Lena; Saldert, Charlotta	2016	Communicative barriers and resources in nursing homes from the enrolled nurses' perspective: A qualitative interview study.	International Journal Of Nursing Studies	Forsgren, E., Skott, C., Hartelius, L., & Saldert, C. (2016). Communicative barriers and resources in nursing homes from the enrolled nurses' perspective: A qualitative interview study. <i>International journal of nursing studies</i> , 54, 112-121.
From, Ingrid; Nordstrom, Gun; Wilde-Larsson, Bodil; Johansson, Inger	2013	Caregivers in older peoples' care: perception of quality of care, working conditions, competence and personal health.	Scandinavian Journal Of Caring Sciences	From, I., Nordström, G., Wilde-Larsson, B., & Johansson, I. (2013). Caregivers in older peoples' care: perception of quality of care, working conditions, competence and

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
				personal health. Scandinavian journal of caring sciences, 27(3), 704-714.
From, Ingrid; Wilde-Larsson, Bodil; Nordstrom, Gun; Johansson, Inger	2015	Formal caregivers' perceptions of quality of care for older people: associating factors.	BMC Research Notes	Wilde-Larsson, B., Nordström, G., & Johansson, I. (2015). Formal caregivers' perceptions of quality of care for older people: associating factors. BMC Research Notes, 8(1), 1-9.
Goh, Anita M Y; Loi, Samantha M; Westphal, Alissa; Lautenschlager, Nicola T	2017	Person-centered care and engagement via technology of residents with dementia in aged care facilities.	International Psychogeriatrics	Goh, A. M., Loi, S. M., Westphal, A., & Lautenschlager, N. T. (2017). Person-centered care and engagement via technology of residents with dementia in aged care facilities. International Psychogeriatrics, 29(12), 2099-2103.
Goh, Pearlyn Qin Ling; Ser, Ting Fang; Cooper, Simon; Cheng, Ling Jie; Liaw, Sok Ying	2020	Nursing teamwork in general ward settings: A mixed-methods exploratory study among enrolled and registered nurses.	Journal Of Clinical Nursing	Goh, P. Q. L., Ser, T. F., Cooper, S., Cheng, L. J., & Liaw, S. Y. (2020). Nursing teamwork in general ward settings: A mixed-methods exploratory study among enrolled and registered nurses. Journal of clinical nursing, 29(19-20), 3802-3811.
Goldsmith, Peter	2013	Don't write off AiNs and EENs.	Lamp	Curtis, R. (1997). The improbable transformation of inner-city neighborhoods: Crime, violence, drugs, and youth in the 1990s. J. Crim. L. & Criminology, 88, 1233.
Grealish, Laurie; Chaboyer, Wendy; Darch, Jacob; Real, Belinda; Phelan, Maggie; Soltau, Dawn; Lunn, Matthew; Brandis, Susan; Todd, Jo-Anne; Cooke, Marie	2019	Caring for the older person with cognitive impairment in hospital: Qualitative analysis of nursing personnel reflections on fall events.	Journal Of Clinical Nursing	Grealish, L., Chaboyer, W., Darch, J., Real, B., Phelan, M., Soltau, D., ... & Cooke, M. (2019). Caring for the older person with cognitive impairment in hospital: Qualitative analysis of nursing personnel reflections on fall events. Journal of clinical nursing, 28(7-8), 1346-1353.
Grealish, Laurie; Simpson, Toni; Soltau, Dawn; Edvardsson, David	2019	Assessing and providing person-centred care of older people with cognitive impairment in acute settings: threats, variability, and challenges.	Collegian	Grealish, L., Simpson, T., Soltau, D., & Edvardsson, D. (2019). Assessing and providing person-centred care of older people with cognitive impairment in acute settings: threats, variability, and challenges. Collegian, 26(1), 75-79.
Guise, Veslemoy; Wiig, Siri	2017	Perceptions of telecare training needs in home healthcare services: a focus group study.	BMC Health Services Research	Guise, V., & Wiig, S. (2017). Perceptions of telecare training needs in home healthcare services: a focus group study. BMC health services research, 17(1), 1-10.
Guskey, T. R.	2014	Professional development leave is your right	The Queensland Nurse	Guskey, T. R. (2000). Evaluating professional development. Corwin press.
Gustavsson, Johanna; Rahm, GullBritt; Jernbro, Carolina; Nilson, Finn	2017	Effects of Impact-Absorbing Flooring in Residential Care from	Journal Of Housing For The Elderly	Gustavsson, J., Rahm, G., Jernbro, C., & Nilson, F. (2017). Effects of impact-absorbing flooring in residential care from the

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
		the Perspectives of Enrolled Nurses.		perspectives of enrolled nurses. <i>Journal of Housing for the Elderly</i> , 31(4), 367-381.
Gyamfi, Joyce; Plange-Rhule, Jacob; Iwelunmor, Juliet; Lee, Debbie; Blackstone, Sarah R; Mitchell, Alicia; Ntim, Michael; Apusiga, Kingsley; Tayo, Bamidele; Yeboah-Awudzi, Kwasi; Cooper, Richard; Ogedegbe, Gbenga	2017	Training nurses in task-shifting strategies for the management and control of hypertension in Ghana: a mixed-methods study.	BMC Health Services Research	Gyamfi, J., Plange-Rhule, J., Iwelunmor, J., Lee, D., Blackstone, S. R., Mitchell, A., ... & Ogedegbe, G. (2017). Training nurses in task-shifting strategies for the management and control of hypertension in Ghana: a mixed-methods study. <i>BMC health services research</i> , 17(1), 1-9.
Hada, Adriana; Jack, Leanne; Coyer, Fiona	2019	Using a knowledge translation framework to identify barriers and supports to effective nursing handover: A focus group study.	Heliyon	Hada, A., Jack, L., & Coyer, F. (2019). Using a knowledge translation framework to identify barriers and supports to effective nursing handover: A focus group study. <i>Heliyon</i> , 5(6), e01960.
Halcomb, Elizabeth; Stephens, Moira; Bryce, Julianne; Foley, Elizabeth; Ashley, Christine	2017	The development of professional practice standards for Australian general practice nurses.	Journal Of Advanced Nursing	
Halleberg Nyman, Maria; Forsman, Henrietta; Ostaszkiwicz, Joan; Hommel, Ami; Eldh, Ann Catrine	2017	Urinary incontinence and its management in patients aged 65 and older in orthopaedic care - what nursing and rehabilitation staff know and do.	Journal Of Clinical Nursing	Hälleberg Nyman, M., Forsman, H., Ostaszkiwicz, J., Hommel, A., & Eldh, A. C. (2017). Urinary incontinence and its management in patients aged 65 and older in orthopaedic care—what nursing and rehabilitation staff know and do. <i>Journal of clinical nursing</i> , 26(21-22), 3345-3353.
Hamiduzzaman, Mohammad; Kuot, Abraham; Greenhill, Jennene; Strivens, Edward; Isaac, Vivian	2020	Towards personalized care: Factors associated with the quality of life of residents with dementia in Australian rural aged care homes.	Plos One	Hamiduzzaman, M., Kuot, A., Greenhill, J., Strivens, E., & Isaac, V. (2020). Towards personalized care: Factors associated with the quality of life of residents with dementia in Australian rural aged care homes. <i>PloS one</i> , 15(5), e0233450.
Hansen, Warriodene	2021	The perceptions of newly qualified nurses on the guidance by preceptors towards becoming experts in nursing.	Curationis	Hansen, W. (2021). The perceptions of newly qualified nurses on the guidance by preceptors towards becoming experts in nursing. <i>curationis</i> , 44(1), 1-9.
Hargestam, Maria; Lindkvist, Marie; Brulin, Christine; Jacobsson, Maritha; Hultin, Magnus	2013	Communication in interdisciplinary teams: exploring closed-loop communication during in situ trauma team training.	BMJ Open	Härgestam, M., Lindkvist, M., Brulin, C., Jacobsson, M., & Hultin, M. (2013). Communication in interdisciplinary teams: exploring closed-loop communication during in situ trauma team training. <i>BMJ open</i> , 3(10), e003525.
Hegney, Desley; Eley, Robert; Francis, Karen	2013	Queensland nursing staffs' perceptions of the preparation for	Nurse Education Today	Hegney, D., Eley, R., & Francis, K. (2013). Queensland nursing staffs' perceptions of the

