

NURSING SCOPE OF PRACTICE DEFINED AND OPERATIONALIZED IN CANADA:  
A SYSTEMATIC REVIEW

by

Anna Theresa Ryan

BScN, The University of Western Ontario, 2019

A THESIS SUBMITTED IN PARTIAL FUFILLMENT OF THE REQUIREMENTS FOR THE  
DEGREE OF

Master of Science in Nursing

in

The Faculty of Graduate and Postdoctoral Studies

(Nursing)

THE UNVIERSITY OF BRITISH COLUMBIA

(Vancouver)

August, 2021

© Anna Theresa Ryan, 2021

The following individuals certify that they have read, and recommend to the Faculty of Graduate and Postdoctoral Studies for acceptance, a thesis entitled:

Nursing scope of practice defined and operationalized in Canada: A systematic review

submitted by Anna Ryan in partial fulfillment of the requirements for  
the degree of Master of Science  
in Nursing

**Examining Committee:**

Dr. Farinaz Havaei, Nursing, UBC

---

Co-supervisor

Dr. Maura MacPhee, Nursing, UBC

---

Co-supervisor

**Abstract**

**Aim:** To examine the conceptual and operational definitions of RNs and LPNs respectively in a Canadian context.

**Design:** A systematic review of Canadian research articles related to RN and LPN scope of practice will be undertaken.

**Methods:** A systematic search looking for Canadian research studies published from 2009 to 2019 was conducted using CINAHL and MEDLINE databases. Other publications and websites, such as the BCCNP, were screened for relevant documents.

**Results:** The final data set contained eight articles. Results indicate that four articles provided conceptual definitions for RNs, two articles provided conceptual definitions for LPNs, three articles provided operational definitions for RNs and two articles provided operational definitions for LPNs. Results include a lack of a strong operational scope of practice measure for RNs and LPNs respectively. Implications for nursing practice include scope overlap and ambiguity, leading to both LPNs and RNs in positions they felt underprepared for.

**Lay Summary**

This study was conducted to examine the reality of nursing practice for both RNs and LPNs. This study examines the legislative scope of practice for nurses alongside the scope of practice that nurses are actually working in their daily practice. By further examining the scope of practice that nurses are working, nurses can be better supported to provide safe, effective and quality nursing care to the Canadian public.

**Preface**

This thesis is original, unpublished, independent work by the author, A. Ryan. Ethics approval was not required for this study. A Ryan made substantial contributions to the conception and design of the study, revision, analysis and interpretation of the data. F. Havaei, assisted with initial abstract review. Supervisors assisted with manuscript revisions and read and approved the final manuscript.

## Table of Contents

Abstract.....	iii
Lay Summary.....	iv
Preface.....	v
List of Tables.....	vii
List of Figures.....	vii
Acknowledgements.....	ix
Dedication.....	x
Introduction.....	1
Background.....	1
Research question.....	2
The Study.....	2
Methods.....	2
Results.....	4
Discussion.....	9
Limitations.....	12
Conclusion.....	12
References.....	13

**List of Tables**

Table 1: Conceptual and Operational Definitions of SOP for RNs and LPNs ..... 4

Table 2: Subscales Used to Measure Operational Definitions of RNs..... 8

Table 3: Subscales Used to Measure Operational Definitions of LPNs..... 9

**List of Figures**

Figure 1: PRISMA Search Diagram..... 3

**Acknowledgements**

I have immense gratitude for the faculty at the UBC School of Nursing for their passion and commitment to a stronger nursing future. Dr. Havaei and Dr. MacPhee, thank you for your dedication strengthening the nursing community through your work. You are making a difference every day.

A special thanks to my friends and my family for their ongoing support as I pursued this goal.

**Dedication**

To nurses everywhere, the heroes of this pandemic, thank you. Here's to a brighter future ahead

## **Introduction**

Organizations are most effective when their workforces are optimized. In healthcare, optimization stems from effective utilization of health human resources. In Canada, nursing professionals make up the largest proportion of health human resources (Oelke et al., 2008). Therefore, suboptimal utilization of nurses compromises the efficacy and the effectiveness of health service provision (Oelke et al., 2008). Across the country, there have been national (Nelson, Turnbull & Bainbridge, 2014) and provincial (Byres, 2018) calls to optimize nursing professionals' respective scopes of practice. Promoting the utilisation of full scope of practice amongst nurses is the first health resource optimization strategy recommended by the Institute of Medicine (2011). Optimization requires a clear understanding of potential scope of practice overlap amongst different classifications of nursing professionals (White et al., 2008).

A *full scope of practice* refers to the range of roles and competencies associated with professional knowledge and legally authorized to be performed by its members through their provincial regulatory body (D'Amour, Dubois, Déry & Clarke, 2012). Evidence currently suggests that nurses are underutilized, performing only a fraction of their full scope in their daily practice, known as an *actual or enacted scope of practice* (D'Amour et al., 2012). When nurses do not work to their full scope, there are negative consequences, including low job satisfaction and workforce instability with cost implications and human resource challenges (D'Amour et al., 2012). There is some evidence to suggest that when nurses do not work to full scope, there is greater probability of missed nursing care that compromises the quality of care delivery (Recio-Saucedo et al., 2018). A problem with determining gaps between optimized scope of practice (i.e., full scope) and less than full scope practice (i.e., actual scope) is an objective measure for nurses' scope of practice. The findings of this systematic review will inform the development of instruments that quantify the extent that different nurse classifications perform the competencies associated with a full scope of practice. Additionally, the findings of this review will provide insight for decision makers surrounding the lack of clarity related to Canadian nurses' scope of practice.

