

**Job Titles and Education Requirements of Registered Nurses in Primary Care:**

**A Research Practicum**

By © Crystal V. Barrett submitted to  
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## Abstract

**Background:** Registered nurses (RNs) are becoming increasingly involved in primary care settings, taking on a variety of roles that differ based on independent competency, practice setting and funding model, and the individual or community needs. These roles and scopes of practice of RNs in primary care have been found to differ across countries, leading to ambiguity among job titles used to refer to RNs in primary care settings. Similarly, education requirements specific to primary care nurses have not been explored and therefore are not well understood for this particular specialty. An international synthesis of job titles and education requirements for RNs in primary care can help future researchers and policymakers with cross-country comparisons to improve the integration and impact of RNs in primary care settings.

**Purpose:** The purpose of this Master of Nursing research practicum was to develop qualitative research skills by synthesizing international information to clarify job titles and education requirements of RNs in primary care.

**Methods:** A document analysis was employed with modified methodology, carrying out content analysis on included documents, while forgoing thematic analysis as data did not require the coding process to generate themes or categories. In addition, key informant consultations were carried out for each included country to verify the correctness and completeness of data. All Organization for Economic Co-operation and Development and key partner countries were considered for inclusion (n=42); countries were excluded if data could not be collected and verified in the English or French language. A manuscript was prepared and submitted to the International Journal of Nursing Studies. An abstract for E-poster digital presentation was submitted to the International Council of Nurses Congress, a virtual meeting in November 2021.

**Results:** A total of 24 Organization for Economic Co-operation and Development and key partner countries were included in this study. Five countries were excluded for a lack of available data/sources in English or French, and 13 additional countries were excluded because data was not verified by key informants. The most commonly used job titles for RNs in primary were “primary care nurse” and “general practice nurse.” Various other job titles were used such as “primary health care nurse,” “community nurse,” and “family nurse.” Consistently, there were no mandatory education requirements for RNs to practice in primary care; however, many countries had optional education programs/courses available for RNs to gain additional education specific to primary care nursing. There was an isolated incidence of mandatory education in Slovenia where RNs were required to complete education modules to practice in a specific area of primary care, known as the model of family practice.

**Conclusions:** This manuscript synthesized findings that express the international inconsistency among job titles for RNs in primary care, and the lack of mandatory education for RNs to practice in primary care. This fundamental information in primary care nursing can contribute to the ongoing developments that are required to clarify and optimize this role internationally. Integrating these findings into future research, education, practice, and policy across countries can help advance this nursing specialty, while improving patient outcomes and care delivery within primary healthcare systems.

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## **Chapter 1**

### **Introduction and Research Practicum Objectives**

## 1.1 Introduction

Primary care practice focuses on health promotion and illness/injury prevention to deliver accessible and holistic care to all (Canadian Nurses Association, 2016). The integration of registered nurses (RNs) in primary care settings is becoming increasingly relevant to the management of chronic diseases, preventative screening, education, and treatment of minor illnesses (Canadian Nurses Association, 2014; Lukewich, Allard et al., 2020; Norful et al., 2017; Poitras et al., 2018). Registered nurses execute a “generalist” role within primary care, with varying roles and scopes of practice across countries (Canadian Family Practice Nurses Association, 2021; Halcomb et al., 2016; Lukewich et al., 2018; Norful et al., 2017). The lack of clarity surrounding the specific roles of RNs in primary care has led to ambiguity among the job titles used to identify RNs in this specific field. International research has recognized the differences in job titles of RNs in primary care (Norful et al., 2017); however, these differences have not been formally synthesized for use in research, education, and policy.

As primary care nursing is an emerging specialty, there is extensive growth that is required to advance and optimize the use of RNs in primary care settings. The ambiguity surrounding nurse roles and titles in primary care extends into another area of primary care nursing that also lacks clarity internationally, which is the presence or absence of mandatory education requirements for RNs to practice in this field. Previous researchers (Lukewich et al., 2018) have recognized that there is limited documented knowledge on mandatory and optional education for RNs in primary care.

A Master of Nursing (MN) research practicum project with a focus on clarifying primary care nursing job titles and education requirements has the potential to promote international change and development. By creating a unified understanding of international nomenclature used

to refer to the RNs in primary care, we can create clarity for researchers, educators, and policy developers to advance primary care nursing. Promoting the development of this nursing specialty can optimize the RN role within primary care settings to improve the functioning of primary healthcare systems and ultimately benefit patient outcomes.

### **1.2 Research Practicum Objectives**

The overall goal and key objectives for this MN practicum project were developed in collaboration with my academic supervisor, Dr. Julia Lukewich. The overall goal was to build a foundation of research knowledge by developing qualitative nursing research skills through involvement in various research activities. The practicum objectives that were addressed to successfully reach this overall goal were to:

1. Demonstrate advanced nursing practice competencies, specifically through the competencies of education, research, leadership, and consultation and collaboration.
2. Compile international data for the purpose of creating global advancement in primary care nursing.
3. Contribute to international nursing research by submitting a manuscript for publication and seeking knowledge translation activities through international outlets.
4. Demonstrate the ability to apply peer, colleague, and supervisor feedback into scholarly writing through critical draft revisions of a research proposal, manuscript, and conference abstract submission.

### **1.3 Overview of Research Practicum Activities**

The goal and objectives of the MN research practicum were executed through the development of a research proposal submitted for funding, execution of a document analysis study, and submission of a manuscript for publication. In the Fall semester of this practicum

project (N6660), a research proposal was developed and critically reviewed by myself, my supervisor, and a group of colleagues identified by Dr. Lukewich. These colleagues, and eventually co-authors for the manuscript, included: Dr. Maria Mathews, Dr. Marie-Eve Poitras, Dr. Allison Norful, Dr. Ruth Martin-Misener, Dr. Joan Tranmer, and Dana Ryan. This proposal was submitted for funding to a provincial nursing organization (see Chapter 2). Data collection also began in the Fall, to allow the start of key informant consultations and manuscript writing in N6661 (Winter).

During the second and final course of this research practicum project (N6661), the remaining steps of the research study were conducted. Data collection and key informant consultations were concluded, generating verified and complete data for manuscript writing. The manuscript required four circulating drafts to reach a final version for submission in the *International Journal of Nursing Studies* (see Chapter 3). As well, an abstract was submitted to the International Council of Nurses 2021 Congress for inclusion as a digital poster presentation (see Appendix).

## Chapter 2

### Research Proposal

A research proposal was developed for submission to the Newfoundland and Labrador Registered Nurses' Education and Trust for the Nursing Research Award. This proposal, submitted in October 2020 during N6660, is presented in this chapter. Notably, some methods/approaches from the proposal evolved throughout the completion of the study (i.e. inclusion criteria, data collection, data extraction, data analysis). In particular, the tables used for data presentation differ significantly between the proposal and the final manuscript. The final manuscript, located in Chapter 3, reflects the final methods used in this Master of Nursing practicum project.

#### Reference:

Lukewich, J., Barrett, C., Martin-Misener, R., Mathews, M., Norful, A.,

Poitras, M-E., Tranmer, J., & Ryan, D. (Received: 2020). Job Titles and Education Requirements of Registered Nurses in Primary Care: An International Document Review.

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## 2.1 Project Summary

The term “nurse” is used as a general descriptor to identify nursing professionals who are educated in the behavioral, life, and nursing sciences, including nurse practitioners, registered nurses (RNs), and licensed practical nurses (International Council of Nurses, 2020). RNs specifically are diverse and impactful in primary care settings, contributing significantly to chronic disease management, health promotion, and coordination of screening programs (Community Health Nurses of Canada [CHNC], 2019; Norful et al., 2017). In recent years, nurses have been recognized as the most prominent non-physician contributors to primary care teams (Freund et al., 2015). However, despite the significant potential that RNs have to advance healthcare delivery in primary care, their defined role and competencies remain inconsistent across countries. In Canada, RNs working in primary care have been colloquially titled ‘primary care nurses’ or ‘family practice nurses’ and recently a national set of competencies have been developed for this unique role (Canadian Family Practice Nurses Association [CFPNA], 2019; Lukewich, Allard, et al., 2020). Overall, the job titles used to identify RNs in primary care have not been well defined or synthesized internationally (Lukewich, Poitras, & Mathews, 2020). This ambiguity has led to the frequent use of the general ‘nurse’ in policy and research documents, without a clear distinction between nurses with distinct professional designations (i.e. nurse practitioners, RNs, licensed practical nurses) that each have unique scopes of practice, training and certification requirements, and regulatory oversight (Lukewich, Poitras, & Mathews, 2020; Maier et al., 2016). The lack of clear terminology leaves us poorly positioned to ensure that nurses with particular knowledge, skills and expertise are given the most appropriate roles. In addition, the education requirements of RNs vary considerably across countries, creating difficulty in making international comparisons. Similarly, there has been limited documentation

of education requirements specific to RNs in primary care; very few formal primary care nursing educational programs have been identified (Lukewich et al., 2018). The variability among RNs working in primary care internationally, including their titles and education requirements, offers the opportunity to examine differences more closely. Therefore, our study purpose is to identify and synthesize protected titles used for RNs and their education requirements internationally; the job titles used to refer to RNs in primary care settings; and primary care-specific education requirements. We will conduct a document analysis design, using the methodology described by Bowen (2009), and key informant consultations.

Overall, this project will be the first to report and compare titles and education requirements of RNs in primary care internationally. By outlining the variability among titles used to refer to RNs working in primary care internationally, future comparisons can be made across jurisdictions to inform research, practice, policy, and education.

## **2.2 Statement of Problem**

Over the years, RNs have taken on new, integrated roles across a variety of healthcare settings (Canadian Nurses Association [CNA], 2015). This diversity in nursing roles has led to a lack of clarity among the many titles used to identify RNs (Dowling et al., 2013). In Canada, there are three regulated classes of nurses with protected titles: nurse practitioners, RNs, and licensed practical nurses. Protected titles identify regulated nursing professionals who meet their licensure requirements and standards (College and Association of Registered Nurses of Alberta [CARNA], 2019). In comparison, there are many non-certified, informal job titles used to identify nursing within specific disciplines or practice areas, such as primary care nursing. Notably, title ambiguity causes confusion and can limit the benefits of policy, education, practice, and research (Lukewich, Poitras, & Mathews, 2020). By addressing this international



knowledge gap related to title ambiguity, professional equivalents can be more easily recognized for the purpose of professional regulation and research.

Similarly, the education requirements of RNs, and additional educational requirements of RNs in primary care, have not been well-defined internationally (Delamaire & Lafortune, 2010). Education paths for RN licensure differ greatly across countries, creating a barrier for meaningful comparisons (Organization for Economic Co-operation and Development [OECD], 2016). Synthesizing this information to gain clarity and consistency in the titles and education requirements of RNs can assist researchers and policy-makers with international comparisons; in particular, resolving this issue would allow for improved facilitation of primary care nursing research where the RN role can be further understood, explored, and developed.

## **2.3 Literature Review**

### **2.3.1 Primary Care Nursing**

In Canada, RNs working in primary care have been titled ‘primary care nurses’ or ‘family practice nurses’ (CFPNA, 2019). For the purpose of this proposal, the term ‘primary care nurse(s)’ will be used going forward when referring to RNs working in primary care settings. Primary care nurses are defined by Community Health Nurses of Canada (CHNC) (2019) as a subgroup of community health nurses relied upon by individuals, families, groups, communities, and populations to provide initial health services, most often in a clinic or office setting. Expectations of primary care nurses include, but are not limited to, chronic disease management, health screening and education, assessment and treatment of minor illnesses, and therapeutic interventions (CHNC, 2019; CNA, 2014). The roles carried out by primary care nurses are dependent upon the competencies of the RN and the needs of the individual or population receiving care (CHNC, 2019). These competencies are being developed but remain unclear in

many countries (Lukewich et al., 2018; Rashid, 2010); however, Canada has made a step forward in clarifying the role of primary care nurses by developing a set of national core competencies (CFPNA, 2019; Lukewich, Allard, et al., 2020). Through clarification of primary care nurse job titles, international comparisons can be made to develop unified competencies, creating consistency in the primary care nursing role.

### **2.3.2 Nursing Framework**

The Canadian Nurses Association (CNA) has created a nursing framework that outlines the importance of a defined scope of practice to optimize the professional RN role in care delivery (CNA, 2015). Scope of practice is dependent upon a hierarchy of boundaries with employer policies being the deciding factor outside of individual competencies and client needs. In advanced nursing, where RNs take specialty career paths, additional education may be required to complement an expanded scope of practice. It is important to define these scopes of practice and competencies as they differ across regulated nursing designations. Each nurse, within their regulatory designation, contributes to effective care delivery along the client continuum based on complexity of client status. Collectively, nurses have been recognized as the most prominent non-physician contributor to primary care teams (Freund et al., 2015). With RNs being increasingly integrated into primary care settings, it is of significant importance to optimize their role through clarification of their primary care competencies (CNA, 2014; Oelke et al., 2014). By outlining the fundamental variability in job titles used to refer to primary care nurses internationally, comparisons can be made across jurisdictions to create uniformity in scope of practice and competencies for RNs in primary care.