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
		practice of registered and enrolled nurses.		preparation for practice of registered and enrolled nurses. Nurse Education Today, 33(10), 1148-1152.
Hegney, Desley; Eley, Robert; Osseiran-Moisson, Rebecca; Francis, Karen	2015	Work and personal well-being of nurses in Queensland: Does rurality make a difference?.	The Australian Journal Of Rural Health	Hegney, D., Eley, R., Osseiran-Moisson, R., & Francis, K. (2015). Work and personal well-being of nurses in Queensland: Does rurality make a difference?. Australian Journal of Rural Health, 23(6), 359-365.
Hemingway, S.; Clifton, A.; Edward, K.,	2016	The future of mental health nursing education in the United Kingdom: Reflections on the Australian and New Zealand experience	Journal Of Psychiatric And Mental Health Nursing	Hemingway, S. (2016). The future of mental health nursing education in the United Kingdom: Reflections on the Australian and New Zealand experience. Journal of Psychiatric and Mental Health Nursing, 23(5), 331-337.
Henderson, Julie; Willis, Eileen; Xiao, Lily; Toffoli, Luisa; Verrall, Claire	2016	Nurses' perceptions of the impact of the aged care reform on services for residents in multi-purpose services and residential aged care facilities in rural Australia.	Australasian Journal On Ageing	Henderson, J., Willis, E., Xiao, L., Toffoli, L., & Verrall, C. (2016). Nurses' perceptions of the impact of the aged care reform on services for residents in multi-purpose services and residential aged care facilities in rural Australia. Australasian Journal on Ageing, 35(4), E18-E23.
Hewko, Sarah J; Cummings, Greta G; Pietrosanu, Matthew; Edwards, Nancy	2018	The Impact of Quality Assurance Initiatives and Workplace Policies and Procedures on HIV/AIDS-Related Stigma Experienced by Patients and Nurses in Regions with High Prevalence of HIV/AIDS.	AIDS And Behavior	Hewko, S. J., Cummings, G. G., Pietrosanu, M., & Edwards, N. (2018). The impact of quality assurance initiatives and workplace policies and procedures on HIV/AIDS-related stigma experienced by patients and nurses in regions with high prevalence of HIV/AIDS. AIDS and Behavior, 22(12), 3836-3846.
Hughes, Margaret; Kirk, Ray; Dixon, Alison	2018	New Zealand nurses' storied experiences of direction and delegation.	Nursing Praxis In New Zealand	Hughes, M., Kirk, R., & Dixon, A. (2018). New Zealand nurses' storied experiences of direction and delegation. Nursing Praxis in New Zealand, 34(3).
Jacob, E; McKenna, L; D'Amore, A Angelo	2014	Senior nurse role expectations of graduate registered and enrolled nurses in Australia: Content analysis of open-ended survey questions.	Contemporary Nurse	Jacob, E. R., McKenna, L., & D'Amore, A. (2014). Senior nurse role expectations of graduate registered and enrolled nurses in Australia: Content analysis of open-ended survey questions. Contemporary nurse, 48(2), 212-218.
Jacob, Elisabeth R; McKenna, Lisa; D'Amore, Angelo	2014	Similarities and differences in educational preparation of registered and enrolled nurses in Australia: An examination of curricula content.	Contemporary Nurse	Jacob, E. R., McKenna, L., & D'Amore, A. (2014). Similarities and differences in educational preparation of registered and enrolled nurses in Australia: An examination of curricula content. Contemporary Nurse, 48(2), 199-211.

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Jacob, Elisabeth R; McKenna, Lisa; D'Amore, Angelo	2016	Educators' expectations of roles, employability and career pathways of registered and enrolled nurses in Australia.	Nurse Education In Practice	Jacob, E. R., McKenna, L., & D'Amore, A. (2016). Educators' expectations of roles, employability and career pathways of registered and enrolled nurses in Australia. <i>Nurse Education in Practice</i> , 16(1), 170-175.
Jacob, Elisabeth R; McKenna, Lisa; D'Amore, Angelo	2014	Senior nurse role expectations of graduate registered and enrolled nurses on commencement to practice.	Australian Health Review: A Publication Of The Australian Hospital Association	Jacob, E. R., McKenna, L., & D'Amore, A. (2014). Senior nurse role expectations of graduate registered and enrolled nurses on commencement to practice. <i>Australian Health Review</i> , 38(4), 432-439.
Jacob, Elisabeth R; McKenna, Lisa; D'Amore, Angelo	2014	Comparisons of the educational preparation of registered and enrolled nurses in Australia: the educators' perspectives.	Nurse Education In Practice	Jacob, E. R., McKenna, L., & D'Amore, A. (2014). Comparisons of the educational preparation of registered and enrolled nurses in Australia: The educators' perspectives. <i>Nurse Education in Practice</i> , 14(6), 648-653.
Jacob, Elisabeth R.; McKenna, Lisa; D'Amore, Angelo	2017	Role expectations of different levels of nurse on graduation: A mixed methods approach.	Collegian	Jacob, E. R., McKenna, L., & D'Amore, A. (2017). Role expectations of different levels of nurse on graduation: A mixed methods approach. <i>Collegian</i> , 24(2), 135-145.
Jacob, Elisabeth Ruth; Barnett, Anthony; Sellick, Kenneth; McKenna, Lisa	2013	Scope of practice for Australian enrolled nurses: evolution and practice issues.	Contemporary Nurse	Ruth Jacob, E., Barnett, A., Sellick, K., & McKenna, L. (2013). Scope of practice for Australian enrolled nurses: Evolution and practice issues. <i>Contemporary Nurse</i> , 45(2), 155-163.
Johansson, Lotta; Knutsson, Susanne; Bergbom, Ingegerd; Lindahl, Berit	2016	Noise in the ICU patient room - Staff knowledge and clinical improvements.	Intensive & Critical Care Nursing	Johansson, L., Knutsson, S., Bergbom, I., & Lindahl, B. (2016). Noise in the ICU patient room—Staff knowledge and clinical improvements. <i>Intensive and Critical Care Nursing</i> , 35, 1-9.
John, Thomas Wiswa; Mkoka, Dickson Ally; Frumence, Gasto; Goicolea, Isabel	2018	An account for barriers and strategies in fulfilling women's right to quality maternal health care: a qualitative study from rural Tanzania.	BMC Pregnancy And Childbirth	John, T. W., Mkoka, D. A., Frumence, G., & Goicolea, I. (2018). An account for barriers and strategies in fulfilling women's right to quality maternal health care: a qualitative study from rural Tanzania. <i>BMC pregnancy and childbirth</i> , 18(1), 1-10.
Johnson, Maree; Levett-Jones, Tracy; Langdon, R; Weidemann, Gabrielle; Manias, Elizabeth; Everett, Bronwyn	2018	A qualitative study of nurses' perceptions of a behavioural strategies e-learning program to reduce interruptions during medication administration.	Nurse Education Today	Johnson, M., Levett-Jones, T., Langdon, R., Weidemann, G., Manias, E., & Everett, B. (2018). A qualitative study of nurses' perceptions of a behavioural strategies e-learning program to reduce interruptions during medication administration. <i>Nurse education today</i> , 69, 41-47.