## **Background**

In Canada, there are four regulated nurse designations; registered nurses (RNs), licensed practical nurses (LPNs) titled registered practical nurses (RPNs) in certain jurisdictions, registered psychiatric nurses (RPNs), and nurse practitioners (NPs). RNs (68%) and LPNs (22%) comprise 90% of the nursing workforce nationally (CNA, 2019) with RNs authorized to perform a broader range of competencies than LPNs (Havaei, MacPhee & Dahinten, 2019). RNs are typically authorized to care for more complex and less stable patients, whereas LPNs are authorized to care for more stable patients, requiring direction from a RN with respect to increases in patient complexity (Havaei, MacPhee & Dahinten, 2019). This difference in RN and LPN scopes of practice is attributed to knowledge base differences; RNs are typically university educated and LPNs hold two-year diplomas (Havaei et al., 2019). In Canada, jurisdictional nursing regulatory bodies collaborate to develop national entry-level competencies, which are broadly consistent, although there is some variation across Canadian provinces and territories based on population needs (D'Amour et al., 2012).

There is a limited body of Canadian nursing research on scopes of practice. Earlier studies found that greater numbers of LPNs were not working to full scope in comparison to their RN colleagues (Oelke et al., 2008; White et al., 2008). Canadian RNs reported working to their full scope of practice only half of the time (White et al., 2008; Shields & Wilkins, 2006). International nursing research also reported that RNs were not performing their full range of competencies based on their formal education and training (D'Amour et al., 2012). For example, in the United States, RNs were performing essential nursing tasks only 38% of the time (Upenieks, Akhavan & Kotlerman, 2008). In Europe, RNs were queried by survey about performing non-nursing duties: Assessment of non-nursing tasks is one approach for determining underutilization of nurses. This survey study reported a range of time spent on non-nursing tasks over a shift from 17% in Spain to 61% in Germany (Ausserhofer et al., 2014).

Scope of practice goes beyond tasks, encompassing the application of theoretical nursing knowledge and judgement consistent with the regulatory requirements for specific nurse classifications (D'Amour et al., 2012). Multiple components or competencies (knowledge, skills, and judgment) complicate attempts to assign and to measure scope of practice. Gaining insights into nurses' full versus actual/enacted scope of practice can assist in understanding nursing workforce management and necessary workforce supports (D'Amour et al., 2012). Without a clear measure of scope of practice, it remains challenging to optimize RN and LPNs (MacLeod et al., 2019b). The purpose of this review is to clarify what is known about RN and LPN scopes of practice within the Canadian nursing context.

### **Research question**

The research question of this review, set within the Canadian nursing context is: What are conceptual and operational definitions for scope of practice?

### **The Study**

#### **Methods**

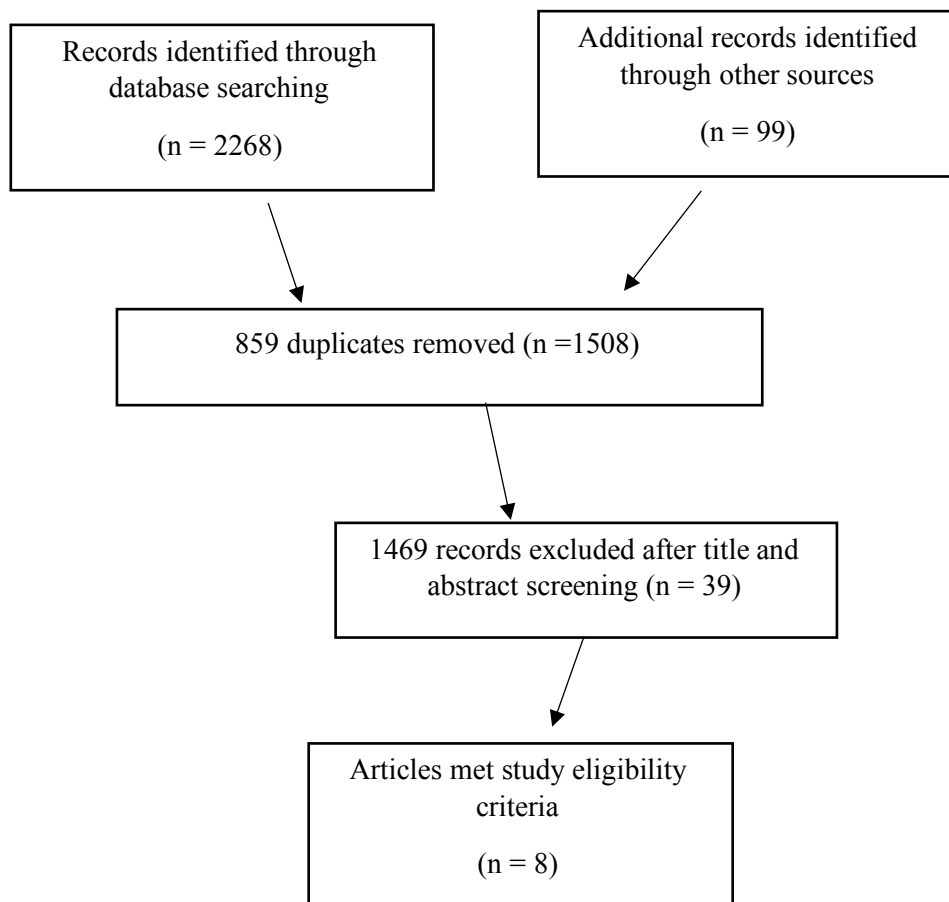
A systematic review was undertaken to examine the study research questions. A prespecified search was utilized to identify publications relevant to the research questions. Electronic database searches were conducted within CINAHL and MEDLINE databases for peer-reviewed research articles involving primary or secondary data analysis related to both RNs' and LPNs' scopes of practice. Due to the rapidly evolving nature of nursing practice (Rafiq & Mughal, 2020) we decided to limit our search to studies published between 2009 and 2019.