### 2.3.4 International Considerations

Select Organization for Economic Co-operation and Development (OECD) countries (i.e. Canada, United States, Australia, France, Germany, Italy) have outlined trends in nursing education, providing an overview of the levels of education available, associated titles, and specific education requirements (OECD, 2016). Among the countries that provided this information there is notable variability in the education pathways. Consistently, education requirements were not outlined specifically for different nursing disciplines, such as primary care. As well, a lack of consistency among job titles for primary care nurses internationally has been identified with primary care nurses referred to as ‘practice nurses’ and ‘community nurses’ in Australia and South Africa, respectively (Norful et al., 2017). Throughout the existing body of research, this ambiguity has led to a general use of the term ‘nurse,’ without a clear distinction among nursing designations (Lukewich, Poitras, & Mathews, 2020; Maier et al., 2016). This can be challenging when attempting to ensure that nurses with particular skills and knowledge are given the most appropriate roles. Alternatively, protected titles such as ‘RN’ remain fairly consistent internationally; protected titles for registered nursing professionals are relied upon to protect the public, and maintain public trust while providing ethical, safe, and competent care (CARNA, 2019; CNA, 2015; Nursing and Midwifery Board of Australia, 2013).

In addition, a systematic review by Norful et al. (2017) outlined the many roles and responsibilities carried out by primary care nurses internationally. Although chronic disease management, medication management, and patient education were major roles of primary care nurses, their responsibilities involved many other clinical and administrative duties (Norful et al., 2017). Nonetheless, the roles of primary care nurses are an integral component to the overall functioning of a healthcare team. Primary care nurses connect with many other professions to

create diverse teams involving physicians, dietitians, pharmacists, and social workers in urban, rural, or remote areas (Oelke et al., 2014). Ultimately, the lack of role clarity for primary care nurses may be a limiting factor to advancing primary care (CNA, 2014). By defining the primary care nurse role/job titles and clinical organizations in which they work, nurses can ensure they are leveraging all potential clinical RN responsibilities to maximize their contributions to patient care. In addition, ambiguity that surrounds the role of RNs in primary care will be reduced. Heightened clarity will improve human resource management. This may result in subsequent positive impacts on efficiency and effectiveness in primary care practice to deliver high quality and accessible healthcare (Delamaire & Lafortune, 2010). In an attempt to close the knowledge gap, this project will be the first report to synthesize international comparisons of titles and education requirements among primary care nurses.

#### **2.4 Study Purpose**

To identify and synthesize protected titles used for RNs and their education requirements internationally; the job titles used to refer to RNs in primary care settings; and primary care-specific education requirements.

#### **2.5 Research Objectives**

The following research objectives will be addressed in this project:

1. (a) To identify the protected titles of RNs and (b) to outline the education requirements of RNs in select OECD countries with developed primary care systems.
2. (a) To identify the job titles used to refer to RNs in primary care, (b) to outline the education requirements of RNs in primary care, and (c) to outline the practice settings involving RNs in primary care in select OECD countries with developed primary care systems.

## 2.6 Methods

### 2.6.1 Study Design

Document analysis (Step 1), using the methodology described by Bowen (2009), and key informant consultations (Step 2) will be used. As a systematic procedure for reviewing relevant documents, this analytic method involves selecting, appraising, and synthesizing data; key informant interviews can triangulate this method to help verify the extracted data (Bowen, 2009; Kumar, 1989).

### 2.6.2 Step 1: Document Analysis

#### *Search Strategy*

A variety of publicly available documents will be searched, including reports, regulatory guidelines, practice standards, applicable journal articles, and information on webpages of relevant international, national, and regional sources. Documents that identify the protected title for RNs or education requirements of RNs and/or the job titles used to refer to RNs in primary care or education requirements of primary care nurses will be included. In countries where the protected title “RN” is not used, we will first identify education and scope of practice to determine equivalent nomenclature. In addition, it will be imperative to determine the jurisdiction that is responsible for the regulation/professional code of nurses in each country. This will ensure that we conduct searches at the right jurisdictional level and identify any within country variations. For example, in Canada, RNs are regulated at the provincial/territorial level. Focus will be on documents published by established and known reputable sources that represent RNs and/or RNs in primary care; newspaper articles, opinion pieces, or similar documents without known quality will be excluded. Webpages will include, but are not limited to: The World Health Organization, OECD.org, Canadian Information Centre for International

Credentials, nursing regulatory bodies, nursing associations (e.g. Canadian Nurses Association, American Nurses Association, American Academy of Nursing, National Council of State Boards of Nursing, European Federation of Nurses Association), National Nursing Assessment Service, and nursing unions. Additional searches will be performed through the Google search engine using various keywords, including but not limited to: “registered nurse,” “class”, “title”, “primary care nurse”, “family practice nurse”, “community health nurse”, “community nurse”, and “education.” Additional keywords will be determined as the search evolves.

### ***Inclusion and Exclusion***

Countries considered for this project include the 37 countries who are members of the OECD with developed primary care systems and information available in English and French (Please note: bilingual team members will facilitate document review in French language). Moreover, OECD countries with an available fact sheet involving trends in nursing education on OECD.org (i.e. Canada, United States, Australia, France, Germany, Italy) will be included. In addition, the systematic review by Norful et al. (2017), which focused on identifying RN roles within primary care internationally, will be used to further select countries by identifying those with a specific interest in primary care nursing research. Australia, the United States, and Canada constituted a large majority of the findings in this study and compliment the above inclusion criteria. A final list of countries included in this document review will be determined based on the availability of documents meeting the outlined search strategy and inclusion/exclusion criteria.

### ***Data Extraction***

The information gathered will be organized into narrative summary tables. Information relevant and meaningful to the topic will be included for each of the chosen countries and

presented using the following categories: RN licensure education requirements, primary care education requirements, primary care practice setting(s), RN protected title, RN title(s) in primary care, regulatory jurisdiction, and references (see sample data extraction tables: Table 1 and Table 2). Table 1 will be used to present the data pertaining to RNs generally, while Table 2 will present the data specific to RNs in primary care. Canada’s definition of an “RN” (i.e. baccalaureate prepared/bachelor’s degree) will be used as the reference standard. Notably, RN licensure education is required by all RNs, both generally and specifically in primary care; primary care education requirements will outline if any mandatory/formal education programs exist internationally for primary care nurses. If more than one job title is used to refer to RNs and/or primary care RNs in a given country, all titles will be listed, stating the region (e.g. province, state) corresponding to each. These within country differences will be verified for correctness Step 2: Key Informant Consultations (see below) and any differences will be discussed in the data analysis section.

**Table 1.** Sample data extraction table – RNs generally.

	Country 1	Country 2	Country 3
RN licensure education requirements			
RN protected title			
Level of regulation			
References			

**Table 2.** Sample data extraction table – RNs in primary care.

	Country 1	Country 2	Country 3
Primary care education requirements			
Primary care practice setting(s)			
RN job title(s) in primary care			
Level of regulation			
References			

### 2.6.3 Step 2: Key Informant Consultations

#### *Identification of Key Informants*

Key informants from targeted nursing organizations of interest will be sought out to verify data from Step 1: Document Analysis and to identify any documents or data sources that might not be publicly available but relevant to addressing the study objectives. As well, key informants will be particularly significant when verifying the jurisdictional level of regulation/professional code for their country as this information may be more difficult to retrieve in Step 1. Key informants will be identified through professional networks of the Principal Investigator and study team members, as well as other colleagues with expertise and knowledge in primary care nursing internationally, and online searches of key webpages. For example, key informants may include researchers in other countries with expertise in primary care nursing (i.e. Dr. Allison Norful, United States; Dr. Elizabeth Halcomb, Australia) and representatives from nursing regulatory bodies or groups who have knowledge of international education requirements of RNs. Additional individuals may be selected from the “Contact Us” links on websites used for gathering documents.



### ***Procedure***

Key informants will be first contacted by email and further consultation will occur via email or teleconference/videoconference (as determined by preference of informant; using Cisco Webex Meetings which is available at no cost through Memorial University). Informants will first be sent study information, including study purpose and request to gather the required information. A copy of the data extraction table will be provided to the informant and we will ask them to verify the correctness and completeness of the data. If key informants provide new documents for review, the new information will be added to the data extraction table.

#### **2.6.4 Step 1 and Step 2: Data Analysis**

Thematic analysis will be used to compare and contrast the titles and education requirements of RNs and primary care nurses as well as the practice settings of primary care nurses, internationally. All data will be reviewed and verified independently by two researchers. Any discrepancies will be reviewed/resolved by a third reviewer. Data pertaining to terminology (i.e. protected titles, job titles) will require minimal analysis, as the titles used to identify RNs in primary care internationally can be categorized based upon similarities. Each member of the study team will review the data surrounding education requirements and practice settings to identify common themes. This will occur via teleconference meeting facilitated by the Principal Investigator. Coding for the development of themes may consider level of education (e.g. diploma, university degree), duration of education program, and practice model of RNs in primary care settings. Overall outcomes from the analysis will be organized in a table format (see sample data analysis table: Table 3).

**Table 3.** Sample data analysis table *[NOTE: will modify to fit study findings]*

	Country 1	Country 2	Country 3
<b>Protected Titles of RNs</b>			
Registered Nurse	•		
[Insert Other Equivalency Here]		•	•
<b>Job Titles for RNs in Primary Care</b>			
Primary care nurse	•	•	
Family practice nurse	•		
[Insert Others Here]			•
[Insert Others Here]			
<b>Education Requirements of RNs</b>			
Bachelor's degree	•	•	
Diploma	•		
<b>Education requirements of RNs in Primary Care</b>			
Advanced life-saving certification programs	•	•	
[Insert Others Here]		•	
<b>Practice Settings of RNs in Primary Care</b>			
Primary care networks	•		
Family health teams	•		

### 2.6.5 Ethical Considerations

Step 1: Document Analysis does not require approval from the Health Research Ethics Board. Ethics approval will be sought through the Health Research Ethics Board before commencing Step 2: Key Informant Consultations.

### 2.7 Dissemination of Results

Results of this study will support future research in this field, as it will provide a standardized set of terminologies and definitions from which to base research questions and objectives, and a more comprehensive way to synthesize international literature that already exists on the topic. Several end-of-grant knowledge translation strategies will be used to disseminate the results of this research to a variety of users. Findings from this research will be presented at local (i.e. College of Registered Nurses of Newfoundland and Labrador Webinar

Series, Primary Healthcare Partnership Form [PriFor]), national (Canadian Family Practice Nurses Association [CFPNA], Canadian Association of Health Services and Policy Research [CAHSPR]), and international conferences/forums (International Council of Nurses, Sigma Theta Tau Biennial Research Convention) to diverse audiences that will include the public, key decision-makers and policy-makers, researchers, and healthcare practitioners. A manuscript will be prepared and submitted for review and publication in a peer-reviewed journal (e.g. International Journal of Nursing Studies). Furthermore, a project summary will be prepared and shared with key informants who participated in consultations. The results will be made available for the purposes of providing a cohesive set of terms and information by which future research can be aligned.

## **2.8 Relevance to Nursing in Newfoundland and Labrador**

Although the focus of this study is to provide an international comparison of terms and information amongst a wide range of countries, the project will provide vital information that can be used to inform on-going research activities in Newfoundland and Labrador (NL) and across Canada that are relevant to this topic. The emerging role of RNs in primary care is becoming an increasingly important topic across the province, and additional research in this area is pertinent to the integration and optimization of this role. Although the integration of team-based care has proceeded at a slower pace in NL in comparison with other jurisdictions across Canada and other OECD countries, it is a current priority for the provincial government, which makes this study particularly novel, timely, and relevant. This study will provide a clear set of terminologies and definitions, which will assist in research examining RN nursing roles both provincially, as well as internationally, and facilitate cross-country and interjurisdictional comparisons. As well, study

findings will aid in the recruitment of internationally trained nurses by identifying equivalent standards and nomenclature.

### **Chapter 3**

#### **Manuscript**

This chapter includes the manuscript (Barrett et al., 2021), as submitted to the International Journal of Nursing Studies. The manuscript was submitted for peer-review and publication on April 10, 2021. Please note, the reference numbers included in Table 6 and 7 correspond to the reference list for the manuscript, which differs from the reference list for this practicum report.

#### **Reference:**

Barrett, C., Mathews, M., Poitras, M-E., & Norful, A., Tranmer, J., Martin-Misener, R., Ryan, D., & Lukewich, J. (corresponding author). Job titles and education requirements of registered nurses in primary care: An international document review. Submitted March 2021 to the International Journal of Nursing Studies.

### 3.1 Abstract

*Background:* Registered nurses have increasingly taken on new, integrated roles across a variety of healthcare settings, thus leading to a lack of clarity among titles used to identify registered nurses. Protected titles, such as “registered nurse,” identify regulated professionals, whereas informal job titles identify nurses by their education or practice area. The variation in education requirements of registered nurses and the inconsistency in titles used to identify registered nurses in primary care internationally limits the ability to compare research findings and policies across countries. There is also minimal documentation on the education requirements specific to registered nurses in primary care.