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Johnston, Jacqueline; Reisenhofer, Sonia	2017	Focus Education Part 1. Supporting Enrolled Nurses Transiting To University.	Australian Nursing & Midwifery Journal	Duchscher, J. E. B. (2009). Transition shock: The initial stage of role adaptation for newly graduated registered nurses. <i>Journal of advanced nursing</i> , 65(5), 1103-1113.
Jones, J., & Cheek, J.	2017	A Snapshot Of Nursing In Australia	Nurses & Midwives' Paycheck	Jones, J., & Cheek, J. (2003). The scope of nursing in Australia: a snapshot of the challenges and skills needed. <i>Journal of Nursing Management</i> , 11(2), 121-129.
Joyce, C. M., & Piterman, L.	2015	New national practice standards released for nurses in general practice	Australian Nursing And Midwifery Journal	Joyce, C. M., & Piterman, L. (2011). The work of nurses in Australian general practice: a national survey. <i>International journal of nursing studies</i> , 48(1), 70-80.
Karnon, J; Ali Afzali, H Haji; Gray, J; Holton, C; Banham, D; Beilby, J	2013	A risk adjusted cost-effectiveness analysis of alternative models of nurse involvement in obesity management in primary care.	Obesity (Silver Spring, Md.)	Karnon, J., Afzali, H. H. A., Gray, J., Holton, C., Banham, D., & Beilby, J. (2013). A risk adjusted cost-effectiveness analysis of alternative models of nurse involvement in obesity management in primary care. <i>Obesity</i> , 21(3), 472-479.
Knight, Vickie; Ryder, Nathan; Guy, Rebecca; Lu, Heng; Wand, Handan; McNulty, Anna	2013	New Xpress sexually transmissible infection screening clinic improves patient journey and clinic capacity at a large sexual health clinic.	Sexually Transmitted Diseases	Knight, V., Ryder, N., Guy, R., Lu, H., Wand, H., & McNulty, A. (2013). New Xpress sexually transmissible infection screening clinic improves patient journey and clinic capacity at a large sexual health clinic. <i>Sexually transmitted diseases</i> , 40(1), 75-80.
Lantta, Tella; Anttila, Minna; Kontio, Raija; Adams, Clive E; Valimaki, Maritta	2016	Violent events, ward climate and ideas for violence prevention among nurses in psychiatric wards: a focus group study.	International Journal Of Mental Health Systems	Lantta, T., Anttila, M., Kontio, R., Adams, C. E., & Välimäki, M. (2016). Violent events, ward climate and ideas for violence prevention among nurses in psychiatric wards: a focus group study. <i>International journal of mental health systems</i> , 10(1), 1-10.
Lee, Ying Ying; Wang, Zixin	2019	Facilitators and barriers for healthcare providers to recommend HPV vaccination to attendees of public sexually transmitted diseases clinics in Hong Kong, China.	Plos One	Lee, Y. Y., & Wang, Z. (2019). Facilitators and barriers for healthcare providers to recommend HPV vaccination to attendees of public sexually transmitted diseases clinics in Hong Kong, China. <i>Plos one</i> , 14(1), e0209942.
Leon, Rebecca J.; Tredoux, Jaimie H.; Foster, Suzanne M.	2019	Valuing Enrolled Nurses –A study to better understand the investment education and training have on the retention of Enrolled Nurses.	Collegian	Leon, R. J., Tredoux, J. H., & Foster, S. M. (2019). Valuing Enrolled Nurses—A study to better understand the investment education and training have on the retention of Enrolled Nurses. <i>Collegian</i> , 26(1), 158-164.
Liaw, Sok Ying; Chng, Devon Yun Jia; Wong, Lai Fun; Ho, Jasmine Tze Yin; Mordiffi, Siti Zubaidah; Cooper,	2017	The impact of a Web-based educational program on the recognition and management of deteriorating patients.	Journal Of Clinical Nursing	Liaw, S. Y., Chng, D. Y. J., Wong, L. F., Ho, J. T. Y., Mordiffi, S. Z., Cooper, S., ... & Ang, E. N. K. (2017). The impact of a Web-based educational program on the recognition and

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Simon; Chua, Wei Ling; Ang, Emily Neo Kim				management of deteriorating patients. Journal of Clinical Nursing, 26(23-24), 4848-4856.
Listerfelt, Stephanie; Fridh, Isabell; Lindahl, Berit	2019	Facing the unfamiliar: Nurses' transcultural care in intensive care - A focus group study.	Intensive & Critical Care Nursing	Listerfelt, S., Fridh, I., & Lindahl, B. (2019). Facing the unfamiliar: Nurses' transcultural care in intensive care—A focus group study. Intensive and Critical Care Nursing, 55, 102752.
Little, Yvonne	2017	Primary health: Influencing the future	Kai Tiaki : Nursing New Zealand	Little, Y. (2017). Primary health: Influencing the future. Kai Tiaki: Nursing New Zealand, 23(1), 36.
Longmore, Mary	2018	Nursing runs in the blood	Kai Tiaki : Nursing New Zealand	Longmore, M. (2018). Nursing runs in the blood. Kai Tiaki: Nursing New Zealand, 24(5), 33-33.
Lockett, Tim; Luscombe, Georgina; Phillips, Jane; Beattie, Elizabeth; Chenoweth, Lynnette; Davidson, Patricia M; Goodall, Stephen; Pond, Dimity; Mitchell, Geoffrey; Agar, Meera	2021	Australian long-term care personnel's knowledge and attitudes regarding palliative care for people with advanced dementia.	Dementia (London, England)	Lockett, T., Luscombe, G., Phillips, J., Beattie, E., Chenoweth, L., Davidson, P. M., ... & Agar, M. (2021). Australian long-term care personnel's knowledge and attitudes regarding palliative care for people with advanced dementia. Dementia, 20(2), 427-443.
Mathieu, E., Ritchie, H., Ortiz-Ospina, E., Roser, M., Hasell, J., Appel, C., ... & Rodés-Guirao, L.	2021	COVID-19 Vaccinations	Inscope	Mathieu, E., Ritchie, H., Ortiz-Ospina, E., Roser, M., Hasell, J., Appel, C., ... & Rodés-Guirao, L. (2021). A global database of COVID-19 vaccinations. Nature human behaviour, 5(7), 947-953.
Mammbona, A A; Mavhandu-Mudzusi, A H	2019	Enrolled nurses' experiences of caring for patients living with HIV in a South African rural hospital.	International Nursing Review	Mammbona, A. A., & Mavhandu-Mudzusi, A. H. (2019). Enrolled nurses' experiences of caring for patients living with HIV in a South African rural hospital. International nursing review, 66(1), 139-146.
Manchester, Anne	2019	Respect for different world views	Kai Tiaki : Nursing New Zealand	Petersen, K., & Gencel, C. (2013, October). Worldviews, research methods, and their relationship to validity in empirical software engineering research. In 2013 joint conference of the 23rd international workshop on software measurement and the 8th international conference on software process and product measurement (pp. 81-89). IEEE.
Mazaheri, Monir; Ericson-Lidman, Eva; Joakim, Ohlen; Norberg, Astrid	2018	Meanings of troubled conscience and how to deal with it: expressions of Persian-speaking enrolled nurses in Sweden.	Scandinavian Journal Of Caring Sciences	Mazaheri, M., Ericson-Lidman, E., Joakim, Ö., & Norberg, A. (2018). Meanings of troubled conscience and how to deal with it: expressions of Persian-speaking enrolled