The keywords used included *scope of practice* (role\*, duty or duties or responsibility\* or professional competence or clinical competence), *nursing care* (nurs\*), *licensed* or *registered* (licensure, register\*, regulat\*, license\* or RN or LPN or RPN) and *Canadian* (Canada). The reference lists of the identified or related articles were manually scanned to identify other potentially relevant articles. Additionally, grey literature, such as the British Columbia College of Nurses and Midwives (BCCNM) website, were screened for relevant scope of practice documents.

Inclusion criteria were peer reviewed research studies exploring nursing scope of practice using primary or secondary analysis of qualitative and/or quantitative data and differentiating between direct care RNs and LPNs scope of practice. Systematic review and meta-analysis articles were included if all criteria listed was met regardless of the publication date of the individual studies included in the review. Studies that did not have a full-text available and/or were not in English were excluded.

Following the literature search, two members of the research team screened 100 randomly selected abstracts to obtain inter-rater agreement of more than 98%. After obtaining inter-rater agreement, research team members independently screened remaining articles. The decision to include or exclude any article was recorded to ensure procedural rigor.

Figure 1: PRISMA Search Diagram



## Results

Figure 1 provides a visual demonstration of our search results. A total of 2,367 papers were retrieved. After removing the duplicates, 1,508 papers underwent a title and abstract review which resulted in eliminating an additional 1,469 papers. A total of 39 articles underwent full-text screening. After full-text screening, 32 articles were excluded for the following reasons: not Canadian (4 papers), main focus was not related to scope of practice (7 articles), did not include conceptual or operational definitions for SOP (5 papers), did not differentiate between RNs and LPNs (2 papers), was a commentary article (12 papers), was a master's thesis (1 paper) or data collection conducted prior to 2008 (1 paper). The final data set is comprised of 8 articles that met the study inclusion criteria. Of note is that all of these studies were published after 2016, suggesting that examining scope of practice is a concept that has recently gained popularity in nursing research. Three of the included studies used a qualitative research approach (Donnelley & Domm, 2014; Kusi-Appiah, Dahlke, Stahlke & Hunter, 2019; MacKinnon, Butcher & Bruce, 2018). Four studies used a quantitative research approach (Déry, Clarke, D'Amour & Blais, 2016; Déry, Clarke, D'Amour & Blais, 2018; MacLeod et al., 2019a; MacLeod et al., 2019b) and the final study utilized a mixed methods approach (Lankshear, Rush, Weeres & Martin, 2016).

Table 1: Conceptual and Operational Definitions of SOP for RNs and LPNs

Article Authors	Study Design	Sample
Dery et al., 2018	Cross Sectional Survey	RNs
<b>Conceptual Definition</b>	The range of functions and responsibilities carried out by nurses in their daily work, expressed as a fraction of a larger set of activities covered in professional education programs at the university level and described in broad definition of the nature of practice. The concept of enacted scope of practice is close to that of role enactment (D'Amour et al., 2012), "the application of knowledge within parameters defined by legislation, experience, competence, and contextual factors in the environment" (Bessner et al., 2005, p. 6)	
<b>Operational Definition</b>	The frequency by which nurses performed 26 activities associated with a full scope of practice. The activities include assessment and care planning; teaching of patients and families; communication and care coordination; integration and supervision of staff; quality of care and patient safety; and knowledge updating and utilization.	
Article Authors	Study Design	Sample
Déry et al., 2016	Cross Sectional Survey	RNs
<b>Conceptual Definition</b>	Enacted scope of practice is defined as the range of function and responsibilities carried out by nurses in relation to the competencies they have developed through education and experience.	
<b>Operational Definition</b>	The Actual Scope of Nursing Practice (ASCOP) questionnaire comprises 26 items grouped into 6 dimensions. It consists of 6-point Likert-type questions (from 1 = never to 6 = always, with 2 = rarely, 3 = sometimes, 4 = frequently, 5 = almost always). Dimensions are (1) assessment and care planning, (2) teaching of patients and families, (3) communication and care coordination, (4) integration and supervision of staff, (5) quality of care and patient safety, and (6) knowledge updating and utilization.	