*Objectives:* This study aims to (a) outline protected titles and education requirements for registered nurses; and (b) identify job titles and education requirements specific to registered nurses in primary care internationally.

*Methods:* A modified document analysis with key informant consultations was employed. Organization for Economic Co-operation and Development and key partner countries were considered for inclusion (n=42). Online searches were performed using keywords (e.g. nurse, title, nursing education) to identify data focused on protected titles and education requirements of registered nurses, and job titles and education requirements of registered nurses in primary care. Data were extracted from online sources and verified for accuracy and completeness by key informants, identified for each country through online searches or professional networks.

*Results:* Document analysis and data verification were completed for 24 countries. Five countries were excluded for their lack of available documents in English or French. Another 13 countries were excluded due to inability to verify data. The findings show that “registered nurse” is the most common protected title internationally. Other protected titles include “general nurse” and

“nurse.” Many unofficial job titles for registered nurses in primary care were identified, including “primary care nurse”, “general practice nurse”, and “community nurse.” Twelve countries had no specific job title for registered nurses in primary care. Consistently, there was no mandatory education required for registered nurses to practice in primary care. However, many countries had primary care-specific programs available for nurses to gain knowledge in this area.

*Conclusions:* This study confirms that job titles used to identify registered nurses in primary care vary considerably across countries. A unified understanding of international nomenclature for this role can support and facilitate future research, education, and policy development to recognize and optimize primary care nursing by improving access and quality of care for individuals, families, and communities.

*Tweetable abstract:* Globally, job titles of RNs in primary care vary considerably and there are no formal primary care education requirements to practice.

### **3.2 Contribution of the Paper**

#### **What is already known about the topic?**

- Internationally, substantial variation exists in the roles and competencies of registered nurses in primary care settings.
- The professional identity of primary care nursing as a specialized field is limited by the ambiguity among primary care nursing job titles.

#### **What this paper adds**

- Titles used to identify registered nurses in primary care are inconsistent across countries, with many countries lacking a specific title for this role.

- Mandatory education for registered nurses in primary care is uncommon, although specialized education specific to primary care is available in many countries.
- The findings from this study can facilitate international comparisons of registered nurses in primary care to promote regulation and optimization of the role.

*Keywords:* Document analysis; Family practice; General nurse; Job title; Nursing education; Primary care; Primary care nursing; Primary health care; Practice nurse; Registered nurse

### **3.3 Introduction**

Primary care focuses on the promotion of health and wellness, the prevention of injury and illness, the advancement of health and social equity, and the delivery of accessible, holistic care (Canadian Nurses Association [CNA], 2016). In primary care, registered nurses (RNs) partner with other health care professionals to care for individuals, families, groups, and communities along the health continuum (CNA, 2014; Community Health Nurses of Canada, 2019). Internationally, nurses are becoming increasingly embedded in primary care delivery and have been recognized as the most prominent non-physician contributor to primary care teams (Freund et al., 2015; Organization for Economic Co-operation and Development [OECD], 2013). Roles of primary care nurses include, but are not limited to, chronic disease management, health screening and education, assessment and treatment of minor illnesses, and therapeutic interventions, encompassing their functional role as “generalists” (Canadian Family Practice Nurses Association [CFPNA], 2021; CNA, 2014; Lukewich, Allard et al., 2020; Norful et al., 2017; Poitras et al., 2018). The roles carried out by primary care nurses are dependent upon the competency (i.e. knowledge, skills, expertise) of the individual RN, the specific practice setting, funding model (e.g. fee-for-service, alternative payment plan) and team composition of practice in which they work, and the needs of the individual or population receiving care (CNA, 2015;



Halcomb et al., 2007; Mathews et al., 2020; Walker et al., 2015). However, the roles and responsibilities of primary care nurses differ widely (Lukewich et al., 2018; Norful et al., 2017) and the scope of practice and competencies of primary care nurses are poorly defined across many countries (Halcomb et al., 2016; Rashid, 2010). A few countries, such as Australia, Canada, New Zealand, and the United Kingdom, have developed national competencies or standards to clarify the role and articulate the value of RNs in primary care practice (Australian Nursing and Midwifery Federation, 2014; CFPNA, 2019; Lukewich, Allard et al., 2020; Mid-Central District Health Board et al., 2019; The Queen's Nursing Institute [QNI], 2020; QNI & The Queen's Nursing Institute Scotland [QNIS], 2017).

The confusion surrounding competencies and roles for primary care nurses has contributed to the ambiguity of job titles for RNs in primary care. "Registered Nurse" is a protected title, relied upon as a means to protect the public and maintain public trust by providing ethical, safe, and competent care (CNA, 2015; Nursing and Midwifery Board of Australia, 2013). Alternatively, job titles are non-protected, informal terms used to identify nurses within specific disciplines or practice areas (Kelly et al., 2019). Researchers have recognized international differences in job titles in primary care, such as "primary care nurse," "practice nurse," and "community nurse" (Norful et al., 2017) (for the purpose of this paper, the term "primary care nurse" will be used to refer to RNs working in primary care settings). However, to the best of our knowledge, there is no published literature outlining the variability in RN job titles in primary care. The identification of varying titles and educational competencies specific to primary care nursing may allow researchers and policymakers to better investigate and implement nursing contributions in primary care internationally.

In addition to the inconsistency and lack of clarity with regards to job titles, there is also limited documented knowledge on mandatory and optional education for primary care nurses (Lukewich et al., 2018). Trends in nursing education across certain OECD countries (i.e. Australia, Canada, France, Germany, Italy, United States) demonstrate variability in specific education requirements for RNs (OECD, 2016). Education requirements for nursing specialties, such as primary care, were not addressed in this report. Furthermore, the lack of formal or standardized education specific to primary care nursing, both within undergraduate and postgraduate programs, has been recognized as a contributing factor to the uncertainty around role expectations and scope of practice of primary care nurses (Calma et al., 2019; Vanhook et al., 2018; Wojnar & Whelan, 2017).

Many countries have established national associations to represent specific areas of nursing practice, such as primary care (e.g. Australian Primary Health Care Nurses Association, CFPNA, Danish Family Nursing Association, A Fellowship of Family Nurses in Estonia, New Zealand College of Primary Health Care Nurses) (Australian Primary Health Care Nurses Association, 2021a; CFPNA, 2021; Danish Society for Family Nursing, 2021; Kringos et al., 2015b; New Zealand College of Primary Health Care Nurses, 2014). Other countries, such as Iceland, have professional departments within their national association specific to primary care nurses (Icelandic Nurses' Association, n.d.). The United States' equivalent to these associations is the American Academy of Ambulatory Care Nurses, which is a generalized association that represents and supports nurses working in areas outside of hospital settings (American Academy of Ambulatory Care Nurses, 2021). These associations provide a national voice to collaborate and advance the primary care nurse role within research, education, and policy. Countries with a

primary care-specific association have recognized primary care nursing as a distinct nursing specialty.

Given the growing presence of primary care nursing globally, unified understanding of the nomenclature and education of this role within primary care settings is needed to facilitate cross-country comparisons. Therefore, the purpose of this study is to provide clarity to primary care nursing by documenting international equivalents of protected titles, job titles, and education requirements among RNs in primary care. The objectives are to: (a) identify the protected titles of RNs; (b) outline the entry-level education requirements of RNs; (c) identify the job titles used to refer to RNs in primary care; (d) identify and outline the presence of mandatory education requirements of RNs in primary care; and € describe the availability of optional nursing education specific to primary care across OECD and key partner countries.

### **3.4 Methods**

#### **3.4.1 Study Design**

Document analysis, informed by Bowen (2009), was the chosen design for this study. This systematic procedure was used in combination with key informant consultations to triangulate the method and enhance credibility of results (Bowen, 2009; Kumar, 1989).

#### **3.4.2 Search Strategy**

All OECD and key partner countries were considered for inclusion. International, national, and regional webpages (e.g. nursing associations – Canadian Nurses Association, National Council of State Boards of Nursing, nursing regulatory bodies – Nursing and Midwifery Board of Australia, The World Health Organization, OECD.org, Intercultural Education of Nurses in Europe [IENE], The Queen’s Nursing Institute) were searched for publicly available documents, including reports, policy documents, regulatory guidelines, practice standards, and

journal articles. Additional searches were performed through the Google search engine using various keywords, including but not limited to: “registered nurse,” “title,” “primary care nurse,” “nursing education,” and “regulation,” in addition to the country identifier (Table 1). For select countries noted in Table 1, the official language was used as the country identifier in these searches. Notably, the search term “registered nurse” repeatedly provided information specific to nursing employment opportunities and was eventually removed from the initial searches. Keywords evolved throughout searches as information was retrieved. For example, if “community nursing” was found to be the equivalent term to primary care nursing in a particular country, subsequent searches would include “community nurse” to identify information surrounding primary care nurse titles and education requirements. A different combination of country identifiers and keywords were used for each country until all required data was obtained. Abstracts/summaries of documents or webpages were reviewed to determine relevancy to study objectives. If abstracts/summaries were not available, documents or webpages were reviewed in their entirety to decide appropriateness for inclusion in content analysis. Only documents published by established and known reputable agencies that represent RNs and/or RNs in primary care were included. Newspaper articles, commentary/opinion pieces, or similar documents were excluded. Countries were excluded if data was unavailable in the English or French language, or if key informants provided no response leaving data unverified.

**Table 4.** Search strategy.

<b>Country Identifier</b>	Name of country (e.g. Finland)
	Official language of country <sup>a</sup> (e.g. Finnish)
<b>Examples of Keywords</b>	nurse, registered nurse, general nurse, title, protected title, nursing, nursing education, nursing program, nursing research, primary care nursing, primary care nurse, general practice nurse, community nurse, community health nurse, district nurse, health visitor, nursing regulation

<sup>a</sup>The official languages used as key terms in this search strategy included: Danish (Denmark), Dutch (The Netherlands), Estonian (Estonia), Finnish (Finland), Swedish (Sweden), Greek (Greece), Hungarian (Hungary), Icelandic (Iceland), Irish (Ireland), Italian (Italy), Japanese (Japan), Korean (South Korea), Spanish (Spain), Turkish (Turkey).

### 3.4.3 Data Collection and Extraction

Data collection and key informant consultations were conducted synchronously between November 2020 and March 2021. Data extracted from relevant documents included: protected/regulated title, RN education requirements, licensure examination process, primary care job title(s), primary care education requirements, level of regulation for RNs in primary care, and key informant contact information. With respect to primary care education requirements, information was sought on the availability of both mandatory and optional primary care-specific training programs or courses. Information on training programs for specific nursing roles commonly performed within primary care or other settings, such as well-women care, nurse prescriber training, motivational interviewing, and educational programs that advance qualifications to an Advanced Practice Nurse or Nurse Practitioner, were not explored in this study. Only English and/or French documents/sources were included. Data collection and extraction for France was conducted by a bilingual team member.

### 3.4.4 Key Informant Consultations

Data were verified independently by two researchers prior to initiating key informant consultations. Key informants and their contact information were identified from national

nursing organizations, academic institutions, relevant nursing research articles, and through professional networks of team members. After all required data were retrieved, smaller data extraction tables for each country were developed, and country-specific data and relevant references were shared with identified key informants via email. Key informants were asked to verify the correctness and completeness of data for their country of expertise. In several instances, the initial key informant identified and provided contact details for a more appropriate informant. At least two key informants were contacted for each country. Key informants were given the option to complete verification via email, telephone, or video conference. Two key informants (Portugal, United Kingdom) preferred a video conference interaction with the primary researcher to discuss and clarify extracted data. The remaining key informants noted changes within the extraction table and communicated by email. If responses were not received via email within one week, follow-up reminders were sent. Consent was obtained from each key informant to acknowledge their contributions to the study. The key informant consultation in France was carried out by a bilingual team member. Once all data were verified by key informants, further analysis was conducted to identify commonalities and differences within each category. Although we conducted content analysis, thematic analysis was not performed as this study did not require the coding of data into themes or categories.

### **3.4.5 Ethical Considerations**

The Newfoundland and Labrador's Health Research Ethics Board (Ref # 2020.283) determined that ethics approval was not required for the completion of this project.

## **3.5 Results**

Twenty-four of the 42 OECD and key partner countries were included in this study. Five countries (Chile, Columbia, Germany, Greece, Mexico) were excluded for their lack of available

sources in the English or French language and 13 countries (Brazil, China, Denmark, Hungary, India, Ireland, Italy, Lithuania, Luxembourg, Poland, South Africa, South Korea, Sweden) were excluded because data could not be verified by a key informant. Key informants were valuable in ensuring the accuracy and completeness of data. Table 2 provides a summary of included/excluded countries.