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
				nurses in Sweden. <i>Scandinavian Journal of Caring Sciences</i> , 32(1), 380-388.
Mazaheri, Monir; Ericson-Lidman, Eva; Zargham-Boroujeni, Ali; Ohlen, Joakim; Norberg, Astrid	2017	Clear conscience grounded in relations: Expressions of Persian-speaking nurses in Sweden.	Nursing Ethics	Mazaheri, M., Ericson-Lidman, E., Zargham-Boroujeni, A., Öhlén, J., & Norberg, A. (2017). Clear conscience grounded in relations: Expressions of Persian-speaking nurses in Sweden. <i>Nursing ethics</i> , 24(3), 349-361.
Mbonye, Anthony K; Buregyeya, Esther; Rutebemberwa, Elizeus; Clarke, Sian E; Lal, Sham; Hansen, Kristian S; Magnussen, Pascal; LaRussa, Philip	2016	Prescription for antibiotics at drug shops and strategies to improve quality of care and patient safety: a cross-sectional survey in the private sector in Uganda.	BMJ Open	Mbonye, A. K., Buregyeya, E., Rutebemberwa, E., Clarke, S. E., Lal, S., Hansen, K. S., ... & LaRussa, P. (2016). Prescription for antibiotics at drug shops and strategies to improve quality of care and patient safety: a cross-sectional survey in the private sector in Uganda. <i>BMJ open</i> , 6(3), e010632.
McCann, Terence V; Baird, John; Muir-Cochrane, Eimear	2014	Attitudes of clinical staff toward the causes and management of aggression in acute old age psychiatry inpatient units.	BMC Psychiatry	McCann, T. V., Baird, J., & Muir-Cochrane, E. (2014). Attitudes of clinical staff toward the causes and management of aggression in acute old age psychiatry inpatient units. <i>BMC psychiatry</i> , 14(1), 1-9.
McKenna, Lisa; Wood, Pamela; Williams, Allison; O'Connor, Margaret; Moss, Cheryle; Griffiths, Debra; Della, Phillip; Endacott, Ruth; Cross, Wendy	2019	Scope of practice and workforce issues confronting Australian Enrolled Nurses: A qualitative analysis.	Collegian	McKenna, L., Wood, P., Williams, A., O'Connor, M., Moss, C., Griffiths, D., ... & Cross, W. (2019). Scope of practice and workforce issues confronting Australian Enrolled Nurses: A qualitative analysis. <i>Collegian</i> , 26(1), 80-85.
Mgolozeli, Siyabulela E; Shilubane, Hilda N; Khoza, Lunic B	2019	Nurses' attitudes towards the implementation of the Mother-Baby Friendly Initiative in selected primary healthcare facilities at Makhuduthamaga Municipality, Limpopo province.	Curationis	Khoza, L. B., Mgolozeli, S. E., & Shilubane, H. N. (2019). Nurses' attitudes towards the implementation of the Mother-Baby Friendly Initiative in selected primary healthcare facilities at Makhuduthamaga Municipality, Limpopo province. <i>curationis</i> , 42(1), 1-9.
Mill, Judy; Harrowing, Jean; Rae, Tania; Richter, Solina; Minnie, Karin; Mbalinda, Scovia; Hepburn-Brown, Ceres	2013	Stigma in AIDS nursing care in sub-saharan Africa and the Caribbean.	Qualitative Health Research	Mill, J., Harrowing, J., Rae, T., Richter, S., Minnie, K., Mbalinda, S., & Hepburn-Brown, C. (2013). Stigma in AIDS nursing care in sub-Saharan Africa and the Caribbean. <i>Qualitative health research</i> , 23(8), 1066-1078.
Moran, A; Lebona, L; Makgopa, G; Nkwane, Y; Dlamini, C; Jagwer, G	2021	One size does not fit all: reaching agricultural workers in South Africa with TB services.	The International Journal Of Tuberculosis And Lung Disease : The	Moran, A., Lebona, L., Makgopa, G., Nkwane, Y., Dlamini, C., & Jagwer, G. (2021). One size does not fit all: reaching agricultural workers in South Africa with TB services. <i>The International Journal of</i>

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
			Official Journal Of The International Union Against Tuberculosis And Lung Disease	Tuberculosis and Lung Disease, 25(7), 573-578.
Mudaly, P; Nkosi, Z Z	2015	Factors influencing nurse absenteeism in a general hospital in Durban, South Africa.	Journal Of Nursing Management	Mudaly, P., & Nkosi, Z. Z. (2015). Factors influencing nurse absenteeism in a general hospital in D urban, S outh A frica. Journal of nursing management, 23(5), 623-631.
Munday, Judy; Kynoch, Kathryn; Hines, Sonia	2015	Nurses' experiences of advocacy in the perioperative department: a systematic review.	JB I Database Of Systematic Reviews And Implementation Reports	Munday, J., Kynoch, K., & Hines, S. (2015). Nurses' experiences of advocacy in the perioperative department: a systematic review. JBI Evidence Synthesis, 13(8), 146-189.
Murray-Parahi, P; Edgar, V; Descallar, J; Comino, E; Johnson, M	2017	ENSCOPE: Scoping the Practice of Enrolled Nurses in an Australian Community Health Setting.	International Nursing Review	Murray-Parahi, P., Edgar, V., Descallar, J., Comino, E., & Johnson, M. (2017). EN s COPE: Scoping the Practice of Enrolled Nurses in an Australian Community Health Setting. International Nursing Review, 64(1), 59-68.
Mutamba, B; Abbo, C; Muron, J; Idro, R; Mwaka, A D	2013	Stereotypes on Nodding syndrome: responses of health workers in the affected region of northern Uganda.	African Health Sciences	MUTAMBA, B., et al. Stereotypes on Nodding syndrome: responses of health workers in the affected region of northern Uganda. African health sciences, 2013, vol. 13, no 4, p. 986-991.
Nazarko, Linda	2016	Lessons of history: back to the past.	British Journal Of Healthcare Assistants	Richard, J. (2004). The secret past of fair value: Lessons from history applied to the French case. Accounting in Europe, 1(1), 95-107.
Neo, Yi Ling; Hong, Leting Isabella; Chan, Ee Yuee	2021	Enrolled nurses' perceptions of providing nutritional care to hospitalised older people in Singapore's acute care setting: A qualitative descriptive study.	International Journal Of Older People Nursing	Neo, Y. L., Hong, L. I., & Chan, E. Y. (2021). Enrolled nurses' perceptions of providing nutritional care to hospitalised older people in Singapore's acute care setting: A qualitative descriptive study. International Journal of Older People Nursing, 16(2), e12354.
Nilsson, Anita; Edvardsson, David; Rushton, Carole	2019	Nurses' descriptions of person-centred care for older people in an acute medical ward—On the individual, team and organisational levels'.	Journal Of Clinical Nursing	Nilsson, A., Edvardsson, D., & Rushton, C. (2019). Nurses' descriptions of person-centred care for older people in an acute medical ward—On the individual, team and organisational levels'. Journal of clinical nursing, 28(7-8), 1251-1259.
O'Brien, Anthony; Giles, Michelle; Dempsey, Shane;	2014	Evaluating the preceptor role for pre-registration nursing and	Nurse Education Today	O'Brien, A., Giles, M., Dempsey, S., Lynne, S., McGregor, M. E., Kable, A., ... & Parker,