<b>Article Authors</b>	<b>Study Design</b>	<b>Sample</b>
Donnelley & Domm, 2014	Interpretive Description	RNs
<b>Conceptual Definition</b>	Nursing jurisdictions in Canada develop documents describing the RN role in terms of education level related to the practice context, comparisons of practice expectations. These documents define the role of the registered nurse in terms of level of decision making, identifying conditions through assessments and nursing diagnoses, leading and coordinating the care planning process, monitoring and interpreting changes in the client condition and responding to the identified changes with appropriate interventions.	
<b>Operational Definition</b>	Qualitative study results in no operational definition	
<hr/>		
<b>Article Authors</b>	<b>Study Design</b>	<b>Sample</b>
Mackinnon et al., 2018	Institutional Ethnography	RNs and LPNs
<b>Conceptual Definition</b>	D'Amour et al. (2012) identified six core dimensions of the RNs "full scope" of practice: assessment and care planning, health teaching, communication and care planning, integration and supervision of nursing team members, safety and quality of patient care, and current knowledge utilization	
<b>Operational Definition</b>	Qualitative study results in no operational definition	
<hr/>		
<b>Article Authors</b>	<b>Study Design</b>	<b>Sample</b>
MacLeod et al., 2019b	Cross Sectional Survey	RNs
<b>Conceptual Definition</b>	Undefined	
<b>Operational Definition</b>	Scope of practice survey item was recoded into "working within and working beyond" and included as the main outcome (SOP – Beyond) for this multivariable analysis. This variable measured nurses' perception of their current scope of practice as beyond or within their registered/licensed scope.	
<hr/>		
<b>Article Authors</b>	<b>Study Design</b>	<b>Sample</b>
Lankshear et al., 2016	Mixed Methods	RNs and RPNs (Ontario Based Study)
<b>Conceptual Definition</b>	Undefined	
<b>Operational Definition</b>	The Registered Practical Nurse- Role Clarity Questionnaire (RPN-RCQ) is a 37-item questionnaire that garners respondent opinions regarding the role of the RPN within clinical practice settings. The RPN-RCQ was generated from literature review, expert panel, legislation and professional standards. The questionnaire is comprised of two influencing factors: individual and organizational. Individual factor subscales includes team functioning, knowledge of roles and scope, leadership practices and RPN perspective. Organizational factor subscales include care delivery, role evolution, role overlap, role description, application of education into practice and student experience.	

<b>Article Authors</b>	<b>Study Design</b>	<b>Sample</b>
Kusi – Appiah et al., 2019	Qualitative description in a secondary analysis. Primary study = Grounded Theory.	RNs and LPNs
<b>Conceptual Definition</b>	The LPN scope of practice focuses on stable populations; specific tasks, such as managing intravenous lines and giving injections, have been recently added. Some suggest that LPNs are trained for task-oriented patient care and are unable to deliver a broader scope of nursing care (Corazzini, Anderson, Rapp, & Mueller, 2010). However, new studies report that LPNs' scope of practice has expanded to include some aspects of the traditional RN role (Donnelly & Domm, 2014; Jones, Toles, Knafel, & Beeber, 2018; Mackinnon et al., 2018).	
<b>Operational Definition</b>	Undefined	
<b>Article Authors</b>	<b>Study Design</b>	<b>Sample</b>
MacKinnon et al, 2018	Institutional Ethnography	RNs and LPNs
<b>Conceptual Definition</b>	LPNs care for clients at all life stages. They provide health care services for the: a) promotion, maintenance and restoration of health, with a focus on clients with stable or predictable states of health b) prevention, treatment and palliation of illness and injury, with a focus on stable or predictable disorders and conditions, primarily by: assessing health status, planning, implementing and evaluating interventions and coordinating health services.	
<b>Operational Definition</b>	Undefined	
<b>Article Authors</b>	<b>Study Design</b>	<b>Sample</b>
MacLeod et al., 2019a	Cross Sectional Survey	LPNs
<b>Conceptual Definition</b>	Undefined	
<b>Operational Definition</b>	The scope of practice survey item was recoded into two categories (working below/working within) as the main outcome variable, Scope of Practice Below (SOP- Below) for this multivariable analysis. This variable measured whether the LPNs perceived their current scope of practice to be below or within their registered/licensed scope of practice.	

### Conceptual Definition of RNs

Of the final data set, four articles included conceptual definitions for RNs (Dery et al., 2016; Dery et al., 2018; Donnelly & Domm, 2014 and MacKinnon et al., 2018). Of the four articles, two utilized a quantitative approach (Dery et al., 2016; Dery et al., 2018) and two utilized a qualitative approach (Donnelly & Domm, 2014 and MacKinnon et al., 2018). Both quantitative studies adopted a cross sectional survey design using a self-administered survey conducted in 2010 of 301 RNs at a major pediatric hospital in Quebec. The two qualitative studies utilized institutional ethnography (MacKinnon et al., 2018) and interpretive description methods (Donnelly & Domm, 2014). While MacKinnon et al. (2018) interviewed 10 RNs and 10 LPNs,

Donnelley & Domm (2014) conducted two focus groups; one with 39 nurse leaders and one with 42 front line nurses. It is important to note that MacLeod et al., (2019b) failed to provide a conceptual definition for scope of RNs despite the study being focused on this subject matter.

The conceptual definitions provided by Dery et al. (2016, 2018) are nearly identical, focusing on the range of responsibilities that are a fraction of what is covered in education programs. In their conceptual definitions, Dery et al. (2016, 2018) do not provide further clarity as to what the range of responsibilities associated with a full scope of practice is. Dery et al. (2018) state that a properly enacted scope of practice includes application of knowledge within parameters, including those of legislation, experience, competence and contextual factors within the environment. However, there is no further discussion in their conceptual definition as to what the factors are. Donnelley & Domm (2014) and Mackinnon et al. (2018) both identify dimensions of “full scope” in their conceptual definitions, and in contrast to Dery et al. (2016, 2018) include factors that contribute to their conceptual definition such as assessment, health teaching, care planning etc. MacKinnon et al. (2018) is the only conceptual definition that discusses integration and supervision of other nursing team members.

