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EXPLORING NURSING PRACTICE IN RURAL, REMOTE AND ISOLATED CONTEXTS

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Abstract

Registered Nurses (RNs) work autonomously in an expanded scope of practice to provide primary care in rural, remote and isolated (RRI) areas. The mechanisms that regulate this expanded scope of practice have been largely unexplored. This research explores the expanded scope skills performed by RNs in RRI areas of British Columbia (BC) and the Yukon, the regulatory mechanisms governing these expanded scope skills, and provides a foundation for future research and policy development aimed at addressing the challenges faced by RNs in these settings. The findings suggest that nurses working within these contexts are knowledgeable and experienced in advanced skills that enable them to meet the broad range of health needs within their communities. However, both BC and Yukon cases revealed potential regulatory ambiguities. Yukon is currently undergoing health system and policy reform, which presents an opportunity for changes that could positively impact the professional regulation of nurses.

Keywords: nursing, scopes of practice, regulation, rural, remote, isolated, education

Table of Contents

List of Tables

List of Abbreviations

3I+E	Interests, Ideas, Institutions and External Factors
BC	British Columbia
BCCDC	British Columbia Centre for Disease Control
BCCNM	British Columbia College of Nurses and Midwives
BCIT	British Columbia Institute of Technology
BN	Bachelor of Nursing
CARRN	Canadian Association for Rural and Remote Nursing
CIHI	Canadian Institute for Health Information
CNA	Canadian Nurses Association
DST	Decision Support Tool
ER	Emergency Room
FNIHB	First Nations and Inuit Health Branch
GI	Gastrointestinal
GU	Genitourinary
IO	Intraosseus
ITLS	International Trauma Life Support
IUD	Intrauterine Device
LPNs	Licensed Practical Nurses
PAs	Physician Assistants
PAP Smear	Papanicolaou Smear
PHCN	Primary Health Care Nurse

PHN	Primary Health Nurse
NNPBC	Nurses and Nurse Practitioners of British Columbia
NP	Nurse Practitioner
RAN	Remote Area Nurse
RN	Registered Nurse
RNs	Registered Nurses
RNS	Rural Nurse Specialist
RPNs	Registered Practical Nurses
RRI	Rural, remote and isolated
RTVS	Real Time Virtual Support
TCPS 2	Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, 2nd Edition
TNCC	Trauma Nursing Core Course
UNBC	University of Northern British Columbia
UTI	Urinary Tract Infection
WGH	Whitehorse General Hospital
YG	Yukon Government
YNA	Yukon Nurses Alliance
YRNA	Yukon Registered Nurses Association
YT	Yukon Territory

Chapter 1: Introduction

Registered Nurse (RN) roles in rural, remote and isolated (RRI) areas are multifaceted and unique from their urban counterparts. Nurses in RRI areas often work autonomously or in small teams with other nurses and support staff, providing healthcare services 24/7 (Argent et al., 2022; Barrett et al., 2015; Burrows et al., 2019; Lundberg et al., 2021; McDonnell et al., 2019; Oliveira et al., 2021; Ricarte de Oliveira et al., 2019) in nurse-led models of care (Lundberg et al., 2021; McCullough et al., 2020; Mills, 2015; Msuya et al., 2017; Oliveira et al., 2021). Physicians, nurse practitioners (NPs) and allied health professionals are not readily accessible in RRI areas (Barrett et al., 2015; Bell et al., 2018; Bourke et al., 2021; Lundberg et al., 2021; Martin-Misener et al., 2020; McElroy et al., 2022) and as a result, RNs may perform skills beyond their legislated scope of practice to fill healthcare gaps (Barrett et al., 2015; Martin-Misener et al., 2020; Muirhead & Birks, 2019; McElroy et al., 2022). In RRI settings, the boundaries of the nursing scope of practice are often not well defined through policies and protocols, and there is some evidence of subjective interpretation and application of what skills fall within and outside of the nursing scope (Knight et al., 2015; MacLeod et al., 2019). This research explores the expanded scope skills performed by RNs in RRI areas of British Columbia (BC) and the Yukon, the regulatory mechanisms governing these expanded scope skills, and provides a foundation for future research and policy development aimed at addressing the challenges faced by RNs in these settings.