**Table 5.** List of included/excluded OECD and key partner countries (N=42).

<b>Included (N=24)</b>	Australia, Austria, Belgium, Canada, Czech Republic, Estonia, Finland, France, Iceland, Indonesia, Israel, Japan, Latvia, Netherlands, New Zealand, Norway, Portugal, Slovakia, Slovenia, Spain, Switzerland, Turkey, United Kingdom, United States
<b>Excluded due to Language and/or Unverified Data (N=18)</b>	Brazil, Chile, China, Columbia, Denmark, Germany, Greece, Hungary, India, Ireland, Italy, Lithuania, Luxembourg, Mexico, Poland, South Africa, South Korea, Sweden

### 3.5.1 Regulation

The nursing profession was most often regulated at a national-level (n=20 countries), although provincial/territorial/state regulation exists within four countries (Belgium, Canada, Spain, United States) (Almost, 2021; IENE, n.d.-b; National Council of State Boards of Nursing [NCSBN], 2020; Robinson & Griffiths, 2007). Consistently, either independent nursing bodies or government agencies possess regulatory duties, all outlining the laws, rules, and expectations of RNs (or equivalent) to ensure a safe and professional practice in the public's interest (NCSBN, 2020).

### 3.5.2 Protected Titles

Table 3 provides a summary of the data collected for each country, including protected titles, job titles for RNs in primary care, and education requirements both generally and specifically in primary care. Titles used to identify nurses were shown to be relatively uniform across countries, although not always protected. "Registered Nurse" was the most commonly

used protected title (n=14; Australia, Austria, Canada, Finland, Iceland, Israel, Japan, Netherlands, New Zealand, Portugal, Slovenia, Switzerland, United Kingdom, United States). Other titles included “Nurse” (n=5; Belgium, France, Latvia, Slovakia, Turkey), “General Nurse” (n=2; Czech Republic, Estonia), “General Care Nurse” (Spain), “Authorised General Nurse” (Norway), and “Professional Nurse” (Indonesia) (Table 3). Titles, such as “registered nurse” and “nurse,” used in Finland and France are not recognized as protected titles (A. Suutarla, personal communication, January 28, 2021; C. Fourneau & C. Renaux, personal communication, February 19, 2021).

### **3.5.3 Education Requirements and Licensure Exams**

Despite the relatively congruent nature of protected titles for nurses across countries, the education requirements for licensure varied in qualification, length of program, and licensure examination requirement. Eleven of the 24 countries (Estonia, Finland, France, Iceland, Norway, Portugal, Slovakia, Slovenia, Spain, Turkey, United Kingdom) identified a single educational pathway for obtaining qualification for licensure (i.e. bachelor degree or diploma). In contrast, 13 countries (Australia, Austria, Belgium, Canada, Czech Republic, Indonesia, Israel, Japan, Latvia, Netherlands, New Zealand, Switzerland, United States) had two or three educational pathways available, including a bachelor degree, master degree, associate degree, or diploma (Table 3). In Canada, these options varied by province, as Quebec was the only province to offer diploma training for RNs. In Latvia, as of 2022, only a bachelor degree option will be available for nursing qualification/licensure (E. Cela, personal communication, February 16, 2021). Although all education programs provided requirements for licensure, a higher-level nursing title was often indicative of the education obtained. For example, in the Netherlands, bachelor-prepared RNs were classified as Level 6 in the Dutch Qualifications Framework, while



vocationally trained RNs were classified as Level 4 in the framework (J. Veldhuizen, personal communication, January 29, 2021; National Coordination Point, n.d.). Similarly, in Israel, RNs with a bachelor degree were recognized as “RN with an academic degree” while diploma trained nurses were referred to as “RN” (NCSBN, 2020). The length of time to complete these nursing education programs varied, ranging from two to four and a half years (Table 3). For countries with the option to obtain a master degree for nursing qualification (n=3; Australia, Indonesia, New Zealand), previous education at a baccalaureate-level was required for entry (C. Kerr, personal communication, January 31, 2021; Government of New South Wales, 2020; Suba & Scruth, 2015). Furthermore, 13 out of 24 countries required individuals to pass a licensure exam to practice, including Austria, Canada, the Czech Republic, Finland, France, Israel, Japan, Latvia, the Netherlands, New Zealand, Slovakia, Switzerland, and the United States (Table 3). These licensure exams differ across countries. For example, the National Council Licensure Examination for Registered Nurses (NCLEX-RN) is used in a few countries, including Canada (excluding Quebec); whereas in Japan the Registered Nurse National Board Examination is administered (NCSBN, 2020; Robinson & Griffiths, 2007).

#### **3.5.4 Primary Care Job Titles**

Job titles used to refer to RNs working in primary care varied considerably across countries, identifying either a single title (n=8; France, Iceland, Israel, New Zealand, Norway, Portugal, Turkey, United Kingdom), multiple recognized titles (n=4, Australia, Canada, Estonia, Netherlands), or no specific title for this role (n=12; Austria, Belgium, Czech Republic, Finland, Indonesia, Japan, Latvia, Slovakia, Slovenia, Spain, Switzerland, United States) (Table 3). The most common job titles were “primary care nurse” (n=3; Australia, Canada, Netherlands) or “general practice nurse” (n=3; Australia, Netherlands, United Kingdom). Other titles such as

“primary health care nurse” (n=2; Iceland, New Zealand), “community nurse” (n=2; Estonia, Israel), “district nurse” (Norway), and “liberal nurse” (infirmière libérale) (France) were identified. As well, many countries identified titles surrounding the family health descriptor of primary care nursing, including “family nurse” (n=2; Estonia, Portugal), “family practice nurse” (Canada), and “family health employee” (Turkey). The only country with a protected title and regulated primary care nursing profession was Turkey. Notably, the “family health employee” role in Turkey was regulated but it also encompassed various other professionals (i.e. midwife, health officer, and emergency medical technician) and was not specific to nursing (Republic of Turkey, 2013). Professional associations specific to primary care nurses (or equivalent) were identified in many countries, however, they did not provide any formal regulation or protection of this distinct role.

### **3.5.5 Mandatory and Optional Primary Care Education**

All countries included in this study allow RNs to practice in primary care after completing their entry-to-practice nursing program. Only Slovenia and France have certain requirements to practice in primary care. In Slovenia, a specific area of primary care practice, known as the model of family practice, requires the completion of educational modules for RNs to practice (K. Čuček Trifkovič & B. Kegl, personal communication, January 29, 2021). As well, in France, clinical experience, equivalent to two years at full-time status, is necessary to practice in primary care as a liberal nurse (C. Fourneau & C. Renaux, personal communication, February 19, 2021). Aside from these exceptions, no mandatory education requirements were identified across countries; however, optional specialized education programs were available in many countries (n=17). Table 4 outlines the primary care-specific education available nationally to RNs. These optional education opportunities differed in their level of education (e.g. certificate,

master degree). Postgraduate courses/programs were available for professional development in 14 countries (Australia, Belgium, Canada, Czech Republic, Iceland, Israel, Japan, Latvia, Netherlands, New Zealand, Slovakia, Slovenia, Spain, United Kingdom); and master degrees in primary care specifically were available to advance one's academic credentials in the Czech Republic, Estonia, Iceland, Indonesia, and Portugal (n=5) (Table 4). In many countries primary care is an emerging area in nursing education, gaining more attention in recent years. For example, in Japan, a certificate program specific to primary care was only recently implemented in 2019 (Japan Primary Care Association, n.d.).

**Table 6.** Data by country.

Country	RN Title	Education Requirements	Length of Program	Licensure Exam	Primary Care Job Title	Mandatory Primary Care Education	Specialty Training <sup>a</sup> Available	References <sup>b</sup>
Australia	Registered Nurse	Bachelor degree Master degree	4 years 2 years	No	Primary care nurse General practice nurse	None	Yes	[32,62,67,70]
Austria	Registered Nurse	Bachelor degree Diploma	3 years	Yes	No specific title <sup>c</sup>	None	No	[25,30,37,48]
Belgium	Nurse	Bachelor degree Diploma	4 years 3 years	No	No specific title <sup>c</sup>	None	Yes	[40,41,84,88]
Canada	Registered Nurse	Bachelor degree Diploma <sup>d</sup>	2-4 years 3 years	Yes	Primary care nurse Family practice nurse	None	Yes	[1,13,18,62,70]
Czech Republic	General Nurse	Bachelor degree Diploma	3 years	Yes	No specific title <sup>c</sup>	None	Yes	[48,62,94,99]
Estonia	General Nurse	Diploma	3.5 years	No	Family nurse Community nurse	None	Yes	[21,62,92,93]
Finland	Registered Nurse	Bachelor degree	3.5-4.5 years	Yes	No specific title <sup>c</sup>	None	No	[55,62,76,82,90]
France	Nurse	Diploma	3 years	Yes	Liberal nurse	None	No	[22,39,62,70]
Iceland	Registered Nurse	Bachelor degree	4 years	No	Primary health care nurse	None	Yes	[59,62,91,96]
Indonesia	Professional Nurse	Bachelor degree Master degree	4 years 2 years	No	No specific title <sup>c</sup>	None	Yes	[85,89]

Israel	Registered Nurse	Bachelor degree Diploma	4 years 2.5 years	Yes	Community nurse	None	Yes	[60,62,64,69,83]
Japan	Registered Nurse	Bachelor degree Associate degree Diploma	4 years 2-3 years 3 years	Yes	No specific title <sup>c</sup>	None	Yes	[42–44,82]
Latvia	Nurse	Bachelor degree Diploma	4 years 3 years	Yes	No specific title <sup>c</sup>	None	Yes	[26,62,81]
Netherlands	Registered Nurse	Bachelor degree Diploma	4 years	Yes	Primary care nurse General practice nurse	None	Yes	[47,62,78,82]
New Zealand	Registered Nurse	Bachelor degree Master degree	4 years 2 years	Yes	Primary health care nurse	None	Yes	[58,63,68]
Norway	Authorised General Nurse	Bachelor degree	3 years	No	District nurse	None	No	[17,62,76,82]
Portugal	Registered Nurse	Bachelor degree	4 years	No	Family nurse	None	Yes	[9,28,62]
Slovakia	Nurse	Bachelor degree	3 years	Yes	No specific title <sup>c</sup>	None	Yes	[24,48,62]
Slovenia	Registered Nurse	Diploma	3 years	No	No specific title <sup>c</sup>	None <sup>e</sup>	Yes	[50,62,78]
Spain	General Care Nurse	Bachelor degree	4 years	No	No specific title <sup>c</sup>	None	Yes	[31,36,62,78]
Switzerland	Registered Nurse	Bachelor degree Diploma	3 years	Yes	No specific title <sup>c</sup>	None	No	[45,78,82]

Turkey	Nurse	Bachelor degree	4 years	No	Family health employee	None	No	[3,8,62,80]
United Kingdom	Registered Nurse	Bachelor degree	3 years	No	General practice nurse	None	Yes	[29,62,72,82]
United States	Registered Nurse	Bachelor degree Associate degree Diploma	3-4 years 4 years 2-3 years	Yes	No specific title <sup>c</sup>	None	No	[62,65,70,87]

RN = Registered nurse. <sup>a</sup>This specialty training is specific to programs or courses focused on primary care nursing (or equivalent). This does not include programs or training for specialty nursing skills within primary care, such as well-women care, or nurse prescriber. As well, this does not consider educational programs that progress qualifications to an Advanced Practice Nurse or Nurse Practitioner. Key informants were not asked to verify or provide this information. <sup>b</sup>References are in addition to personal communication with respective key informant(s). <sup>c</sup>This indicates that the data was verified by key informants and it was confirmed that no specific job titles are used to identify RNs in primary care. Rather, protected titles, such as RN or General Nurse, are used in primary care just as they are in other settings. <sup>d</sup>College diploma option available in province of Quebec only. <sup>e</sup>There is one exception in Slovenia. Education modules are required to practice in one area of primary care (model of family practice).

**Table 7.** Speciality primary care training available by country.

Country	Primary Care Specialty Training Description	References <sup>a</sup>
Australia	Transition to practice programs, or specialty programs (e.g. Nursing in Primary Health Care Practice [NiPHC]) are offered by the Australian Primary Health Care Nurses Association; Graduate certificates available in primary health care nursing (e.g. Australian College of Nursing)	[4,7]
Belgium	Postgraduate program of nursing in General Practice (e.g. University of Antwerp)	[95]
Canada	Specialized programs specific to primary care nursing (e.g. Family Practice Nursing Education Program, the Registered Nurses Professional Development Centre; Rural Nursing Certificate Program, University of Northern British Columbia); Certification program with the Canadian Nurses Association in community health nursing	[15,19,79,97]
Czech Republic	Masters level training or non-university education programs available in community care nursing (closely resembling primary care)	[*]
Estonia	Master degree (Health Sciences Masters) with specialty in Health Nursing	[93]
Iceland	Post graduate diploma or Masters level program available in Primary Health Care	[*]
Indonesia	Master degree (2 years); followed by specialist program in community nursing with clinical residency (2 semesters) (e.g. University of Indonesia)	[89]
Israel	In-service training program available in Primary Medicine (overseen by Nursing Administration)	[60]
Japan	Primary care nurse certification course offered by the Japan Primary Care Association	[44]
Latvia	Formal and informal educational opportunities (seminars, courses) aimed at primary care	[*]

Netherlands	Specialty training program for Primary care nurse (1-2 years depending on prior education)	[48]
New Zealand	Postgraduate diploma/certificate programs in Nursing (Primary Health Care) (e.g. University of Otago)	[98]
Portugal	Master degree (primarily) available in Community nursing in the focus area of Family health nursing (2 years of clinical experience is required for entry)	[28,62]
Slovakia	Specialized training programs/courses in Community care (includes primary care)	[*]
Slovenia	Educational modules specific to the model of family practice ( <i>required</i> to practice in this area of primary care) <sup>b</sup>	[*]
Spain	Specialty program in Primary/family and community nursing (includes competency exam and 2-year residency)	[36]
United Kingdom	General practice nurse programs available at multiple universities with varying education levels (e.g. University of London)	[29]

\*Information was provided by key informants only and did not include any additional references. <sup>a</sup>References are in addition to personal communication with respective key informant(s). <sup>b</sup>The model of family practice in Slovenia is a primary health care model implemented in 2011 to transition many elements of care to primary service delivery within general practitioner practices. This model places significant importance and responsibility on the role of a registered nurse, contributing to preventative screening and chronic disease management, among other duties (Rafferty et al., 2019).