#### Conceptual Definition of LPNs

Of the final data set, two qualitative articles presented a conceptual definition for LPN scope of practice (Kusi-Appiah, 2019 & MacKinnon et al., 2018). The study by Kusi-Appiah et al. (2019) utilized a secondary analysis of qualitative data provided by 23 participants; 18 RNs, 3 LPNs and 3 HCAs. MacKinnon et al. (2018) utilized institutional ethnography and interviewed 10 RNs and 10 LPNs. The conceptual definition provided in both studies stresses that LPNs care for clients in stable states. For example, MacKinnon et al. (2018) state that LPNs focus on clients with “stable or predictable states of health” (p. 9). Kusi-Appiah et al. (2019) suggests that LPN care is task-oriented and states that additional tasks, such as giving injections, have recently been added to LPN scope. In contrast to MacKinnon et al. (2015), Kusi-Appiah et al. (2019) acknowledge in their conceptual definition that LPN scope of practice is expanding and now includes some tasks traditionally left to RNs.

#### Operational Definition of RNs

Of the final data set, three articles provided operational definitions for the scope of practice of RNs (Dery et al., 2018; Dery et al., 2016 & MacLeod et al., 2019b). Both studies by Dery et al. (2016; 2018) adopted a cross sectional survey design using a self-administered survey conducted in 2010 of 301 RNs at a major pediatric hospital in Quebec. MacLeod et al. (2019b) utilized data from a scope of practice survey item in the Nursing Practice in Rural and Remote Canada (RRN11) (MacLeod et al., 2017) survey with responses from 1754 RNs working in rural or remote populations (note: rural = outside commuting distance of urban centres of 10 000 or more). Table 3 outlines the subscales used for the RN operational definitions.

Table 2: Subscales Used to Measure Operational Definitions of RNs

Article	Subscale Used to Measure RN Operational Scope of Practice
Dery et al., 2016	The Actual Scope of Nursing Practice (ASCOP) questionnaire comprises 26 items grouped into 6 dimensions. It consists of 6-point Likert-type questions (from 1 = never to 6 = always, with 2 = rarely, 3 = sometimes, 4 = frequently, 5 = almost always). Dimensions are (1) assessment and care planning, (2) teaching of patients and families, (3) communication and care coordination, (4) integration and supervision of staff, (5) quality of care and patient safety, and (6) knowledge updating and utilization.
Dery et al., 2018	This study also utilized the ASCOP (described above)
MacLeod et al., 2019b	The scope of practice survey item was recoded into “working within and working beyond” and included as the main outcome (SOP-Beyond) for the multivariable analysis. This variable measured nurses’ perception of their current scope of practice as beyond or within their registered/licensed scope.

The ASCOP used in the studies by Dery et al. (2016; 2018) is focused on nursing scope of practice and all dimensions within the questionnaire are related to scope of practice. In contrast, MacLeod et al. (2019b) are drawing their findings off one variable in a larger survey and thus not all variables are related to scope of practice.

#### Operational Definition of LPNs

Of the final data set, two articles provided an operational definition for the LPN scope of practice (Lankshear et al., 2016 & MacLeod et al., 2019a). Lankshear et al. (2016) utilized a mixed methods approach involving a provincial survey of Ontario nurses followed by nurse leader focus groups. A total of 1101 nurses participated in the survey with 661 LPN respondents. Subsequently, ten focus groups using a total of 47 nursing leaders from various geographical regions and care settings were conducted in order for qualitative data to complement quantitative data gathered (Lankshear et al., 2016). Lankshear et al. (2016) state that previous literature contained no relevant instruments and developed the Registered Practical Nurse Role Clarity Questionnaire (RPN-RCQ). Table 4 contains information related to the RPN-RQC. MacLeod et al. (2019a) extracted data from (RRNII). 1206 LPNs returned surveys.

Table 3: Subscales Used to Measure Operational Definitions of LPNs

Article	Subscale Used to Measure LPN Operational Scope of Practice
Lankshear et al. (2016)	The Registered Practical Nurse- Role Clarity Questionnaire (RPN-RCQ) is a 37-item Likert type questionnaire that garners respondent opinions regarding the role of the RPN within clinical practice settings. The RPN-RCQ was generated from literature review, expert panel, legislation and professional standards. The questionnaire is comprised of two influencing factors: individual and organizational. Individual factor subscales include items team functioning, knowledge of roles and scope, leadership practices and RPN perspective. Organizational factor subscales include items care delivery, role evolution, role overlap, role description, application of education into practice and student experience. The likert type questionnaire utilized four levels of agreement and an “I don’t know” option to reflect potential ambiguity.
MacLeod et al., 2019a	The scope of practice survey item was recoded into two categories (working below/working within) as the main outcome variable, Scope of Practice Below (SOP- Below) for this multivariable analysis. This variable measured whether the LPNs perceived their current scope of practice to be below or within their registered/licensed scope of practice.

Lankshear et al (2016) developed the RPN-RCQ and thus this is the first study to utilize the instrument. It is important to note that the instrument requires further testing (Lankshear et al., 2016). The RPN-RCQ is targeted towards assessing scope of practice and thus all variables are related to scope of practice. Due to the nature of a rural and remote survey, MacLeod et al. (2019a) posed questions related to isolation etc. that Lankshear et al. (2016) did not include. MacLeod et al. (2019a) are drawing their findings off one variable in a larger survey and thus not all variables are related to scope of practice.

### Discussion

This study had two key findings. First, most of the RN and LPN scope of practice studies included in the review failed to provide a conceptual definition of scope of practice. Those that did provide a definition had limitations in how they defined scopes leading to confusion and scope overlap. Second, only a few of the included studies provided operational definitions however there remain gaps in objective measurement of scope.