1.1 Positionality

This work came to fruition because of my experience working as a Primary Health Care Nurse (PHCN) in RRI Yukon communities. This role involved an expanded scope of practice

with some initial training from my employer. For example, some of the skills I was trained to perform included suturing minor wounds, chest and extremity x-rays, needle pneumothorax decompression, medical diagnosis, and autonomously dispensing and administering medications from a set formulary. I worked with two other nurses at a time, with physicians visiting the clinic two days each month. I had access to emergency physicians over the phone for support, but video calling was not possible, and as a result, communication of the client status could be challenging at times. I encountered several dilemmas of not knowing the boundaries of my scope and uncertainty of how the nursing regulator was involved in setting these boundaries. I began to wonder if this experience was common among other nurses in RRI areas, and what evidence-based strategies could be employed to better support my colleagues in these roles. As a Yukon Nurses Association (YNA) member and board director, I am aware of the key issues impacting nursing practice in the Yukon. I believe my professional experience working in RRI Yukon communities helped me look deeper into the data for associations or patterns that may not be evident to other researchers without this experience and knowledge.

1.2 Statement of the Problem

There is a lack of understanding of effective regulatory and policy infrastructure for nursing practice in RRI areas. As a result of unclear scope of practice boundaries, policies, and protocols, nurses in RRI areas may face uncertainty, such as when determining whether they are authorized to provide advanced care to certain clients. These areas of uncertainty ultimately disservice clients in RRI areas, who can only access healthcare services locally through these nurse-led models of care. It is important that RRI nurses are supported with adequate policy infrastructure and professional support to competently work to their full scope of practice and

reduce scope of practice boundary uncertainties.

1.3 Purpose

By examining their regulatory mechanisms, this study aimed to explore the expanded scope skills performed by RNs in RRI areas of British Columbia (BC) and the Yukon, understand the regulatory mechanisms governing these expanded scope skills, and provide a foundation for future research and policy development aimed at addressing the challenges faced by RNs in these settings. The findings of this research are intended to support advocacy efforts for improved professional support for nurses working in RRI areas.

1.4 Research Questions

1. How do RNs working in RRI areas describe the skills that may be performed beyond the entry to practice scope?
2. How do different regulatory and health system actors govern RNs' performance of expanded scope skills?

1.5 Definition of Terms

The following terms and concepts will be referred to throughout this work.

- Rural, remote and isolated (RRI): There are various definitions of RRI communities in the literature. The Canadian Association for Rural and Remote Nursing (CARRN) (2020) approach will be used in this research, where RRI areas are defined as one entity and characterized by their geographical isolation from urban healthcare facilities, limited amenities, and where RNs are the primary care providers with more extensive responsibilities.

- Nurses: This research studies the regulation of RNs in RRI areas, and therefore, this will be the group referred to when using “nurse” or “nurses”.
- Expanded scope skills: This term will be used to refer to skills beyond the entry to practice scope that RNs have received additional training and education to perform in the RRI context.
- Regulatory body: Refers to organizations that set, monitor and enforce standards by which nurses are regulated within their given jurisdiction for the purpose of public protection (CNA, n.d.).
- Professional association: Refers to nursing organizations that advocate for the best interest of the nursing profession on the behalf of nurses, nursing students, and retired nurses (CNA, n.d.).

Chapter 2: Review of the Literature

This chapter provides an overview of a literature review that was carried out to gain a better understanding of the existing knowledge base related to RRI nursing. The aims of this narrative literature review were to (1) explore how the unique roles, responsibilities and supports for nurses in RRI areas around the world are different from those in urban areas, (2) explore how the educational and training preparation for the RN role in RRI areas differs between jurisdictions or organizations, and (3) identify how the RRI area practice contexts differ from the urban contexts. The gaps in the literature identified through this review informed my thesis research questions. The findings of this review also provided key insights into the scope of the RRI nursing role, which aided in the design of my thesis research and participant interview guide.

2.1 Background

The population density definition of RRI areas varies across regions, but they are generally small, have limited resources, and may lack essential infrastructure such as year-round road access. RRI areas may experience challenges in maintaining health infrastructure and equipment, challenges with reliable cell coverage or internet access, or, in extreme circumstances, may lack medical supplies, medications, and running water (Lenthall et al., 2018, Ricarte de Oliveria et al., 2019). Nurses in RRI areas provide care to populations that experience poorer health outcomes than their urban counterparts because of reduced access to social determinants of health and cited inequities (Australian Government, 2023; Centers for Disease Control and Prevention, 2023; World Health Organization, 2018). Many RRI areas across the world are primarily inhabited by Indigenous populations with unique histories, cultures, and

health beliefs (Behera et al., 2020; McCullough et al., 2021; McDonnell et al., 2019; Wicks et al., 2023; Wood et al., 2021; Young & Young, 2016).