### 3.6 Discussion

This study sought to provide clarity to primary care nursing by presenting an international synthesis of primary care job titles and education requirements/opportunities. Overall, job titles of primary care nurses varied internationally, and many countries had no standardized title to refer to this emerging role. As well, there were international differences in education requirements for nursing licensure and education opportunities specific to primary care nursing. Generally, there were no mandatory education requirements to practice in primary care internationally, aside from a specific area of primary care in Slovenia, known as model of family practice (K. Čuček Trifkovič & B. Kegl, personal communication, January 29, 2021). The results of this study lead to some reflections.

There is limited evidence on the extent to which primary care is covered within nursing curriculums internationally. As mandatory education for RNs entering primary care has not been prioritized, RNs rely on the knowledge obtained through their entry-level program to guide their clinical practice in primary care. Registered nurses entering primary care have reported feeling unprepared for their role, implying the need for improvements in primary care-specific nursing education (Calma et al., 2019; Martin-Misener et al., 2008). This feeling of unpreparedness can lead nurses to practice suboptimally by not using their full scope of practice, and can even affect job satisfaction and ultimately quality of care. There is a need to incorporate primary care-specific content into undergraduate curriculums and offer professional development opportunities in primary care, to better equip students and/or RNs with the fundamental knowledge and skills to practice within primary care (Calma et al., 2019; Vanhook et al., 2018). Moreover, the findings from this study and previous reviews (Maier & Aiken, 2016; Norful et

al., 2017) indicate the need for global advancement in primary care nursing to meet the growing demands in primary health care, highlighting the importance of developing nursing education.

The presence of professional associations within certain countries has likely contributed to advancing primary care nursing by recognizing and advocating for this distinct nursing specialty in practice, research, education, and policy. There is the potential for specialized associations to advocate for uniform job titles nationally and internationally. In Norway, the title “district nurse” is the recognized job title for RNs in primary care (A. Clancy, personal communication, January 21, 2021; Clancy et al., 2013; Rafferty et al., 2019). Alternatively, in the Netherlands and United Kingdom, district nurse refers to home and community care nurses (J. Veldhuizen, personal communication, January 29, 2021; QNI & QNIS, 2015). Evidently, the title of “district nurse” represents nursing groups inconsistently across countries. The specialized associations in the Netherlands and United Kingdom may have generated clarity for this role/title, whereas in Norway there is no primary care-specific nurses association to promote international uniformity for the “district nurse” title (Kringos et al., 2015b). Similarly, the absence of a specialized association advocating for primary care nurses in Turkey may be the reason for the use of a generalized title to refer to RNs in primary care (i.e. family health employee) that does not distinguish between nursing and other providers within the setting (A. K. Harmancı Seren, personal communication, February 8, 2021; Republic of Turkey, 2013). As well, in France where a professional association is lacking, nursing practice both generally and specifically in primary care is not regulated, requiring no registration or license to practice (C. Fourneau & C. Renaux, personal communication, February 19, 2021). This can significantly impact the consistency, safety, and quality of care provided. Notably, the presence of established associations and recognized national job titles does not eliminate all challenges. Job titles are

oftentimes not protected, allowing for other titles to be used interchangeably. In Canada, primary care nurse and family practice nurse are commonly used job titles in primary care (CFPNA, 2021); however, without regulation of these titles or unified agreement on a single job title, there is variation in the use of these titles across provinces/territories. This concern of title ambiguity has been recognized for midwives as well, encouraging the development of initiatives to clarify midwife job titles and strengthen their role expectations (Grundy-Bowers, 2018).

The findings of this study may improve literature searches with an international scope on RNs and/or RNs in primary care by enhancing search syntax through the use of distinguished search terms and nomenclature. The choice to focus on OECD and key partner countries was an appropriate initial step to bring awareness to the international ambiguity within primary care nursing titles. The findings from this study align with other international reports focusing on nursing education requirements and regulation (Robinson & Griffiths, 2007) and nursing shortages (Simoens et al., 2005) among OECD countries; and confirm international variation in primary care nursing identified by previous researchers (Halcomb et al., 2016; Maier & Aiken, 2016; Norful et al., 2017). Future research should focus on broader international comparisons that include countries where documents were not available in English or French (those excluded in this study) and those not identified as an OECD or key partner country.

### **3.6.1 Limitations**

Although efforts were made to include as many countries as possible, this study only included countries with documents available in English and/or French. Multiple attempts were made to contact a key informant in each country, however, we were unsuccessful at connecting with an informant to verify data in certain countries (many emails were unanswered). As well, this study did not seek specifics for each specialized course/program/degree identified, therefore

the level of detail for optional primary care education varied by country based on the information available/provided by key informants. Additionally, despite the verification of data by key informants with nursing expertise, there is potential that language barriers may have resulted in miscommunication or imprecise exchange of information.

### **3.7 Conclusion**

This paper is the first to report and compare titles and education requirements for RNs in primary care internationally. Findings from this document analysis confirm that there is considerable variation in job titles as well as the availability of primary care-specific educational programs across countries. These findings offer a synthesis of information that can act as a foundation to facilitate improvements in primary care nursing research and patient care through evidence-based decision making. Given the rapidly expanding role of primary care nursing globally, primary care-specific educational opportunities could benefit the primary care nursing workforce. Further research outlining the global progression of this role, including job titles and education, will continue to support this distinct field of nursing and contribute to the evolution of primary healthcare systems internationally.

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## **Chapter 4**

### **Research Experience and Knowledge Translation**

This chapter will include a reflection of my research experiences throughout this practicum project, and a summary of knowledge translation (KT) activities and key learning outcomes from the completion of these activities.

#### **4.1 Research Practicum Project Summary**

This research project began in the Fall 2020, starting with the development of a research proposal to present ideas/plans and involve nursing colleagues. The proposal required a detailed literature review and was an important first step in developing specific study objectives and outlining methods/approaches. In the Winter 2021 semester, it was decided among team members after completing market analysis forms for three potential journals that the manuscript would be prepared for the International Journal of Nursing Studies (IJNS). An article outline was developed that complied with the guidelines of this specific journal. Once data collection, including verification of data by key informants, and data analysis was complete the manuscript writing process began.

The findings from this document analysis confirmed international ambiguity in primary care nursing, a conclusion that had been noted by previous researchers (Halcomb et al., 2016; Maier & Aiken, 2016; Norful et al., 2017). This study found that job titles among RNs in primary care differ significantly across countries, and oftentimes are not protected and do not represent a regulated nursing practice. As well, it was found that RNs in primary care settings have no mandatory education requirements, internationally. Interestingly, many countries had education opportunities available (i.e. courses, programs, degrees) for RNs to gain additional knowledge in primary care nursing.

Knowledge translation approaches were integrated through all stages of this research study. First, the research process involved leaders in primary care nursing research, both as authors and key informants in the document analysis to verify data. In addition, journal and conference abstract submissions were chosen appropriately to maximize the dissemination of

findings to knowledge users and initiate the integration of findings into research, education, practice, and policy development.

## **4.2 Knowledge Translation Activities**

The methods of KT for this project included preparation and submission of a manuscript for publication, and submission of an abstract for a conference presentation. To support KT activities (e.g. open access publication, conference participation), funding was acquired through a provincial source. The application for research proposal and funding application was completed in N6660. The remaining activities were executed in the final course of this research practicum project (N6661).

### **4.2.1 Manuscript**

The manuscript was prepared according to the author guidelines of the IJNS accessed online. This was the journal chosen for submission for its respectability and global readership, complementing the international nature of the study. As well, the aim and scope of the IJNS included international health-related research to promote evidence-based practice and policy, which aligned well with our study objectives and overall findings (Elsevier, 2018). The author guidelines had many elements to consider when preparing the manuscript, such as a specific title format (i.e. Topic [or question]: Method), a 400-word abstract, and a “Contribution of the Paper” section (outlining what is known about the topic and what the study adds to this existing knowledge) (Elsevier, 2018). However, the guidelines were quite reasonable and allowed me to write the manuscript without many formatting challenges. The word limit for both the abstract and the body of the manuscript were appropriate allowing for 400 words and 7000 words, respectively. As well, the guidelines allowed for a maximum of five tables, which was sufficient to allow for the presentation of elements of the methods and results (Elsevier, 2018).



Throughout the data collection and manuscript writing process, I had weekly or bi-weekly video meetings with Dr. Lukewich and her research assistant to discuss study progress and present any challenges/questions that may have developed. As well, I had regular contact via email with other co-authors who provided valuable contributions to the study. Dr. Lukewich provided direction regarding the organization of the tables and the inclusion of references within the tables, providing examples from previous research. Prior to the completion of data collection, a draft study protocol was submitted to colleagues for review and feedback. In March 2021, all data was collected and verified by key informants. Subsequently, conclusions were drawn and a draft manuscript for publication was completed. Throughout the review process, all members of the team provided insightful comments and suggestions to improve the content outlining the significance of the topic and value of the findings, the organization of methodological steps, and the formatting of the manuscript. For example, suggestions were made regarding the flow and focus of the introduction and discussion, and the clarity of the methodology as this study's approach had not been widely defined or used by previous researchers. Comments and edits to the manuscript were done using the reviewing and tracking features within Microsoft Word.

All feedback was valuable in creating a meaningful manuscript that contributes a new synthesis of knowledge to primary care nursing. I believe my ability to critically review comments and incorporate suggestions improved through my completion of this practicum project. It was interesting to have multiple sources of insight, all of which provided different ideas that strengthened the final manuscript. I was confident in the manuscript that was submitted to the IJNS for publication on April 10, 2021. The editor's decision and peer-review is pending.

### **4.2.2 Conference Opportunities**

An abstract was prepared for the International Council of Nurses 2021 Congress: Nursing Around the World. The abstract was submitted for inclusion in this virtual meeting as a digital poster presentation in November 2021. This was the chosen conference to submit an abstract for KT for its international scope and relevancy to our topic of study, and its target audience of international nursing researchers which aligned well with the predicted knowledge users of our study. This conference connects nurse leaders and researchers from across the globe to share the latest in nursing research; a virtual platform was chosen for this year due to the uncertainty surrounding the Covid-19 pandemic. Within this conference, a variety of sub-themes were outlined to categorize the studies being presented. Our study fit well in sub-theme 5 (Nursing Care and Advanced Practice Nursing) which included community and primary health care as a key interest. The manuscript abstract was condensed to complement the 250-word limit, and feedback was provided by all team members prior to finalizing the abstract for submission. This abstract was submitted on March 9, 2021 and can be found in Appendix. The decision on abstract acceptance is expected by May 2021.

Unfortunately, this is the only conference an abstract has been submitted to thus far. First, the completion of the manuscript exhausted much of the time available in this final practicum source, providing minimal time to meet deadlines for other relevant conferences. As well, due to the ongoing pandemic, many conferences have been delayed or postponed, limiting KT opportunities. Nonetheless, following completion of this practicum project I will continue to seek KT activities and submit abstracts for inclusion in future conferences.

### **4.2.3 Funding**

Finally, funding was sought to assist with expenses related to KT activities. Due to the virtual nature of many conferences this year, expenses will primarily include registration fees. A proposal was submitted to the Newfoundland and Labrador Education and Research Trust in conjunction with the College of Registered Nurses of Newfoundland and Labrador (CRNNL). This was completed in N6660 and was submitted in October 2020. As a research team, we were successful in receiving this award. I was not heavily involved in the application process for this funding, but rather focused on writing and finalizing the proposal. My non-practicing status with the CRNNL did not allow me to fully submit this application, therefore Dr. Lukewich was the principal investigator who completed all other required forms. As well, through the CRNNL and the Education and Research Trust, I was successful in receiving the Graduate Nursing Scholarship valued at \$1000.

## **4.3 Key Learning**

Throughout this research practicum project, I gained valuable knowledge from my experiences with the research process that I expect to carry with me as I continue developing my research skills and contributing to the advancement of primary care nursing research.