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Lynne, Slater; McGregor, Michelle E; Kable, Ashley; Parmenter, Glenda; Parker, Vicki		midwifery student clinical education.		V. (2014). Evaluating the preceptor role for pre-registration nursing and midwifery student clinical education. <i>Nurse Education Today</i> , 34(1), 19-24.
Ossenberg, Christine; Hull, Susan; Pitts, Trina; Henderson, Amanda	2021	Identifying how enrolled nurses meet requisite national practice standards: A quality initiative.	Collegian	Ossenberg, C., Hull, S., Pitts, T., & Henderson, A. (2021). Identifying how enrolled nurses meet requisite national practice standards: A quality initiative. <i>Collegian</i> , 28(3), 275-280.
Ostaszkiwicz, Joan; Tomlinson, Emily; Hutchinson, Alison M	2018	"Dignity": A central construct in nursing home staff understandings of quality continence care.	Journal Of Clinical Nursing	Ostaszkiwicz, J., Tomlinson, E., & Hutchinson, A. M. (2018). "Dignity": A central construct in nursing home staff understandings of quality continence care. <i>Journal of clinical nursing</i> , 27(11-12), 2425-2437.
Parsons, Karen; Gaudine, Alice; Swab, Michelle	2018	Older nurses' experiences of providing direct care in hospital nursing units: a qualitative systematic review.	JBIC Database Of Systematic Reviews And Implementation Reports	Parsons, K., Gaudine, A., & Swab, M. (2018). Older nurses' experiences of providing direct care in hospital nursing units: a qualitative systematic review. <i>JBIC Evidence Synthesis</i> , 16(3), 669-700.
Peate, Ian	2015	Second-level nurse returns?	British Journal Of Nursing	Peate, I. (2015). Second-level nurse returns?. <i>British Journal of Nursing</i> , 24(22), 1117-1117.
Peirce, Deborah; Corkish, Victoria; Lane, Margie; Wilson, Sally	2018	Nurses' Knowledge and Attitudes Regarding Pediatric Pain Management in Western Australia.	Pain Management Nursing : Official Journal Of The American Society Of Pain Management Nurses	Peirce, D., Corkish, V., Lane, M., & Wilson, S. (2018). Nurses' knowledge and attitudes regarding pediatric pain management in western Australia. <i>Pain Management Nursing</i> , 19(6), 707-717.
Perry, Lin; Lamont, Scott; Brunero, Scott; Gallagher, Robyn; Duffield, Christine	2015	The mental health of nurses in acute teaching hospital settings: a cross-sectional survey.	BMC Nursing	Perry, L., Lamont, S., Brunero, S., Gallagher, R., & Duffield, C. (2015). The mental health of nurses in acute teaching hospital settings: a cross-sectional survey. <i>BMC nursing</i> , 14(1), 1-8.
Ping Yu; Traynor, Victoria; Hailey, David	2014	Urinary continence care in Australian nursing homes.	Australian Journal Of Advanced Nursing	Yu, P., Hailey, D., & Traynor, V. (2014). Urinary continence care in Australian nursing homes. <i>Australian Journal of Advanced Nursing</i> , 32(2), 39-46.
Porter, Valerie; Ham, Corey; Grealish, Laurie	2016	Transition to Practice Program: A New Direction for Recruiting and Retaining Enrolled Nurses in Mental Health.	Journal For Nurses In Professional Development	Porter, V., Ham, C., & Grealish, L. (2016). Transition to practice program: A new direction for recruiting and retaining enrolled nurses in mental health. <i>Journal for Nurses in Professional Development</i> , 32(6), 299-305.

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Price, Kay; Kennedy, Kate J; Rando, Tabatha L; Dyer, Anthony R; Boylan, Jo	2017	Education and process change to improve skin health in a residential aged care facility.	International Wound Journal	Price, K., Kennedy, K. J., Rando, T. L., Dyer, A. R., & Boylan, J. (2017). Education and process change to improve skin health in a residential aged care facility. <i>International wound journal</i> , 14(6), 1140-1147.
Pryor, Julie; Buzio, Amanda	2013	Do 'two types' of ENs work in rehabilitation in Australia?	Journal Of The Australasian Rehabilitation Nurses' Association (JARNA)	Pryor, J., & Buzio, A. (2013). Do'two types' of ENs work in rehabilitation in Australia?. <i>Journal of the Australasian Rehabilitation Nurses Association</i> , 16(1), 14-19.
Quinn, Chris	2016	A mental health nursing transition program for enrolled nurses at a forensic mental health hospital.	Australian Journal Of Advanced Nursing	Quinn, C., & Ryan, J. (2016). A mental health nursing transition program for enrolled nurses at a forensic mental health hospital. <i>Australian Journal of Advanced Nursing</i> , The, 34(1), 14-22.
Ralph, Nicholas; Birks, Melanie; Chapman, Ysanne; Muldoon, Nona; McPherson, Carol	2013	From EN to BN to RN: an exploration and analysis of the literature.	Contemporary Nurse	Ralph, N., Birks, M., Chapman, Y., Muldoon, N., & McPherson, C. (2013). From EN to BN to RN: An exploration and analysis of the literature. <i>Contemporary Nurse</i> , 43(2), 225-236.
Reeves, Julie	2019	Professional. Nurses in schools -- making a positive difference.	Australian Nursing & Midwifery Journal	Reeves, J. (2019). Professional: Nurses in schools-making a positive difference. <i>Australian Nursing and Midwifery Journal</i> , 26(5), 41.
Reeves, Julie	2020	Nursing education under review	Australian Nursing And Midwifery Journal	Simpson, E., & Courtney, M. (2002). Critical thinking in nursing education: Literature review. <i>International journal of nursing practice</i> , 8, 89-98.
Richardson, Anna; Richardson, Sandra; McAllum, Alex	2022	District nursing and family/whanau assessment practices: A New Zealand study.	Nursing Open	Richardson, A., Richardson, S., & McAllum, A. (2022). District nursing and family/whanau assessment practices: A New Zealand study. <i>Nursing Open</i> , 9(2), 1276-1285.
Riley, Kim; Schmidt, David	2016	Does online learning click with rural nurses? A qualitative study.	The Australian Journal Of Rural Health	Riley, K., & Schmidt, D. (2016). Does online learning click with rural nurses? A qualitative study. <i>Australian Journal of Rural Health</i> , 24(4), 265-270.
Roe, Jessica; Coulson, Suzanne; Ockerby, Cherene; Hutchinson, Alison M	2020	Staff perceptions of caring for people exhibiting behavioural and psychological symptoms of dementia in residential aged care: A cross-sectional survey.	Australasian Journal On Ageing	Roe, J., Coulson, S., Ockerby, C., & Hutchinson, A. M. (2020). Staff perceptions of caring for people exhibiting behavioural and psychological symptoms of dementia in residential aged care: A cross-sectional survey. <i>Australasian Journal on Ageing</i> , 39(3), 237-243.