The role title and scope of RNs in RRI areas varies depending on the jurisdiction, with titles including the Primary Health Care Nurse (PHCN) in Canada's Yukon Territory, Primary Health Nurse (PHN) or Rural Nurse Specialist (RNS) in New Zealand, and Remote Area Nurse (RAN) in Australia. The RN role in RRI areas differs from that of a NP in that they do not require a master's level education to practice the expanded scope skills and NPs have training and authority to perform skills above the scope of the RRI RN. The unique role and scope are not well defined, and where definitions exist, they are inconsistent across organizations and jurisdictions.

2.2 Methods

2.2.1 Inclusion and Exclusion Criteria

Article titles and abstracts were reviewed and selected by their relevance, and duplicates were screened out as the search was conducted. Articles were filtered to include those available in English, with full text available online, and those published in the past ten years. Reference lists of relevant articles were also manually searched for any literature that may have been missed. Articles were included if they focused on RNs and RRI nursing practice or expanded-scope nursing practice in RRI areas. Articles were excluded if the focus was on Nurse Practitioners (NPs), licensed practical nurses (LPNs) or registered practical nurses (RPNs), other allied health professionals, or larger urban settings. Slight modifications to inclusion and exclusion criteria were made as the search evolved to include articles relevant to the context of RRI nursing practice. For example, a preliminary literature search yielded no results specific to

the Yukon Territory, so the search was expanded to include all countries and regions. Scope of practice literature was excluded from this review if it did not specifically address expanded scope of nursing in RRI contexts.

2.2.2 Search Methods

The initial literature search was conducted in January of 2024. The Athabasca University Ebsco Discovery service, CINAHL Plus, ProQuest Nursing & Allied Health Source, PubMed Central, and Google Scholar databases were used. Key terms were used in various combinations and filtered by title or abstract. A Boolean search method combined the concepts, related categories, and keywords using OR / AND. The truncation symbol * was used to search for all words with a similar root. Key terms included primary health care nurse, registered nurse, scope of practice, rural, remote, isolated, prescribing, x-ray, and Indigenous. Alternate keywords were used to broaden or narrow the search as needed. Limited evidence was available on the regulation of expanded scope of practice in RRI areas, so the search was expanded to include the cultural, environmental, and organizational contexts areas to gain further understanding.

The search was updated in November of 2024 to capture any newly published literature. CINAHL Plus and ProQuest Nursing & Allied Health Source databases were used. The same Boolean search method of the initial literature search was repeated using the same key terms.

2.3 Data collection and analysis

A total of 8,269 results were retrieved from the initial search. Thirty duplicate articles were removed. One hundred and ninety articles were screened in based on their titles and abstracts. The remaining 160 full-text articles were reviewed, and 125 that did not meet the inclusion criteria were excluded. A total of 35 articles were included in this review.

A total of 2,507 results were retrieved in the search update. Sixty-two duplicates were removed and 235 articles were screened in based on their titles. One hundred and seventy-three abstracts were screened, and 120 did not meet the inclusion criteria. A total of 53 full texts were reviewed. An additional 21 were excluded as they were captured in the initial search. Nine articles from the secondary search were included in this review, in addition to the 35 that met the inclusion criteria of the initial search, resulting in a total of 44 articles. Quality appraisal was not conducted due to the small amount of relevant literature found. However, only peer-reviewed literature published by scholarly journals was included.

2.4 Findings

The literature included in this review described the nursing role in RRI areas of Australia (n=16), Botswana (n=1), Brazil (n=1), Canada (n=6), Finland (n=1), India (n=2), New Zealand (n=1), Tanzania (n=1), and the United States of America (n=1). Fourteen relevant literature reviews were included. Each article was reviewed and examined for themes using an inductive approach. Articles were categorized based on themes and jurisdiction. The following themes were identified: (1) nursing roles in RRI areas, (2) educational preparation, (3) support, and (4) the RRI context.