### **4.3.1 Proposal Development**

A research proposal organizes research plans and provides a detailed outline of the significance and benefit of the research being performed (Sudheesh et al., 2016). This initial step in the research process is relied upon to carry out steps such as grant funding and ethics committee approval. I understand the value in completing an extensive literature review, including an adequate number of primary sources, to truly articulate the significance of the topic. As well, a rigorous description of the methodology can ensure that the readers/reviewers

understand the appropriateness of the methods in addressing the research question and/or specific objectives. It is important to identify early in research developments what ethical considerations need to be recognized and approved. Notably, many elements of proposals develop and change as studies progress.

#### **4.3.2 Publication Process**

I understand the importance in reviewing author guidelines and journal aims when deciding on a journal for manuscript submission. Guidelines differ with each journal, at times quite significantly, therefore I anticipate the use of detailed outlines to organize journal specifications when preparing future manuscripts. As well, when submitting a manuscript, I understand the benefit of a cover letter to address the editor, introduce the study, and recognize the impact the findings may have on readers of the journal. Using a template, I created a cover letter to accompany our manuscript. I was also tasked with compiling all required documents/info to build the portable document format and complete the online submission process. This was a valuable learning experience that will help me with future manuscript submissions.

#### **4.3.3 Unexpected Events**

One area specifically that required considerable adjustment when the data collection process began was the inclusion criteria. Initially, it was expected that the World Bank (2020) classification of high- and middle-income countries would be the list used to determine eligible countries for this study. Upon completion of N6660, it was believed that all high- and middle-income countries would be considered for inclusion, yielding a total of 133 countries. However, after initiating the data collection process, it was determined that many countries had accessible information in English or French, and the process for gathering relevant documents/webpages

was quite time consuming. Even with the help of a research assistant, the process of collecting data for over 100 countries, with the time constraint we were faced with during this practicum course was not reasonable. Through discussions with Dr. Lukewich and her research assistant, we decided to limit the country eligibility to Organization for Economic Co-operation and Development and key partner countries, which yielded 42 countries. Although a larger, more inclusive international report would have been ideal, it was not feasible for a short, independent practicum project. This adjustment in inclusion/exclusion criteria caused certain data that had been collected early to be discarded. Unfortunately, some time spent on data collection was lost due to this change; however, a reasonable list of eligible countries was necessary for timely completion of this study.

#### **4.4 Conclusion**

The purpose of this Master of Nursing research practicum project was to build a foundation of research knowledge and skills by carrying out various nursing research activities. I engaged in three important activities that are imperative to developing research that is supported, recognized, and integrated into future research, education, practice, and policy. The major focus of this project was writing a manuscript for publication, a KT activity that allows for the formal recognition of findings within scholarly literature. I have gained experience throughout this practicum project that will allow me to develop research proposals, prepare manuscripts, and write conference abstracts with more independence in the future. I understand the challenges that can present throughout the research process, and the critical thinking and modifications that are required to ensure timely completion of a reliable and credible study. I am sure to apply and build upon the knowledge I have gained in N6661 as I continue my involvement in nursing research experiences.

## **Chapter 5**

### **Advanced Nursing Practice Competencies**

Throughout the completion of my Master of Nursing (MN) research practicum project, I developed and displayed advanced nursing practice (ANP) competencies outlined by the Canadian Nurses Association (CNA) (2019). The competencies I feel I have demonstrated include education, research, leadership, and consultation and collaboration. This chapter will describe how I displayed each of these ANP competencies throughout the practicum project.

### **5.1 Education**

Educational competencies involve participation in teaching and learning activities for healthcare providers, students, patients, and families (CNA, 2019). By engaging in knowledge translation (KT) activities, such as writing a manuscript and seeking conference participation, I am sharing novel research findings through appropriate channels. As a student, I am experiencing academic and professional growth, while ensuring the formal development of knowledge is shared to educate and inform key stakeholders. I anticipate further demonstration of this competency as I officially complete my MN and continue to diffuse and disseminate the knowledge I have generated. I expect this knowledge will foster new educational opportunities aimed at improving primary care nursing as a specialty practice.

### **5.2 Research**

Advanced nursing practice research competencies involve generating, synthesizing, critiquing and applying research to inform practice (CNA, 2019). My MN research practicum project was my introduction to all stages of nursing research development, from the initial development of a research proposal to the preparation and submission of a manuscript for review and publication in a peer-review journal. I have generated research findings that can be used to inform future research, education, and policy focused on improving primary care nursing practice. I anticipate staying involved in future related studies and building upon this important topic to promote primary care nursing development across a greater number of countries.

### **5.3 Leadership**

The leadership competencies associated with ANP surround the expectations that advanced practice nurses are leaders in their field, and the organizations and institutions where they work, seeking opportunities for positive change (CNA, 2019). I demonstrated this

competency by taking on a leadership role in data collection and throughout the development of my manuscript. I organized the collection of data between myself and other team members and carried out all key informant consultations, tracking verified data following each interaction/meeting. I maintained strict deadlines for the completion of data collection and expressed these deadlines to all team members and key informants. As well, I executed these leadership competencies in my role as first author preparing an initial draft of a manuscript for publication and by seeking KT opportunities to share research findings internationally. Although I have only submitted an abstract to one conference, I will continue to explore other KT opportunities to support the dissemination of study findings. Furthermore, I will be expanding my leadership role as I begin doctorate studies in Fall 2021. I look forward to remaining focused on primary care nursing research and potentially expanding on this project and leading the development of future related studies.

#### **5.4 Consultation and Collaboration**

Finally, I engaged substantially in the competencies of consultation and collaboration, described by the CNA (2019) as effective communication and interaction with clients, colleagues, and key stakeholders. I believe I demonstrated this competency to an advanced level, considering a significant portion of the data collection process for my research study involved consultations with key informants from all included countries. I independently consulted and engaged in discussion with key informants from 24 countries, two of which were video consultations. This study exemplified the importance of academic collaborations to strengthen research outcomes. By initiating these interactions with international academic leaders and researchers, I have developed professional relationships and networks that may lead to future collaborations.



As well, both the proposal and the manuscript were done in collaboration with my supervisor, research assistant, and five additional colleagues from both Canada and the United States. I engaged in frequent discussion with all co-authors, who informed and revised both pieces of work related to this study. Through my upcoming involvement in KT activities, such as virtual conferences and networking, I will continue to involve and inform all team members and seek collaborations with other nurse leaders in this field.

## **Chapter 6**

### **Future Directions and Conclusion**

This chapter will outline the future directions for this study, including conference presentations, manuscript revisions and publication, and future research projects. The overall conclusions of this Master of Nursing (MN) research practicum project will also be discussed in this chapter.

### **6.1 Conference Presentations**

I anticipate the acceptance of my abstract for the International Council of Nurses Congress, taking place from November 2-4, 2021. If accepted, I will be required to develop a digital poster presentation for this virtual conference. As a novice researcher, this will provide me with a chance to learn the process for submitting to and presenting at a conference. This conference will be a valuable platform for communicating study findings to international nurse leaders. I would like to participate in in-person conferences to maximize my networking opportunities. I will continue to seek out upcoming conferences as organizations remove their restrictions based on public health guidelines following the pandemic.

### **6.2 Manuscript Revisions**

A manuscript focused on my research practicum project was submitted on April 10, 2021. The journal's decision on accepting or rejecting the manuscript has not yet been made. This is expected to be shared within four weeks of submission. We will wait for a response from the International Journal of Nursing Studies and complete the actions required for publication. If not accepted, we will re-submit to another journal (e.g. Nursing Outlook, BMC Family Practice).

### **6.3 Future Research**

As this research study is the first paper to synthesize international primary care nurse titles and education requirements, there is great opportunity to build upon and expand this research. Collaborating with international researchers who have the ability to translate languages other than French (e.g. Danish, Chinese, Spanish) would enable expansion of this study to include additional countries. I would like to use these research findings to inform and support studies focused on advancing primary care nursing content in undergraduate education. As well, this study has outlined the potential significance of specialized nursing associations in the

recognition and regulation of primary care nursing. I would like to further investigate the presence and impact of these associations, internationally. I expect to integrate the findings from this study into my future research training, including the completion of a PhD in Nursing.

#### **6.4 Conclusion**

In conclusion, the overall goal and specific objectives of my MN research practicum project have been met. I demonstrated advanced nursing practice competencies (Canadian Nurses Association, 2019) including those categorized under education, research, leadership, and consultation and collaboration. I collaborated with international nurse leaders, integrating feedback to improve the overall quality and presentation of research findings within the manuscript. This study has synthesized nursing knowledge that clarifies international job titles and education requirements of registered nurses (RNs) in primary care.

Globally, protected titles for RNs are quite consistent and usually accompany a regulated practice. Alternatively, job titles used to identify RNs in primary care lack clarity and uniformity, with many countries having no specific title to refer to this role. Among the countries that have identified job titles for RNs in primary care, there is no regulated practice, oftentimes leading to an inconsistent use of titles. As well, there are no mandatory education requirements for RNs to practice in primary care across countries. Although focused education has not been prioritized for RNs to practice in primary care, many countries identified optional education opportunities for RNs to develop their knowledge in primary care nursing. This study confirmed the ambiguity that surrounds primary care nursing across countries, and the necessary development that is required to optimize this specialized nursing practice.

I value the knowledge I have gained throughout this MN research practicum, and I look forward to applying it in my future roles as researcher, educator, and leader.

## References

1. Almost, J. (2021). *Regulated nursing in Canada: The landscape in 2021*. Canadian Nurses Association. <https://cna-aiic.ca/en/nursing-practice/the-practice-of-nursing/regulated-nursing-in-canada>
2. American Academy of Ambulatory Care Nurses. (2021). *What is ambulatory care nursing?* <https://www.aaacn.org/practice-resources/what-ambulatory-care-nursing>
3. Ankara University. (n.d.). *Examinations, assessment and grading*. <http://bbs.ankara.edu.tr/bolumbilgi.aspx?icerik=SinavDegerlendirmeveNotlandirma&bno=1515&bot=112>
4. Australian College of Nursing. (2020). *Graduate certificate in community and primary health care nursing*. <https://www.acn.edu.au/education/postgraduate-course/community-and-primary-health-care-nursing#overview>
5. Australian Nursing and Midwifery Federation. (2014). *National practice standards for nurses in general practice*. [http://www.anmf.org.au/documents/National\\_Practice\\_Standards\\_for\\_Nurses\\_in\\_General\\_Practice.pdf](http://www.anmf.org.au/documents/National_Practice_Standards_for_Nurses_in_General_Practice.pdf)
6. Australian Primary Health Care Nurses Association. (2021a). *About APNA*. <https://www.apna.asn.au/about>
7. Australian Primary Health Care Nurses Association. (2021b). *Transition to practice program*. <https://www.apna.asn.au/education/transitiontopractice>
8. Bahçecik, N., & Alpar, S. E. (2009). Nursing education in Turkey: From past to present. *Nurse Education Today*, 29, 698-703. <https://doi.org/10.1016/j.nedt.2009.05.008>

9. Barbieri-Figueiredo, M., Vilar, A. I., Andrade, L., Araújo, C., & Silva, M. J. (2017). Family health nursing - Development and implementation in primary health care in Portugal. *Pflege & Gesellschaft*, 22, 51-66.
10. Barrett, C., Mathews, M., Poitras, M. E., Norful, A. A., Martin-Misener, R., Tranmer, J., Ryan, D., & Lukewich, J. (2021). *Job titles and education requirements of registered nurses in primary care: An international document analysis*. Manuscript submitted for publication.
11. Bowen, G.A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40. <https://doi.org/10.3316/ORJ0902027>
12. Calma, K. R. B., Halcomb, E., & Stephens, M. (2019). The impact of curriculum on nursing students' attitudes, perceptions and preparedness to work in primary health care: An integrative review. *Nurse Education in Practice*, 39, 1-10.  
<https://doi.org/10.1016/j.nepr.2019.07.006>
13. Canadian Family Practice Nurses Association. (2019). *National competencies for registered nurses in primary care*. <https://www.cfpna.ca/copy-of-resources-1>
14. Canadian Family Practice Nurses Association. (2021). *Family practice nursing: We are registered nurses in primary care*. <https://www.cfpna.ca/about>
15. Canadian Nurses Association. (2014). *Optimizing the role of nurses in primary care in Canada: Final report*. <https://www.cna-aiic.ca/~media/cna/page-content/pdf-en/optimizing-the-role-of-nurses-in-primary-care-in-canada.pdf?la=en>
16. Canadian Nurses Association. (2015). *Framework for the practice of registered nurses in Canada* (2nd ed.). <https://www.cna-aiic.ca/en/nursing-practice>
17. Canadian Nurses Association. (2016). *Dementia in Canada: Recommendations to support care for Canada's aging population*. <https://www.cna-aiic.ca/~media/cna/page-content/pdf->

[en/dementia-in-canada\\_recommendations-to-support-care-for-canadas-aging-population.pdf?la=en&hash=4813DCAB22E1C116011B8B6C18F235213BD5A3CB](#)