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Russel, J.	2016	ANMF Calls For 24/7 Rn Cover And Better Wages In Aged Care	Australian Nursing And Midwifery Journal	Russell, J. ANMF CALLS FOR 24/7 RN COVER AND BETTER WAGES IN AGED CARE.
Ryan, Colleen; McAllister, Margaret	2017	Enrolled Nurses,Ã“ experiences learning the nurse preceptor role: A qualitative evaluation.	Collegian	Ryan, C., & McAllister, M. (2017). Enrolled Nurses' experiences learning the nurse preceptor role: A qualitative evaluation. <i>Collegian</i> , 24(3), 267-273.
Ryan, Colleen; Young, Louise; McAllister, Margaret	2017	The impact of an online learning platform about nursing education on enrolled nurse preceptor teaching capabilities: a pre-post-test evaluation.	Contemporary Nurse	Ryan, C., Young, L., & McAllister, M. (2017). The impact of an online learning platform about nursing education on enrolled nurse preceptor teaching capabilities: a pre-post-test evaluation. <i>Contemporary Nurse</i> , 53(3), 335-347.
Saldert, Charlotta; Bartonek-Ahman, Hannah; Bloch, Steven	2018	Interaction between Nursing Staff and Residents with Aphasia in Long-Term Care: A Mixed Method Case Study.	Nursing Research And Practice	Saldert, C., Bartonek-Ã–hman, H., & Bloch, S. (2018). Interaction between nursing staff and residents with aphasia in long-term care: A mixed method case study. <i>Nursing research and practice</i> , 2018.
Schenell, Ramona; Ozanne, Anneli; Strang, Susann; Henoeh, Ingela	2019	Balancing between maintaining and overriding the self: Staff experiences of residents' self-determination in the palliative phases.	International Journal Of Older People Nursing	Schenell, R., Ozanne, A., Strang, S., & Henoeh, I. (2019). Balancing between maintaining and overriding the self: Staff experiences of residents' self-determination in the palliative phases. <i>International journal of older people nursing</i> , 14(4), e12255.
Schutte, Tim; van Eekeren, Rike; Richir, Milan; van Staveren, Jojanneke; van Puijenbroek, Eugene; Tichelaar, Jelle; van Agtmael, Michiel	2018	The adverse drug reaction reporting assignment for specialist oncology nurses: a preliminary evaluation of quality, relevance and educational value in a prospective cohort study.	Naunyn-Schmiedeberg's Archives Of Pharmacology	Schutte, T., van Eekeren, R., Richir, M., van Staveren, J., van Puijenbroek, E., Tichelaar, J., & van Agtmael, M. (2018). The adverse drug reaction reporting assignment for specialist oncology nurses: a preliminary evaluation of quality, relevance and educational value in a prospective cohort study. <i>Naunyn-Schmiedeberg's archives of pharmacology</i> , 391(1), 17-26.
Scott, Graham	2015	Vulnerable patients deserve regulated care.	Nursing Standard (Royal College Of Nursing (Great Britain) : 1987)	Scott, G. (2015). Vulnerable patients deserve regulated care. <i>Nursing Standard (Royal College of Nursing (Great Britain): 1987)</i> , 29(28), 3-3.
Sefidani Forough, Aida; Lau, Esther T L; Steadman, Kathryn J; Kyle, Greg J; Cichero, Julie A Y; Serrano Santos, Jose Manuel; Nissen, Lisa M	2020	Factors affecting Australian aged care facility workers in administering oral medication to residents with swallowing difficulties.	Research In Nursing & Health	Sefidani Forough, A., Lau, E. T., Steadman, K. J., Kyle, G. J., Cichero, J. A., Serrano Santos, J. M., & Nissen, L. M. (2020). Factors affecting Australian aged care facility workers in administering oral medication to residents with swallowing difficulties.

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
				Research in Nursing & Health, 43(4), 419-430.
Shannon, Kay; McKenzie-Green, Barbara	2016	Current role challenges in New Zealand aged residential care: the potential consequences for healthcare assistant role expansion.	Contemporary Nurse	Shannon, K., & McKenzie-Green, B. (2016). Current role challenges in New Zealand aged residential care: the potential consequences for healthcare assistant role expansion. <i>Contemporary nurse</i> , 52(2-3), 140-151.
Shepherd, Jan; Waller, Amy; Sanson-Fisher, Rob; Clark, Katherine; Ball, Jean	2020	Where would acute care nurses prefer to receive end-of-life care? a cross-sectional survey.	International Journal Of Nursing Studies	Shepherd, J., Waller, A., Sanson-Fisher, R., Clark, K., & Ball, J. (2020). Where would acute care nurses prefer to receive end-of-life care? A cross-sectional survey. <i>International Journal of Nursing Studies</i> , 109, 103683.
Shepherd, Jan; Waller, Amy; Sanson-Fisher, Rob; Clark, Katherine; Ball, Jean	2018	Knowledge of, and participation in, advance care planning: A cross-sectional study of acute and critical care nurses' perceptions.	International Journal Of Nursing Studies	Shepherd, J., Waller, A., Sanson-Fisher, R., Clark, K., & Ball, J. (2018). Knowledge of, and participation in, advance care planning: A cross-sectional study of acute and critical care nurses' perceptions. <i>International Journal of Nursing Studies</i> , 86, 74-81.
Sonneborn, Olivia; Miller, Charne; Head, Leon; Cross, Rachel	2018	Disaster education and preparedness in the acute care setting: A cross sectional survey of operating theatre nurse's disaster knowledge and education.	Nurse Education Today	Sonneborn, O., Miller, C., Head, L., & Cross, R. (2018). Disaster education and preparedness in the acute care setting: A cross sectional survey of operating theatre nurse's disaster knowledge and education. <i>Nurse education today</i> , 65, 23-29.
Stanley, David; Beament, Tania; Falconer, Darren; Haigh, Margaret; Saunders, Rosemary; Stanley, Karen; Wall, Peter; Nielson, Sharon	2016	The male of the species: a profile of men in nursing.	Journal Of Advanced Nursing	Stanley, D., Beament, T., Falconer, D., Haigh, M., Saunders, R., Stanley, K., ... & Nielson, S. (2016). The male of the species: a profile of men in nursing. <i>Journal of advanced nursing</i> , 72(5), 1155-1168.
Stoker, Fiona	2017	Accrediting Education Providers	Australian Nursing And Midwifery Journal	Kopelow, M., & Campbell, C. (2013). The benefits of accrediting institutions and organisations as providers of continuing professional education. <i>Journal of European CME</i> , 2(1), 10-14.
Swart, Reece P; Pretorius, Ronel; Klopper, Hester	2015	Educational background of nurses and their perceptions of the quality and safety of patient care.	Curationis	Swart, R. P., Pretorius, R., & Klopper, H. (2015). Educational background of nurses and their perceptions of the quality and safety of patient care. <i>curationis</i> , 38(1), 1-8.
Tahghighi, Mozhdeh; Brown, Janie A; Breen, Lauren J; Kane, Robert; Hegney, Desley; Rees, Clare S	2019	A comparison of nurse shift workers' and non-shift workers' psychological functioning and resilience.	Journal Of Advanced Nursing	Tahghighi, M., Brown, J. A., Breen, L. J., Kane, R., Hegney, D., & Rees, C. S. (2019). A comparison of nurse shift workers' and non-shift workers' psychological functioning and resilience. <i>Journal of Advanced Nursing</i> , 75(11), 2570-2578.