2.4.1 Nursing Roles in RRI Areas

Nurses are vital as primary healthcare providers in RRI areas, delivering patient care across the lifespan (Argent et al., 2022; Beks et al., 2023a; Lundberg et al., 2021; Mills, 2015; Msuya et al., 2017). These nursing roles require flexibility to respond to the community's needs, local infectious disease patterns, and social determinants of health (Muirhead & Birks, 2019). Nurses in RRI areas often work autonomously or in small teams with other nurses and support

staff, providing healthcare services 24/7 (Argent et al., 2022; Barrett et al., 2015; Burrows et al., 2019; Lundberg et al., 2021; McDonnell et al., 2019; Oliveira et al., 2021; Ricarte de Oliveira et al., 2019) in nurse-led models of care (Lundberg et al., 2021; McCullough et al., 2020; Mills, 2015; Msuya et al., 2017; Oliveira et al., 2021). Each nurse's level of knowledge, skill, and experience may impact their comfort in acting autonomously (Bourke et al., 2021; McDonnell et al., 2019).

To compensate for the lack of physician or NP coverage, nurses in RRI areas across countries such as Australia, Botswana, Canada, Finland, New Zealand, and Tanzania perform tasks beyond their designated scope of practice to provide essential care (Barrett et al., 2015; Bell et al., 2018; Bourke et al., 2021; Feringa et al., 2020; Lundberg et al., 2020; MacLeod et al., 2019; Martin-Misener et al., 2020; McCullough et al., 2022; McElroy et al., 2022; Msuya et al., 2017; Muirhead & Birks, 2019). Expanded scope skills vary among each community and may include advanced assessment skills to diagnose and treat medical conditions, emergency scene or incident response, initiating, dispensing, and administering medications, procedures like casting and suturing, and ordering, performing and interpreting laboratory and diagnostic imaging tests on site (Bell et al., 2018; Burrows et al., 2019; Fournier et al., 2021; Knight et al., 2015; Lenthall et al., 2018). Canadian literature also describes nurses' decision-making process on whether critical clients should be transferred to a higher level of care by medical evacuation or scheduled flight, which may be influenced by limited access to equipment, and balancing the limits of their expanded scope with the needs of the clients (McDonnell et al., 2019; Young & Young, 2016). In addition to their clinical responsibilities, nurses may also carry out non-clinical tasks out of necessity, including managing dispensaries, cleaning, food preparation, property and vehicle maintenance, animal health, and administrative work (Fournier et al., 2021; McCullough et al.,

2022; Muirhead & Birks, 2019). Some nurses may feel unprepared for the unique expanded scope role and yet continue to practice the skills beyond their scope of practice in order to meet their community's health needs (Barrett et al., 2015; Lenthall et al., 2018; Muirhead & Birks, 2019).

Scope of Practice. In RRI settings, the boundaries of the nursing scope of practice are often not well defined through policies and protocols, and there is some evidence of subjective interpretation and application of what skills fall within and outside of the nursing scope (Knight et al., 2015; MacLeod et al., 2019). In some cases, nurses in RRI areas face uncertainty in not knowing the boundaries of their scope, or dilemmas where the expectations of their colleagues or superiors do not align with their values or role boundaries (Feringa et al., 2020; Holland et al., 2024; McCullough et al., 2022). However, in some countries such as the USA, Australia, and Canada, nurses in RRI areas may have access to decision support tools or standing orders for tasks including pain management, vaccinations, and anaphylaxis treatment (Brown et al., 2020; Knight et al., 2015; Martin-Misener et al., 2020). There is evidence that expanded scope skills are broadly regulated by care protocols, treatment guides, and collective prescriptions; however, the details of how these mechanisms are employed and involvement of regulators were not described (Fournier et al., 2021).

2.4.2 Educational Preparation

Educational preparation for the RRI RN was described in the Australian, Brazilian, Canadian, Indian, and Tanzanian contexts and in two international reviews. Nurses working in RRI areas are equipped with a RN license as a foundational requirement and specific qualifications diverge across regions and organizations. For instance, RRI nurses in areas of New

Zealand and Canada may be required to have a postgraduate certificate or Master's degree relevant to the practice area (Bell et al., 2018; MacLeod et al., 2017). However, these educational requirements are not the same as NP postgraduate education programs. In contrast, similar roles in India reference on-the-job training and mentorship (Amin et al., 2020).