18. Canadian Nurses Association. (2019). *Advanced Practice Nursing: A Pan-Canadian Framework*. <https://cna-aiic.ca/en/nursing-practice/the-practice-of-nursing/advanced-nursing-practice>
19. Clancy, A., Leahy-Warren, P., Day, M. R., & Mulcahy, H. (2013, March). Primary health care: Comparing public health nursing models in Ireland and Norway. *Nursing Research and Practice*, 2013, Article e426107. <https://doi.org/10.1155/2013/426107>
20. College and Association of Registered Nurses of Alberta. (2019). *Use of title standards*. [https://nurses.ab.ca/docs/default-source/document-library/standards/use-of-the-title-standards.pdf?sfvrsn=948036b7\\_20](https://nurses.ab.ca/docs/default-source/document-library/standards/use-of-the-title-standards.pdf?sfvrsn=948036b7_20)
21. College of Nurse of Ontario. (2014). *Legislation and regulation: An introduction to the Nursing Act, 1991*. [https://www.cno.org/globalassets/docs/prac/41064\\_fsnursingact.pdf](https://www.cno.org/globalassets/docs/prac/41064_fsnursingact.pdf)
22. Community Health Nurses of Canada. (2019). *Canadian community health nursing professional practice model & standards of practice*. <https://www.chnc.ca/standards-of-practice>
23. Danish Society for Family Nursing. (2021). *Danish Society for Family Nursing*. <http://familiesygepleje.dk/>
24. De Maeseneer, J. (2016). *Strengthening the model of primary health care in Estonia: Assessment report*. World Health Organization Regional Office for Europe. [https://www.euro.who.int/\\_data/assets/pdf\\_file/0007/321946/Strengthening-model-primary-health-care-Estonia.PDF?ua=1](https://www.euro.who.int/_data/assets/pdf_file/0007/321946/Strengthening-model-primary-health-care-Estonia.PDF?ua=1)

25. Debout, C., Chevallier-Darchen, F., Petit dit Dariel, O., & Rothan-Tondeur, M. (2012). Undergraduate nursing education reform in France: From vocational to academic programmes. *International Nursing Review*, 59, 519-524. <https://doi.org/10.1111/j.1466-7657.2012.01016.x>
26. Delamaire, M., & Lafortune, G. (2010). Nurses in advanced roles: A description and evaluation of experiences in 12 developed countries. *OECD Health Working Papers*, 54. <https://doi.org/10.1787/5kmbrcfms5g7-en>
27. Dimunová, L. (n.d.). *Nursing care: Training for medical education via innovative e-technology*. [https://www.upjs.sk/public/media/19336/A3\\_MediTec\\_Dimunova.pdf](https://www.upjs.sk/public/media/19336/A3_MediTec_Dimunova.pdf)
28. Elsevier. (2018). *International Journal of Nursing Studies: Author information pack*. [https://www.elsevier.com/wps/find/journaldescription.cws\\_home/266?generatepdf=true](https://www.elsevier.com/wps/find/journaldescription.cws_home/266?generatepdf=true)
29. Euroguidance Austria. (2021). *The Austrian education system*. <https://www.bildungssystem.at/en/health-professions/school-of-nursing>
30. European Observatory on Health Care Systems. (2001). *Health care systems in transition: Latvia*. [https://www.euro.who.int/\\_data/assets/pdf\\_file/0004/95125/E72467.pdf](https://www.euro.who.int/_data/assets/pdf_file/0004/95125/E72467.pdf)
31. Freund, T., Everett, C., Griffiths, P., Hudon, C., Naccarella, L., & Laurant, M. (2015). Skill mix, roles and remuneration in the primary care workforce: Who are the healthcare professionals in the primary care teams across the world? *International Journal of Nursing Studies*, 52, 727-743. <https://doi.org/10.1016/j.ijnurstu.2014.11.014>
32. Fronteira, I., Jesus, É. H., & Dussault, G. (2020). Nursing in Portugal in the National Health Service at 40. *Ciência & Saúde Coletiva*, 25(1), 273-282. <https://doi.org/10.1590/1413-81232020251.28482019>



33. General Practice Nurse Education Network. (2021). *Early career: General practice nurse programmes available in the United Kingdom*. <https://gpnen.org.uk/early-career/general-practice-nurse-programmes-available-in-the-united-kingdom/>
34. Glarcher, M., & Lex, K. M. (2020). Advanced nursing practice in Austria under consideration of outcome measurement. *The Journal of Evidence and Quality in Health Care*, 155, 11-16. <https://doi.org/10.1016/j.zefq.2020.06.012>
35. González Jurado, M. A. (2015, April). *Advanced practice nurse in Spain*. <https://globalhealth.mcmaster.ca/sites/default/files/documents/advancedpracticenurseinspain.pdf>
36. Government of New South Wales. (2020, March). *Becoming a registered nurse*. <https://www.health.nsw.gov.au/nursing/careers/Pages/registered-nurse.aspx#:~:text=The%20most%20common%20entry%20point,the%20equivalent%20part%2Dtime>
37. Grundy-Bowers, M., O'Brien, S., & Harmer, V. (2018, January). Harmonising nursing and midwifery titles in an acute hospital. *Nursing Times*, 114(1), 36-39.
38. Halcomb, E. J., Davidson, P. M., Salamonson, Y., Ollerton, R., & Griffiths, R. (2008). Nurses in Australian general practice: Implications for chronic disease management. *Journal of Nursing and Healthcare of Chronic Illness* in association with *Journal of Clinical Nursing* 17(5a), 6-15. <https://doi.org/10.1111/j.1365-2702.2007.02141.x>
39. Halcomb, E., Stephens, M., Bryce, J., Foley, E. & Ashley, C. (2016). Nursing competency standards in primary health care: An integrative review. *Journal of Clinical Nursing*, 25, 1193-1205. <https://doi.org/10.1111/jocn.13224>

40. Hämel, K., Rosana, B., Casanova, A., & Giovanella, L. (2020). Advanced practice nursing in primary health care in the Spanish National Health System. *Ciência & Saúde Coletiva*, 25(1), 303-314. <https://doi.org/10.1590/1413-81232020251.28332019>
41. Hoffmann, K., George, A., Dorner, T. E., Süb, K., Schäfer, W. L. A., & Maier, M. (2015). Primary health care teams put to the test a cross-sectional study from Austria within the QUALICOPC project. *BMC Family Practice*, 16, Article e168. <https://doi.org/10.1186/s12875-015-0384-9>
42. Icelandic Nurses' Association. (n.d.). *Professional department of health care nurses*. <https://www.hjukrun.is/fagid/fagdeildir/heilsugaesluhjukrun/>
43. Institut de Formation Interhospitalier Théodore Simon. (2021). *Profession: Nurse*. <https://www.ifits.fr/en/training/nurse>
44. Intercultural Education of Nurses in Europe. (n.d.-a). *Levels of nurses' qualification in Belgium*. <http://ieneproject.eu/information-1-be.php>
45. Intercultural Education of Nurses in Europe. (n.d.-b). *Recognition of the nurses' qualification in Belgium*. <http://ieneproject.eu/information-6-be.php>
46. International Council of Nurses. (2020). *Nursing definitions*. <https://www.icn.ch/nursing-policy/nursing-definitions>
47. Japanese Nursing Association. (n.d.). *Overview of Japanese Nursing System*. <https://www.nurse.or.jp/jna/english/nursing/system.html>
48. Japanese Nursing Association. (2016). *Nursing in Japan*. <https://www.nurse.or.jp/jna/english/nursing/>
49. Japan Primary Care Association. (n.d.). *Society-certified primary care nurse*. [http://primary-care.or.jp/nintei\\_nu/index.html](http://primary-care.or.jp/nintei_nu/index.html)

50. Josi, R., & Bianchi, M. (2019). Advanced practice nurses, registered nurses and medical practice assistants in new care models in Swiss primary care: A focused ethnography of their professional roles. *BMJ Open*, 9, e033929. <https://doi.org/10.1136/bmjopen-2019-033929>
51. Kelly, C., Preston, W., & Harper, N. (2019). What's in a name: Should nursing job titles be regulated? *Nursing Times*, 115(5), 52-53.
52. Kringos, D. S., Boerma, W. G. W., Hutchinson, A., & Saltman, R. B. (2015a). *Building primary care in a changing Europe*. European Observatory on Health Systems and Policies. Observatory Study Series, No. 38. <https://www.ncbi.nlm.nih.gov/books/NBK458728/>
53. Kringos, D. S., Boerma, W. G. W., Hutchinson, A., & Saltman, R. B. (2015b). *Building primary care in a changing Europe: Case studies*. European Observatory on Health Systems and Policies. Observatory Study Series, No. 40. <https://www.ncbi.nlm.nih.gov/books/NBK459010/>
54. Kumar, K. (1989). *Conducting key informant interviews in developing countries*. A.I.D. Program Design and Evaluation Methodology Report No. 13. [https://www.participatorymethods.org/sites/participatorymethods.org/files/conducting%20key%20informant%20interviews\\_kumar.pdf](https://www.participatorymethods.org/sites/participatorymethods.org/files/conducting%20key%20informant%20interviews_kumar.pdf)
55. Ljubic, A., Clark, D. J., & Štemberger Kolnik, T. (2016). Comparison of family nursing in Slovenia and Scotland: Integrative review. *International Nursing Review*, 64(2), 276-285. <https://doi.org/10.1111/inr.12324>
56. Lukewich, J., Taylor, S., Poitras, M-E., & Martin-Misener, R. (2018). Advancing family practice nursing in Canada: An environmental scan of international literature and national efforts towards competency development. *Nursing Leadership*, 31(2), 66-78. <https://doi.org/10.12927/cjnl.2018.25602>

57. Lukewich, J., Allard, M., Ashley L., Aubrey-Bassler, K., Bryant-Lukosius, D., Klassen, T., Magee, T., Martin-Misener, R., Mathews, M., Poitras, M. E., Roussel, J., Ryan, D., Schofield, R., Tranmer, J., Valaitis, R., & Wong, S. (2020). National competencies for registered nurses in primary care: A Delphi study. *Western Journal of Nursing Research*, 42(12), 1078-1087. <http://doi.org/10.1177/0193945920935590>
58. Lukewich, J., Poitras, M-E., & Mathews, M. (Submitted: September, 2020). Unseen, unheard, undervalued: Advancing research on registered nurses in primary care. *Practice Nursing*.
59. Maier, C.B., & Aiken, L.H. (2016). Task shifting from physicians to nurses in primary care in 39 countries: A cross-country comparative study. *The European Journal of Public Health*, 26(6), 927-934. <https://doi.org/10.1093/eurpub/ckw098>
60. Maijala, V., Tossavainen, K., & Turunen, H. (2016). Health promotion practices delivered by primary health care nurses: Elements for success in Finland. *Applied Nursing Research*, 30, 45-51. <http://doi.org/10.1016/j.apnr.2015.11.002>
61. Martin-Misener, R., MacLeod, M. L., Banks, K., Morton, A. M., Vogt, C., & Bentham, D. (2008). “There’s rural, and then there’s rural”: Advice from nurses providing primary healthcare in northern remote communities. *Nursing Leadership*, 21(3), 54-63. <https://doi.org/10.12927/cjnl.2008.20062>
62. Mathews, M., Ryan, D., Buote, R., Parsons, S., & Lukewich, J. (2020). A Qualitative Study Exploring the Influence of Clinic Funding on the Integration of Family Practice Nurses in Newfoundland and Labrador. *Nursing Open*, 7(4), 1067–1073. <https://doi.org/10.1002/nop2.477>

63. Mid-Central District Health Board, New Zealand Nurses Organisation, & the New Zealand College of Primary Health Care Nurses. (2019). *Aotearoa New Zealand Primary Health Care Nursing Standards of Practice*.  
<https://www.nzno.org.nz/Portals/0/publications/Primary%20Health%20Care%20Nursing%20Standards%20of%20Practice%202019.pdf?ver=XYUZI2v-cpVH28Oy1rhfdw%3d%3d>
64. Minister of Welfare, Iceland. (2012, May). *Healthcare Practitioners Act No. 34/2012*.  
[https://www.ilo.org/dyn/natlex/natlex4.detail?p\\_isn=91321&p\\_lang=en](https://www.ilo.org/dyn/natlex/natlex4.detail?p_isn=91321&p_lang=en)
65. Ministry of Health, State of Israel. (n.d.). *Recognized In-service Training Courses in Nursing*.  
[https://www.health.gov.il/English/Services/MedicalAndHealthProfessions/nursing/tests/Pages/Nursing\\_Continuing\\_Education.aspx](https://www.health.gov.il/English/Services/MedicalAndHealthProfessions/nursing/tests/Pages/Nursing_Continuing_Education.aspx)
66. National Coordination Point. (n.d.). *Dutch Qualification Framework (NLQF)*.  
[https://nlqf.nl/images/downloads/Artikelen/NLQF\\_Brochure\\_Engels\\_2018\\_site.pdf](https://nlqf.nl/images/downloads/Artikelen/NLQF_Brochure_Engels_2018_site.pdf)
67. National Council of State Boards of Nursing. (2020). A global profile of nursing regulation, education, and practice. *Journal of Nursing Regulation*, 10(4), 1-116.  
[https://doi.org/10.1016/S2155-8256\(20\)30039-9](https://doi.org/10.1016/S2155-8256(20)30039-9)
68. New Zealand College of Primary Health Care Nurses. (2014). *NZ College of Primary Health Care Nurses*.  
[https://www.nzno.org.nz/groups/colleges\\_sections/colleges/college\\_of\\_primary\\_health\\_care\\_nurses](https://www.nzno.org.nz/groups/colleges_sections/colleges/college_of_primary_health_care_nurses)
69. Nirel, N., Riba, S., Reicher, S., & Toren, O. (2012). Registered nurses in Israel – workforce employment characteristics and projected supply. *Israel Journal of Health Policy Research*, 1, 11. <https://doi.org/10.1186/2045-4015-1-11>