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Tan, Apphia Jia Qi; Rashasegaran, Ahtherai; Goh, Mien Li	2020	Enhancing the verbal handover process for nurses in inpatient orthopedic wards: a best practice implementation project.	JBI Evidence Synthesis	Tan, A. J. Q., Rashasegaran, A., & Goh, M. L. (2020). Enhancing the verbal handover process for nurses in inpatient orthopedic wards: a best practice implementation project. <i>JBI Evidence Synthesis</i> , 18(1), 200-211.
Tarazan, N., Alshehri, M., Sharif, S., Al Duhailib, Z., Møller, M. H., Belley-Cote, E., ... & Alhazzani, W.	2015	NMBA Update	Australian Nursing And Midwifery Journal	Tarazan, N., Alshehri, M., Sharif, S., Al Duhailib, Z., Møller, M. H., Belley-Cote, E., ... & Alhazzani, W. (2020). Neuromuscular blocking agents in acute respiratory distress syndrome: updated systematic review and meta-analysis of randomized trials. <i>Intensive care medicine experimental</i> , 8(1), 1-15.
Tarimo, Edith A M; Moyo, Gustav; Masenga, Happy; Magesa, Paul; Mzava, Dafroza	2018	Performance and self-perceived competencies of enrolled nurse/midwives: a mixed methods study from rural Tanzania.	BMC Health Services Research	Tarimo, E. A., Moyo, G., Masenga, H., Magesa, P., & Mzava, D. (2018). Performance and self-perceived competencies of enrolled nurse/midwives: a mixed methods study from rural Tanzania. <i>BMC health services research</i> , 18(1), 1-14.
Tau, Babalwa; Du Plessis, Emmerentia; Koen, Daleen; Ellis, Suria	2018	The relationship between resilience and empowering leader behaviour of nurse managers in the mining healthcare sector.	Curationis	Tau, B., Du Plessis, E., Koen, D., & Ellis, S. (2018). The relationship between resilience and empowering leader behaviour of nurse managers in the mining healthcare sector. <i>Curationis</i> , 41(1), 1-10.
Tellie, Mercia; van Wyk, Neltjie; Leech, Ronell	2020	Compassion Fatigue among Nurses: The Cost of Having a Relationship with HIV-Positive Patients.	Africa Journal Of Nursing & Midwifery	Tellie, M. J. (2020). Compassion fatigue among nurses: the cost of having a relationship with HIV-positive patients. <i>Africa Journal of Nursing and Midwifery</i> , 22(2), 19-pages.
Thomas, Lee	2017	Aged care campaign backed by solid evidence.	Lamp	Thomas, L. (2017). Aged care campaign backed by solid evidence. <i>Lamp, The</i> , 74(8), 11.
Tung, Fabian Ling Ngai; Yan, Vincent Chun Man; Tai, Winnie Ling Yin; Chen, Jing Han; Chung, Joanne Wai-Yee; Wong, Thomas Kwok Shing	2016	Nurses' knowledge of universal health coverage for inclusive and sustainable elderly care services.	Revista Latino-Americana De Enfermagem	Tung, F. L. N., Yan, V. C. M., Tai, W. L. Y., Chen, J. H., Chung, J. W. Y., & Wong, T. K. S. (2016). Nurses' knowledge of universal health coverage for inclusive and sustainable elderly care services. <i>Revista Latino-Americana de Enfermagem</i> , 24.
Wall, Peter; Fetherston, Catherine; Browne, Caroline	2018	Understanding the enrolled nurse to registered nurse journey through a model adapted from Schlossberg's transition theory.	Nurse Education Today	Wall, P., Fetherston, C., & Browne, C. (2018). Understanding the enrolled nurse to registered nurse journey through a model adapted from Schlossberg's transition theory. <i>Nurse education today</i> , 67, 6-14.

Table 4. Brief description of studies that included ENs (n = 149) sorted alphabetically by first authors' last name.				
Waller, Amy; Chan, Sally; Chan, Carmen W H; Chow, Meyrick C M; Kim, Miyoung; Kang, Sook Jung; Oldmeadow, Christopher; Sanson-Fisher, Robert	2020	Perceptions of optimal end-of-life care in hospitals: A cross-sectional study of nurses in three locations.	Journal Of Advanced Nursing	Waller, A., Chan, S., Chan, C. W., Chow, M. C., Kim, M., Kang, S. J., ... & Sanson-Fisher, R. (2020). Perceptions of optimal end-of-life care in hospitals: A cross-sectional study of nurses in three locations. <i>Journal of advanced nursing</i> , 76(11), 3014-3025.
Waller, Amy; Turon, Heidi; Bryant, Jamie; Shepherd, Jan; Hobden, Bree; Sanson-Fisher, Rob	2020	Nurses perspectives on healthcare errors in oncology care: A cross-sectional study.	European Journal Of Oncology Nursing: The Official Journal Of European Oncology Nursing Society	Waller, A., Turon, H., Bryant, J., Shepherd, J., Hobden, B., & Sanson-Fisher, R. (2020). Nurses perspectives on healthcare errors in oncology care: A cross-sectional study. <i>European Journal of Oncology Nursing</i> , 45, 101741.
White, Janine A; Blaauw, Duane; Rispel, Laetitia C	2020	Social exclusion and the perspectives of health care providers on migrants in Gauteng public health facilities, South Africa.	Plos One	White, J. A., Blaauw, D., & Rispel, L. C. (2020). Social exclusion and the perspectives of health care providers on migrants in Gauteng public health facilities, South Africa. <i>PloS one</i> , 15(12), e0244080.
Wright, Ann	2016	We have gone full circle.	Nursing Standard (Royal College Of Nursing (Great Britain) : 1987)	Arndt, C., Jones, S., & Tarp, F. (2010). Aid, growth, and development: have we come full circle?. <i>Journal of Globalization and Development</i> , 1(2).
Yang, Yueh-Ying; Hsiao, Chun-Hui; Chang, Ying-Ju; Ma, Shu-Ching; Wang, Jing-Jy	2020	Exploring dementia care competence of nurses working in acute care settings.	Journal Of Clinical Nursing	Yang, Y. Y., Hsiao, C. H., Chang, Y. J., Ma, S. C., & Wang, J. J. (2022). Exploring dementia care competence of nurses working in acute care settings. <i>Journal of Clinical Nursing</i> , 31(13-14), 1972-1982.