Of the four RN conceptual definitions provided, Dery et al. (2016; 2018) relied on activities covered in educational programs as defined by legislation. Donnelley & Domm (2014) speak to different nursing jurisdictions in Canada describing the RN role in terms of education level related to the practice context of said jurisdiction. However, resorting to defining nursing practice by jurisdictional legislation reduces RN roles to checklists and task completion (Donnelley & Domm, 2014; D’Amour et al., 2012). There is scarce research to reflect the knowledge utilization and critical thinking to describe RN scope of practice (Donnelley & Domm, 2014; Wangenstein, Johansson, Björkström & Nordström, 2010). It is imperative that nursing practice finds a meaningful and objective way to articulate and measure the

competencies required to apply nursing knowledge and move away from the implied notion that nursing practice consists solely of task completion (D'Amour et al., 2012).

Objective measurements of RN scope of practice are lacking. The ASCOP utilized by Dery et al. (2016, 2018) is comprised of six domains of nursing practice and assesses the frequency that nurses complete twenty-six activities within their work. The ASCOP associates the infrequency of performing certain activities with a lack of adherence to full scope (D'Amour et al., 2012). However, the frequency of performing a competency associated with a full scope of practice is not necessarily a good way to capture full scope and implies that nurses need to apply all aspects of the ASCOP to adhere to a full scope. The other objective SOP measurement for RN by MacLeod et al. (2019b) targets rural and remote nurses who historically carry high levels of autonomy due to geographic isolation, limited resources and limited support (Pavloff, Farthing & Duff, 2017).). This measurement lacks generalization within nursing practice across sectors. Rural and remote RNs are accustomed to working a broadened scope to manage the complexities associated with rural health care (Knight, Kenny & Endacott, 2016). Therefore, their perception of working beyond their scope cannot be likened to the perception of a nurse working in a populous, well-resourced area. As a result, RNs lack an objective, articulate measurement tool to emphasize the work they complete on a daily basis.

In the conceptual definitions provided for LPNS, LPNs are described as caring for stable populations, performing specific tasks and clients with predictable courses of illness (MacKinnon et al., 2015). However, suggestions are made that the LPN scope is expanding as LPNs are performing tasks historically performed by RNs (Kusi-Appiah et al., 2019, Fraser et al., 2019). This expansion may be due to the transition of RNs into specialized care delivery and professional practice and operational leadership roles; thus LPNs must complete tasks that historically RNs performed. Additionally, as Canada continues to face a registered nursing shortage (Lundy, 2019) LPNs may be pushed to complete tasks typically given to RNs due to lack of RN resources. LPNs have reported being placed in positions suited for RNs due to lack of RNs available for said position (Fraser et al., 2019; Jones et al., 2018). This creates a large concern in relation to patient safety as LPNs report no additional training or education for these roles historically given to RNs (Fraser et al., 2019). The objective measurement for scope of practice created by Lankshear et al. (2016) is a new instrument that has not been previously used. The RPN-RCQ revealed acceptable internal consistency but requires further testing. Despite this, it is important progress for LPN scope of practice to see the creation of a tool to directly assess adherence to scope of practice. Continued testing of this tool will enable further clarity related to the actual scope of practice of LPNs, something that LPNs require (Fraser et al., 2019; Jones et al., 2018).

In the study of LPN scope of practice by Lankshear et al. (2016), LPNs reported a role ambiguity from a broadened scope of practice. They described challenges with the transition to expanded LPN roles (Fraser et al., 2019), resulting in a lack of understanding between RNs and LPNs with respect to their scopes of practice. Similarly, Kusi-Appiah et al. (2019) and MacLeod et al. (2019a) reported tensions between RNs and LPNs due to scope ambiguity. MacLeod et al. (2019a) suggested that confusion surrounding LPN scope of practice may be perpetuated by the

lack of clarity around LPN knowledge, skills, and clinical decision making in education programs. This demonstrates both the lack of an objective competency framework and the need to accurately measure the scope of RNs and LPNs respectively in order to decrease tension and ensure effective, safe nursing care. Without an outlined description of competencies for both RNs and LPNs, it is understandable that there is a lack of understanding surrounding respective roles. This ambiguity is concerning for many reasons. In order to create and maintain safe work environments, it is imperative there is a clear benchmark to understand the scope of RN and LPNs (D'Amour et al., 2012).

Lack of objective scope of practice assessment tools for RNs and LPNs has notable implications. Without a consistent, transferrable tool, RNs reported working beyond their scope (Donnelly & Domm, 2014; Kusi-Appiah et al., 2019; MacLeod et al., 2019b) with other findings indicating that RNs were not applying the full range of their knowledge consistently (Dery et al., 2018). RNs felt as though their role shifted from care provision to leadership (Donnelly & Domm, 2014; Kusi-Appiah et al., 2019). In addition, RNs reported feeling unprepared for assuming more responsibility and voiced a need for leadership, team building and supervisory skills (Kusi-Appiah et al., 2019; MacKinnon et al., 2018). Based on the finding that RNs were not applying their full range of knowledge consistently, Dery et al. (2018) suggested that RNs should assume expanded roles to optimize their knowledge and skills. RNs and LPNs were also aware of working beyond their scope, raising concerns about patient safety and workload.