70. Norful, A., Martsof, G., de Jacq, K., & Poghosyan, L. (2017). Utilization of registered nurses in primary care teams: A systematic review. *International Journal of Nursing Studies*, 74, 15-23. <https://doi.org/10.1016/j.ijnurstu.2017.05.013>
71. Nursing and Midwifery Board of Australia. (2013). *Explanatory note and FAQ on title protection*. Australian Health Practitioner Regulation Agency. <http://www.medicalboard.gov.au/documents/default.aspx?record=WD10%2F3206%5Bv2%5D&dbid=AP&chksum=nAo0jgvziyHmz80Y%2FYL%2BXw%3D%3D>
72. Nursing and Midwifery Board of Australia. (2019, June). *Fact sheet: The use of health practitioner protected titles*. <https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/FAQ/The-use-of-health-practitioner-protected-titles.aspx>
73. Nursing Council of New Zealand. (n.d.). *Nursing: Scopes of practice*. [https://www.nursingcouncil.org.nz/Public/Nursing/Scopes\\_of\\_practice/NCNZ/nursing-section/Scopes\\_of\\_practice.aspx?hkey=61f53c32-ca6c-4529-aefc-484a0f42f875](https://www.nursingcouncil.org.nz/Public/Nursing/Scopes_of_practice/NCNZ/nursing-section/Scopes_of_practice.aspx?hkey=61f53c32-ca6c-4529-aefc-484a0f42f875)
74. Oren, M., & Ben Natan, M. (2011). The essence of nursing in the shifting reality of Israel today. *The Online Journal of Issues in Nursing*, 16(2), 7.
75. Organization for Economic Co-operation and Development. (2016). *Health workforce policies in OECD countries: Right jobs, right skills, right places*. OECD Health Policy Studies, OECD Publishing. <http://doi.org/10.1787/9789264239517-en>
76. Poitras, M. E., Chouinard, M. C., Gallagher, F., & Fortin, M. (2018). Nursing activities for patients with chronic disease in primary care settings: A practice analysis. *Nursing Research*, 67(1), 35–42. <https://doi.org/10.1097/NNR.0000000000000253>
77. The Queen's Nursing Institute. (2015). *General practice nursing in the 21st Century: A time of opportunity*. [https://www.qni.org.uk/wp-content/uploads/2016/09/gpn\\_c21\\_report.pdf](https://www.qni.org.uk/wp-content/uploads/2016/09/gpn_c21_report.pdf)

78. The Queen's Nursing Institute. (2020). *The QNI standards of education and practice for nurses new to general practice nursing*. <https://www.qni.org.uk/wp-content/uploads/2020/05/Standards-of-Education-and-Practice-for-Nurses-New-to-General-Practice-Nursing-1.pdf>
79. The Queen's Nursing Institute, & The Queen's Nursing Institute Scotland. (2017). *The QNI/QNIS voluntary standards for general practice nursing education and practice*. <https://www.qni.org.uk/wp-content/uploads/2016/09/GPN-Voluntary-Standards-for-Web.pdf>
80. The Queen's Nursing Institute, & The Queen's Nursing Institute Scotland. (2015). *The QNI/QNIS Voluntary Standards for District Nurse Education and Practice*. [https://www.qni.org.uk/wp-content/uploads/2017/02/District\\_Nurse\\_Standards\\_WEB.pdf](https://www.qni.org.uk/wp-content/uploads/2017/02/District_Nurse_Standards_WEB.pdf)
81. Råholm, M-B., Hedegaard, B. L., Löfmark, A., & Slettebø, A. (2010). Nursing education in Denmark, Finland, Norway and Sweden – from Bachelor's degree to PhD. *Journal of Advanced Nursing* 66(9), 2126–2137. <https://doi.org/10.1111/j.1365-2648.2010.05331.x>
82. Rashid, C. (2010). Benefits and limitations of nurses taking on aspects of the clinical role of doctors in primary care: Integrative literature review. *Journal of Advanced Nursing*, 66(8), 1658-1670. <https://doi.org/10.1111/j.1365-2648.2010.05327.x>
83. Rafferty, A. M., Busse, R., Zander-Jentsch, B., Sermeus, W., & Bruyneel, L. (2019). *Strengthening health systems through nursing: Evidence from 14 European countries*. European Observatory on Health Systems and Policies. Health Policy Series, No. 52. <https://www.ncbi.nlm.nih.gov/books/NBK545728/>

84. Registered Nurses Professional Development Centre. (2016). *Family Practice Nursing Education Program*.  
<https://www.rnpdc.nshealth.ca/FamilyPracticeNursing/FPNEPTextbooks/default.asp?mn=1.50>
85. Republic of Turkey. (2013). *Family medicine practice regulation*.  
<https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=17051&MevzuatTur=7&MevzuatTertip=5>
86. Riga Medical College of the University of Latvia. (2021). *Nursing*.  
<https://rmkoledza.lu.lv/en/study-programs/nursing/>
87. Robinson, S., & Griffiths, P. (2007). *Nursing education and regulation: International profiles and perspectives*. National Nursing Research Unit.  
<https://eprints.soton.ac.uk/348772/1/NurseEduProfiles.pdf>
88. Sela-Vilensky, Y., Grinberg, K., & Nissanholtz-Gannot, R. (2020). Attracting Israeli nursing students to community nursing. *Israel Journal of Health Policy Research*, 9, 44.  
<https://doi.org/10.1186/s13584-020-00400-6>
89. Sermeus, W., Pirson, M., Paquay, L., Pacolet, J., Falez, F., Stordeur, S., & Leys, M. (2010). *Financing of home nursing in Belgium*. Belgian Health Care Knowledge Centre. KCE Reports 122C, D/2010/10.273/07  
<https://kce.fgov.be/sites/default/files/atoms/files/d20101027307.pdf>
90. Shields, L., & Hartati, L. E. (2003). Nursing and health care in Indonesia. *Journal of Advanced Nursing*, 44(2), 209-216. <https://doi.org/10.1046/j.1365-2648.2003.02785.x>



91. Simoens, S., Villeneuve, M., & Hurst, J. (2005). *Tackling nurse shortages in OECD countries*. (OECD Health Working Papers No. 19). Organization for Economic Co-operation and Development. <https://doi.org/10.1787/172102620474>
92. Smolowitz, J., Speakman, E., Wojnar, D., Whelan, E-M., Ulrich, S., Hayes, C., Wood, L. (2015). Role of the registered nurse in primary health care: Meeting health care needs in the 21st century. *Nursing Outlook*, 63(2), 130-136. <https://doi.org/10.1016/j.outlook.2014.08.004>
93. Storms, H., & Claes, N. (2017). Primary care nurses in a local Belgian setting: Responding to healthcare needs of people with disabilities. *Journal of Nursing Education and Practice*, 7(7), 44-53. <https://doi.org/10.5430/jnep.v7n7p44>
94. Suba, S., & Scruth, E. A. (2015). A new era of nursing in Indonesia and a vision for developing the role of the clinical nurse specialist. *Clinical Nurse Specialist*, 29(5), 255-257. <https://doi.org/10.1097/NUR.0000000000000146>
95. Sudheesh, K., Duggappa, D. R., & Nethra, S. S. (2016). How to write a research proposal? *Indian journal of anaesthesia*, 60(9), 631–634. <https://doi.org/10.4103/0019-5049.190617>
96. Suutarla, A., & the Finnish Nurses Association's APN Expert Group. (n.d.). *Country report: Advanced Practice Nursing (APN) in Finland*. [https://international.aanp.org/Content/docs/ICN\\_APN\\_country\\_profile\\_Finland.pdf](https://international.aanp.org/Content/docs/ICN_APN_country_profile_Finland.pdf)
97. Svavardottir, E. K. (2008). Excellence in nursing: A model for implementing family systems nursing in nursing practice at an institutional level in Iceland. *Journal of Family Nursing*, 14(4), 456-468. <https://doi.org/10.1177/1074840708328123>
98. Tallinn Health Care College. (2017). *General nurse*. [https://ttk.ee/sites/ttk.ee/files/Ode\\_23.05.2017\\_ENG\\_0.pdf](https://ttk.ee/sites/ttk.ee/files/Ode_23.05.2017_ENG_0.pdf)

99. Tallinn Health Care College. (2019). *Curriculum of Master's studies: Health Sciences*.  
[https://www.ttk.ee/sites/ttk.ee/files/194200\\_curriculum\\_of\\_health\\_sciences\\_23.04.2019\\_2.pdf](https://www.ttk.ee/sites/ttk.ee/files/194200_curriculum_of_health_sciences_23.04.2019_2.pdf)
100. Tóthová, V., & Sedláková. (2008). Nursing education in the Czech Republic. *Nurse Education Today*, 28(1), 33-38. <https://doi.org/10.1016/j.nedt.2007.02.003>
101. University of Antwerp. (n.d.). *Postgraduate of nursing in general practice*.  
<https://www.uantwerpen.be/en/study/programmes/all-programmes/nursing-general-practice/>
102. University of Iceland. (n.d.). *Nursing*.  
[https://english.hi.is/school\\_of\\_health\\_sciences/faculty\\_of\\_nursing/about\\_faculty](https://english.hi.is/school_of_health_sciences/faculty_of_nursing/about_faculty)
103. University of Northern British Columbia. (2021). *School of Nursing: Remote nursing certified practice*. <https://www.unbc.ca/nursing/remote-nursing-certified-practice>
104. University of Otago. (2021). *Study nursing (primary health care) at Otago*.  
<https://www.otago.ac.nz/courses/subjects/nphc1.html>
105. University of South Bohemia in České Budějovice. (2017). *Study programme: Nursing*.  
<https://www.zsf.jcu.cz/en/study-education/study-programmes/study-programmes-offered-in-english/nursing/study-programme-nursing-more-info>
106. Vanhook, P., Flinter, M., Poghosyan, L., & Barksdale, D. (2018, August). The American Academy of Nursing on policy: Emerging role of baccalaureate registered nurses in primary care. *Nursing Outlook*, 66(5), 512-17. <https://doi.org/10.1016/j.outlook.2018.09.003>
107. Walker, L., Clendon, J., & Nelson, K. (2015, September). Nursing roles and responsibilities in general practice: Three case studies. *Journal of Primary Health Care*, 7(3), 236-243.  
<https://doi.org/10.1071/HC15236>

108. Wojnar, D. M., & Whelan, E. M. (2017). Preparing nursing students for enhanced roles in primary care: The current state of prelicensure and RN-to-BSN education. *Nursing Outlook*, 65(2), 222-232. <https://doi.org/10.1016/j.outlook.2016.10.006>
109. The World Bank. (2020). *World Bank Country and Lending Groups*. <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>

## Appendix

### Abstract for International Council of Nurses Congress 2021: Nursing Around the World

#### Reference:

Barrett, C., Mathews, M., Poitras, M-E., Norful, A., Tranmer, J., Martin-Misener, R., Ryan, D., & Lukewich, J. (2021). *Job titles and education requirements of registered nurses in primary care: An international document review* [Conference presentation abstract]. International Council of Nurses 2021 Congress, virtual meeting.

Globally, registered nurses (RNs) have taken on new, integrated roles across a variety of diverse healthcare settings. Protected titles such as ‘Registered Nurse’ are used to identify regulated nursing professionals and informal job titles are often used to recognize nurses by their education or practice area. Internationally, there has been variation in job titles and education requirements for RNs in primary care. In response to an international knowledge gap, this study aims to outline protected titles and education requirements for RNs, and job titles and education requirements specific to RNs in primary care. A document analysis review with key informant consultations was employed. Organization for Economic Co-operation and Development countries and key partners were considered for inclusion in this study (n=42). Online searches were performed using a combination of keywords, and relevant data was extracted and verified for accuracy by key informants from each country. Key informants were identified through online searches and professional networks. Document analysis was completed for 37 countries. Countries that did not have information available in English or French (n=5) were excluded. Country-specific information that was not verified due to a lack of response from key informants (n=13) was excluded from analysis, yielding a total of 24 verified countries. Findings indicate

that 'Registered Nurse' was the most commonly used protected title, alongside 'General Nurse' and 'Nurse.' There was noticeable variation in unofficial job titles for RNs in primary care (e.g., 'primary care nurse', 'general practice nurse', 'community nurse'), with some countries having no specific title for this role (n=12). Consistently, there were no mandatory education requirements for registered nurses to practice in primary care, however, many countries offered optional programs and courses specific to this practice area. This study confirms that job titles used to identify registered nurses in primary care vary considerably across countries. A unified understanding of international nomenclature will support future research and policy development, which is vital to the integration and optimization of this role.