Appendix E – Table 5. Brief description of studies that included Associate Nurses (n = 2) sorted

Table 5. Brief description of studies that included Associate Nurses (n = 2) sorted alphabetically by first authors' last name.				
Authors	Year	Title	Journal of Publication	APA Citation
Dagneu, Zewdi Amanuel; Abraham, Isayas Afewerki; Beraki, Ghirmay Ghebreigziabher; Mittler, Sibyl; Achila, Oliver Okoth; Tesfamariam, Eyasu H	2020	Do nurses have barriers to quality oral care practice at a generalized hospital care in Asmara, Eritrea? A cross-sectional study.	BMC Oral Health	Dagneu, Z. A., Abraham, I. A., Beraki, G. G., Mittler, S., Achila, O. O., & Tesfamariam, E. H. (2020). Do nurses have barriers to quality oral care practice at a generalized hospital care in Asmara, Eritrea? A cross-sectional study. <i>BMC oral health</i> , 20(1), 1-11.
Shimazaki, Kazuyo; Ota, Katsumasa; Niimi, Yukari	2021	Developing a self-checklist of staff development behavior for associate nurse unit managers using the Delphi method.	Nursing & Health Sciences	Shimazaki, K., Ota, K., & Niimi, Y. (2021). Developing a self-checklist of staff development behavior for associate nurse unit managers using the Delphi method. <i>Nursing & Health Sciences</i> , 23(1), 195-207.

Appendix F – Table 6. Brief description of studies that included Associate Degree Nurses (n = 16)

Table 6. Brief description of studies that included Associate Degree Nurses (n = 16) sorted alphabetically by first authors' last name.				
Authors	Published Year	Title	Journal	Citation
Anderson, Lori S.	2015	Impact of simulation experiences on learning transfer in new graduate registered nurses	ProQuest Dissertations and Theses	Anderson, L. S. (2015). Impact of simulation experiences on learning transfer in new graduate registered nurses. East Carolina University.
Barnes, Ruth A.	2015	A study of associate degree nurses' perceptions and beliefs of advancing their formal education at the baccalaureate level	ProQuest Dissertations and Theses	Barnes, R. A. (2015). A study of associate degree nurses' perceptions and beliefs of advancing their formal education at the baccalaureate level (Doctoral dissertation, Capella University).
Baur, Karen; Moore, Bridget; Wendler, M Cecilia	2017	Influencing Commitment to BSN Completion: A Pilot Project Using Motivational Interviewing.	The Journal of nursing administration	Baur, K., Moore, B., & Wendler, M. C. (2017). Influencing commitment to BSN completion: A pilot project using motivational interviewing. JONA: The Journal of Nursing Administration, 47(3), 172-178.
Bowman, Samantha K.	2019	A comparison of self-perceived skills and knowledge using the Casey-Fink survey between associate degree nursing graduates and bachelor of science nursing graduates in a RN residency program	Dissertation Abstracts International Section A: Humanities and Social Sciences	Bowman, S. K. (2019). A Comparison of Self-Perceived Skills and Knowledge using the Casey-Fink Survey between Associate Degree Nursing Graduates and Bachelor of Science Nursing Graduates in a RN Residency Program. AT Still University of Health Sciences.
Krachtus, Debbie	2021	Integrating quality improvement concepts into nursing curriculum: Perspectives of associate degree nurse faculty	Dissertation Abstracts International: Section B: The Sciences and Engineering	Krachtus, D. (2020). Integrating Quality Improvement Concepts into Nursing Curriculum: Perspectives of Associate Degree Nurse Faculty (Doctoral dissertation, Northern Illinois University).
Lindmeier, Connie	2019	Associate Degree Nursing Faculty Experiences Implementing Interprofessional Education	ProQuest Dissertations and Theses	Lindmeier, C. (2019). Associate Degree Nursing Faculty Experiences Implementing Interprofessional Education (Doctoral dissertation, Capella University).
McGhie-Anderson, Rose	2016	Advanced nursing education: Critical factors that influence diploma and associate degree nurses to advance	ProQuest Dissertations and Theses	McGhie-Anderson, R. (2016). Advanced nursing education: Critical factors that influence diploma and associate degree nurses to advance (Doctoral dissertation, Barry University School of Nursing).
McGhie-Anderson, Rose Lavine	2017	Advanced Nursing Education: Critical Factors That Influence Diploma and Associate Degree Nurses to Advance.	Nursing education perspectives	McGhie-Anderson, R. (2016). Advanced nursing education: Critical factors that influence diploma and associate degree nurses to advance (Doctoral dissertation, Barry University School of Nursing).

Table 6. Brief description of studies that included Associate Degree Nurses (n = 16) sorted alphabetically by first authors' last name.				
Montgomery, Sheila Ray	2016	Oppression in nursing: Does education level make a difference in a hospital environment?	ProQuest Dissertations and Theses	Montgomery, S. R. (2016). Oppression in nursing: Does education level make a difference in a hospital environment?. The University of Alabama.
Nabors, Karen	2013	Active learning strategies in classroom teaching: Practices of associate degree nurse educators in a southern state	Dissertation Abstracts International: Section B: The Sciences and Engineering	Nabors, K. (2012). Active learning strategies in classroom teaching: Practices of associate degree nurse educators in a southern state. The University of Alabama.
Reilly, Margaret Joyce	2013	An investigation of the relationship among social support, motivation, perceived competence, and pursuit of a baccalaureate degree among associate degree nurse graduates	Dissertation Abstracts International: Section B: The Sciences and Engineering	Reilly, M. J. (2012). An investigation of the relationship among social support, motivation, perceived competence, and pursuit of a baccalaureate degree among associate degree nurse graduates. City University of New York.
Ross, Bonnie J.	2017	Stories of becoming and being an associate degree nurse educator: A narrative inquiry study examining how participants' ways of knowing evolved through their experiences	Dissertation Abstracts International: Section B: The Sciences and Engineering	Ross, B. J. (2016). Stories of becoming and being an associate degree nurse educator: A narrative inquiry study examining how participants' ways of knowing evolved through their experiences. Rowan University.
Ross, Bonnie; Kerrigan, Monica Reid	2020	Addressing the Faculty Shortage Through Connections: Stories of Becoming a Nurse Educator.	The Journal of nursing education	Ross, B., & Kerrigan, M. R. (2020). Addressing the faculty shortage through connections: Stories of becoming a nurse educator. <i>Journal of Nursing Education, 59(10)</i> , 545-550.
Simpson, Daytona E.	2021	The challenges associate degree nurses face in pursuing a bachelor degree in nursing	Dissertation Abstracts International: Section B: The Sciences and Engineering	Simpson, D. E. (2020). The Challenges Associate Degree Nurses Face in Pursuing a Bachelor Degree in Nursing (Doctoral dissertation, Capella University).
Walker, Sharon K.	2018	Examining Empowerment and Retention of Online Nurse Faculty.	Nurse Program Directors: Examining Empowerment & Retention Of Online Nurse Faculty	Walker, S. K. (2018). Nurse program directors: Examining empowerment and retention of online nurse faculty (Doctoral dissertation, Grand Canyon University).