MacLeod et al. (2019a) suggest that as LPN and RN workforce shortages increase, cost focused decisions are made and staff substitutions occur. This blurring of roles requires a clear guideline surrounding scope in order to ensure there are no gaps in patient care (MacLeod et al., 2019a). Tensions among RNs and LPNs in regards to their respective scope paired with a lack of objective competency framework create concern in regards to the creation of safe patient assignments. If RNs and LPNs are unclear about both their respective scope and their colleague's scopes, how does one ensure that safe patient ratios and assignments are being created and implemented. Lack of clarity surrounding scope can lead to unnecessary gaps or unnecessary overlaps in care. While gaps in patient care are a very large concern, unnecessary overlaps in care signal ineffective management of a valuable human resource during nursing shortage crises in Canada (MacLeod et al., 2019a). This creates a concern for nurse job satisfaction as well (Dery et al., 2018). With an articulated scope that reflects the reality of their practice, increased RN job satisfaction can be proposed (Dery et al., 2018). Due to the demands of nurses paired with the cost of educating and training nurses, nurse retention should be viewed as a priority (Dery et al., 2018). The Canadian Nurses Association predicted a shortage of up to 60,000 full-time equivalent RNs by 2022 (CNA, n.d.) This shortage has increased to a crisis due to the covid-19 pandemic. In 2020, Quebec saw a 43% increase in the number of nursing leaving their jobs with a 28 % increase of nurses on sick leave (Picard, 2021). Retaining the nurses working in Canada is imperative for the Canadian health care system.

## **Limitations**

Limitations of this review include the use of secondary data as there is no opportunity for clarification or further probing of participants. Additionally, data collected from this review ranged from 2010-2019 and due to the rapid changes in nursing practice in the last decade, data collection may have occurred prior to role changes of RNs or LPNs. Certain studies included in this review were conducted in specialized nursing areas (i.e. pediatrics, rural and remote settings and geriatric settings) and findings from these studies may not be easily transferrable to other nursing environments. Lastly, studies included in this review ranged from various provincial jurisdictions wherein scope of practice may be defined differently.

## **Conclusion**

- Future research should further clarify the conceptual definition of RNs and LPNs scope of practice.
- More research is urgently required to measure RNs and LPNs scope of practice. While there are scope of practice measures for RNs, they were developed with certain populations in mind (Quebec nurses) and may not reflect the jurisdictional differences in scope of practice. LPN practice measures require further development and testing.
- RNs need to be better prepared for leadership roles.
- RNs and LPNs need more education about each other's scope of practice.
- One long-term goal would be resolving the shortage of RNs.

## References

- Ausserhofer, D., Zander, B., Busse, R., Schubert, M., De Geest, S., Rafferty, A. M., . . . on behalf of the RN4CAST consortium. (2014). Prevalence, patterns and predictors of nursing care left undone in european hospitals: Results from the multicountry cross-sectional RN4CAST study. *BMJ Quality & Safety*, 23(2), 126-135. doi:10.1136/bmjqs-2013-002318
- Besner J, Doran D, McGillis Hall L, et al. (2005). A Systematic Approach to Maximizing Nursing Scopes of Practice. *Canadian Health Services Research Foundation*. Ottawa, Canada:
- Byres, D.W. (2018) Nursing policy secretariat: Priority Recommendations. Victoria: *BC Ministry of Health*.
- Canadian Institute for Health Information (CIHI). (2018). Regulated Nurses, 2017: Canada and Jurisdictional Highlights. Ottawa, ON
- Canadian Nurses Association (CNA). (2019). Retrieved from: <https://www.cna-aiic.ca/en/nursing-practice/the-practice-of-nursing/health-human-resources/nursing-statistics>
- Canadian Nurses Association (CNA). (n.d.) Tested Solutions for Eliminating Canada's Registered Nurse Shortage. Retrieved from: <https://cna-aiic.ca/en/nursing-practice/the-practice-of-nursing/health-human-resources#sthash.Q7Q7MaeJ.dpuf>
- Corazzini, K. N., Anderson, R. A., Rapp, C. G., & Mueller, C. (2010). Delegation in long-term care: Scope of practice or job description? *Journal of Issues in Nursing*, 15(2), 1–14. <https://doi.org/10.3912/OJIN.Vol15.No02M.an04>
- D'Amour, D., Dubois, C., Déry, J., Clarke, S., Tchouaket, É., Blais, R., & Rivard, M. (2012). Measuring actual scope of nursing practice: A new tool for nurse leaders. *The Journal of Nursing Administration*, 42(5), 248-255. doi:10.1097/NNA.0b013e31824337f4

- Déry, J., Clarke, S. P., D'Amour, D., & Blais, R. (2016). Education and role title as predictors of enacted (actual) scope of practice in generalist nurses in a pediatric academic health sciences center. *The Journal of Nursing Administration*, 46(5), 265-270.  
<https://doi.org/10.1097/NNA.0000000000000341>
- Déry, J., Clarke, S. P., D'Amour, D., & Blais, R. (2018). Scope of nursing practice in a tertiary pediatric setting: Associations with nurse and job characteristics and job satisfaction: Scope of nursing practice. *Journal of Nursing Scholarship*, 50(1), 56-64.  
<https://doi.org/10.1111/jnu.12352>
- Donnelly, G., & Domm, L. (2014). Conceptualizing an expanded role for RNs. *Open Journal of Nursing*, 4(2), 74-84. <https://doi.org/10.4236/ojn.2014.42011>
- Fraser, K., Punjani, N. S., Wilkey, B., Labonte, S., Lartey, S., Gubersky, J., Nickoriuk, K., Joseph, S., Younus, S., & Miklavcic, J. (2019). Optimizing licensed practical nurses in home care: Their role, scope and opportunities. *Nursing Leadership* (Toronto, Ont.), 32(1), 42-59. <https://doi.org/10.12927/cjnl.2019.25849>
- Havaei, F., MacPhee, M., & Dahinten, V. S. (2019). The effect of nursing care delivery models on quality and safety outcomes of care: A cross-sectional survey study of medical-surgical nurses. *Journal of Advanced Nursing*, 75(10), 2144-2155. doi:10.1111/jan.13997
- Jones, C., Toles, M., Knafl, G. J., & Beeber, A. S. (2018). An untapped resource in the nursing workforce: Licensed practical nurses who transition to become registered nurses. *Nursing Outlook*, 66(1), 46-55. <https://doi.org/10.1016/j.outlook.2017.07.007>
- Knight, K., Kenny, A., & Endacott, R. (2016). From expert generalists to ambiguity masters: Using ambiguity tolerance theory to redefine the practice of rural nurses. *Journal of Clinical Nursing*, 25(11-12), 1757-1765. <https://doi.org/10.1111/jocn.13196>