Continuing education in the RRI context is important to maintain provider competency because nurses may not have regular exposure or opportunities to perform specialized skills (Burrows et al., 2019; Fournier et al., 2021; MacKay et al., 2021; McElroy et al., 2022; McDonnell et al., 2019). However, research highlights the unique geographical, financial, time constraints, and staffing challenges that impact the delivery of nursing education and training in RRI areas (Burrows et al., 2019; Corner et al., 2023; Holland et al., 2024; McElroy et al., 2022). RRI nursing organizations do not universally require continuing education, and various studies cite inadequate orientation and preparation for the RRI nursing role (Fournier et al., 2021; Lenthall et al., 2018; McCullough et al., 2022; Muirhead & Birks, 2019; Oliveira et al., 2021).

Other identified education needs include tailored comprehensive specialized nursing practice, advanced specialty courses, medication safety protocols, preceptorship programs, interprofessional practice training, and cultural safety training (Corner et al., 2023; McElroy et al., 2022; Pavloff et al., 2017; Speare et al., 2021; Wood et al., 2021). Some evidence suggests that previous experience is not sufficient to prepare nurses for the expanded remote scope or level of assessment, reasoning and treatment knowledge (Lenthall et al., 2018; McCullough et al., 2022; Oliveira et al., 2021; Pavloff et al., 2017; Speare et al., 2021). Even where advanced training is required for the role, the reality of staffing pressures often means that nurses begin working before completion of training (McDonnell et al., 2019). Research highlighted the need for support in overcoming the unique geographical, financial, time constraints, and staffing

barriers to delivering nursing education and training in RRI areas (Corner et al., 2023; McElroy et al., 2022).

2.4.3 Support

Nurses often work autonomously in RRI areas, with physicians visiting for a few days each month, depending on their availability (Amin et al., 2020; Oliveira et al., 2021; Young & Young, 2016). When physicians are absent in the community, nurses may consult them over the phone for clinical guidance and medical orders (Amin et al., 2020; Burrows et al., 2019; Fournier et al., 2021; McDonnell et al., 2019; Young & Young, 2016). It is important that trusting relationships with effective communication are built between the nurses in RRI areas and supporting physicians (Fournier et al., 2021; Young & Young, 2016). A RRI nurse participant in Fournier et al. (2021) describes the pressure and implication of working in this capacity, "if I give the wrong information or if the physician misunderstands it, it could be enough to make the result a catastrophe" (p.2494). In addition to clinical support from physicians, clinical nursing supervision and mentorship are important to support learning and growth through mutual problem-solving and feedback (Hildebrand et al., 2023; Holland et al., 2024; MacKay et al., 2021). With existing supervision models not being directly transferable to the RRI context, a hybrid supervision model incorporating in-person support, group sessions, case note monitoring, and distance telephone or video conference support as needed is supported by some literature (Hildebrand et al., 2023).

2.4.4 Rural, Remote and Isolated Context

The unique context and needs of the RRI community ultimately shape the multifaceted RRI nursing role (Fournier et al., 2021; McCullough et al., 2022; Muirhead & Birks, 2019;

Oliveira et al., 2021). Recognizing that many RRI areas are primarily inhabited by Indigenous populations (Behera et al., 2020; McCullough et al., 2021; McDonnell et al., 2019; Wicks et al., 2023; Wood et al., 2021; Young & Young, 2016), nurses in RRI areas should have cultural awareness of the lasting effects of colonization and decades of systemic discrimination that continue to have intergenerational impacts on Indigenous populations, as evidenced by their disproportionately higher rates of morbidity and mortality, and practice culturally safe care (Dunbar et al., 2019; Kim, 2019; Pavloff et al., 2022; Wright et al., 2024). Nurses in RRI areas should be supported in accessing cultural safety training and connecting with their communities to collaboratively identify their health needs and priorities (Fournier et al., 2021; Wright et al., 2024).