- Kusi-Appiah, E., Dahlke, S., Stahlke, S., & Hunter, K. F. (2019). Acute care nursing team members' perceptions of roles: Their own and each other's. *Journal of Nursing Management*, 27(8), 1784-1790. <https://doi.org/10.1111/jonm.12877>
- Lankshear, S., Rush, J., Weeres, A., & Martin, D. (2016). Enhancing role clarity for the practical nurse: A leadership imperative. *The Journal of Nursing Administration*, 46(6), 300-307. <https://doi.org/10.1097/NNA.0000000000000349>
- Lundy, M. (2019). Canada's nursing shortage unlikely to get better, report finds: Nursing job vacancies have risen 77 per cent since the second quarter of 2015, outpacing the overall rate of openings, statistics canada data show. *The Globe and Mail (Online)*
- Institute of Medicine. (2011). The future of nursing: leading change, Advancing health. *National Academies Press*.
- MacKinnon, K., Butcher, D. L., & Bruce, A. (2018). Working to full scope: The reorganization of nursing work in two canadian community hospitals. *Global Qualitative Nursing Research*, 5, 2333393617753905-2333393617753905.
- MacLeod, M. L. P., Stewart, N. J., Kosteniuk, J. G., Penz, K. L., Olynick, J., Karunanayake, C. P., . . . Garraway, L. (2019a). Rural and remote licensed practical nurses' perceptions of working below their legislated scope of practice. *Canadian Journal of Nursing Leadership*, 32(1), 8-19. doi:10.12927/cjnl.2019.25852
- MacLeod, M., Stewart, N., Kosteniuk, J., Penz, K., Olynick, J., Karunanayake, C., . . . Garraway, L. (2019b). Rural and remote registered nurses' perception of working beyond their legislated scope of practice. *Canadian Journal of Nursing Leadership*, 32(1), 20-29. doi:10.12927/cjnl.2019.25851

- Nelson, S., Turnbull, J., & Bainbridge, L. (2014). *Optimizing scopes of practice: New models of care for a new health care system*. Canadian Academy of Health Sciences.
- Oelke, N. D., White, D., Besner, J., Doran, D., Hall, L. M., & Giovannetti, P. (2008). Nursing workforce utilization: An examination of facilitators and barriers on scope of practice. *Canadian Journal of Nursing Leadership*, 21(1), 58-71. doi:10.12927/cjnl.2008.19691
- Pavloff, M., Farthing, P. M., & Duff, E. (2017). Rural and Remote Continuing Nursing Education: An Integrative Literature Review. *Online Journal of Rural Nursing & Health Care*, 17(2), 88+.  
<https://link.gale.com/apps/doc/A561882606/HRCA?u=ubcolumbia&sid=summon&xid=e1efdb29>
- Picard, A. (2021). Canada's nursing shortage is a gaping wound in our health care system: OPINION. *The Globe and Mail*. Retrieved from  
<https://www.proquest.com/newspapers/canadas-nursing-shortage-is-gaping-wound-our/docview/2489485547/se-2?accountid=14656>
- Rafiq, N., & Mughal, F. B. (2020). Evolving Nurse Leadership Role in 2020. *Journal of the College of Physicians and Surgeons Pakistan*, 30(12), 1243+.  
<https://link.gale.com/apps/doc/A651907144/HRCA?u=ubcolumbia&sid=summon&xid=cc4b241f>
- Recio-Saucedo, A., Dall'Ora, C., Maruotti, A., Ball, J., Briggs, J., Meredith, P., . . . Griffiths, P. (2018). What impact does nursing care left undone have on patient outcomes? review of the literature. *Journal of Clinical Nursing*, 27(11-12), 2248-2259. doi:10.1111/jocn.14058
- Shields, M., Wilkins, K. (2006) Enquête nationale sur le travail et la santé du personnel infirmier de 2005. *Statistics Canada*.

- Wangenstein, S., Johansson, I. S., Björkström, M. E., & Nordström, G. (2010). Critical thinking dispositions among newly graduated nurses. *Journal of Advanced Nursing*, 66(10), 2170-2181. <https://doi.org/10.1111/j.1365-2648.2010.05282.x>
- White, D., Oelke, N. D., Besner, J., Doran, D., Hall, L. M., & Giovannetti, P. (2008). Nursing scope of practice: Descriptions and challenges. *Canadian Journal of Nursing Leadership*, 21(1), 44-57. doi:10.12927/cjnl.2008.19690
- Upenieks, V. V., Akhavan, J., & Kotlerman, J. (2008). Value-added care: A paradigm shift in patient care delivery. *Nursing Economic*, 26(5), 294-300; quiz 301.