The RRI context is also associated with several challenges including maintaining professional boundaries, nurse recruitment and retention, and nurse safety when working alone. Fostering trusting relationships with communities is an important part of the RRI nursing role, however, the small size and isolation of communities can challenge professional boundaries, cultivating or maintaining personal relationships, and overcoming perceptions of healthcare providers as outsiders (Argent et al., 2022; Barrett et al., 2016; Bell et al., 2018; Dunbar et al., 2019; Fournier et al., 2021; Holland et al., 2024; Knight et al., 2015; Lenthall et al., 2018; MacKay et al., 2021; Schlairet, 2017). The RRI context and nature of the work also pose a challenge for recruiting and retaining consistent nursing staff (Argent et al., 2022; Dunbar et al., 2019; MacKay et al., 2021; Ricarte de Oliveira et al., 2019). In Lenthall et al. (2018), nearly all participants “agreed that working in remote communities was more emotionally demanding than most other jobs they had previously undertaken” (p.184). Working alone or in short-staffed teams presents healthcare worker safety concerns in responding to emergency scenes or in client

interactions (Barrett et al., 2015; Lenthall et al., 2018). Nurses in RRI areas should be supported in working through these unique challenges to prevent burnout and promote nurse retention (Fournier et al., 2021).

2.5 Discussion

This review of the literature provided insight into the nursing role in RRI areas, including educational preparation, practice context, and a brief introduction into how the unique expanded scope is regulated. Nurses in RRI areas take on a great amount of responsibility in working autonomously in an expanded scope. Although similarities exist in the role deployment in RRI contexts, the role boundaries vary and can be ambiguous, which could be attributed to the need to adapt the role to the unique needs of each community. Supportive interprofessional relationships and continuing education are consistently highlighted as important aspects of the RRI nursing role (Burrows et al., 2019; Fournier et al., 2021; MacKay et al., 2021; McElroy et al., 2022; McDonnell et al., 2019; Young & Young, 2016). The specific mechanisms to regulate expanded scope skills remain unclear and require further exploration to empower nurses in RRI areas to safely work to their full scope.

2.5.1 Support for RRI Nursing Expanded Scopes of Practice

Although regulatory systems differ in their structure and operations across jurisdictions, some evidence indicates that using regulation systems to support expanded scopes of practice ultimately improves healthcare access and quality, especially for rural or underserved populations (Leslie et al., 2023). Examples of expanded scopes of practice may include authorization to prescribe or administer restricted medications, and it is the regulator's responsibility to set necessary competencies, accredit training programs, monitor compliance

with standards, and follow up on breaches of standards (Leslie et al., 2023). Countries such as Australia have adopted more flexible regulatory framework structures where scopes of practice are based on the practice context, health needs, individual competency and confidence, and policy requirements of the service provider, which may be a structure for Northern Canadian regulatory systems to consider to improve access to healthcare in RRI areas (Leslie et al., 2021). There is limited evidence of regulator involvement in the current nursing care model in RRI contexts, and further research should explore how the current scope of RRI nurses is regulated.

2.5.2 Ambiguous Scope of Practice Boundaries

Nurses in RRI areas often experience uncertainty about the boundaries of their scope of practice, with interpretations varying based on nurses' experiences and knowledge (Feringa et al., 2020; MacLeod et al., 2019; McCullough et al., 2022). The lack of clear policies and protocols exacerbates the issue, leaving nurses to navigate complex clinical situations with limited guidance. While decision support tools and standing orders are cited in some contexts to support RRI nurse decision-making (Brown et al., 2020; Knight et al., 2015; Martin-Misener et al., 2020), their application is inconsistent. Moving forward, there should be greater education and support for nurses in recognizing the limits of their scope of practice, in addition to empowering them to work to their full scope.

2.5.3 RRI Nursing as a Formally Recognized Specialty

There is a call to recognize the unique expanded scope of nursing in RRI areas as a defined nursing specialty to support nursing education and reduce the risk of the role solely filling existing healthcare gaps (McCullough et al., 2022; Wiggins et al., 2022). For example, an Australian nursing professional body has established a professionally credentialed Remote Area

Nurse designation to formally recognize nurses who demonstrate that they are practicing within the remote standards of practice framework (McCullough et al., 2022). The role is unique to any other nursing context, requiring nurses to have a broad range of knowledge, skills, and cultural competency. Previous experience alone is insufficient in preparing nurses for the unique RRI nursing role, and the literature commonly cites a need for improved orientation, education, support, and clinical supervision to ensure that nurses feel confident and competent in effectively meeting the diverse health needs of their community (Barrett et al., 2015; Corner et al., 2023; Hildebrand et al., 2023; Lenthall et al., 2018; McCullough et al., 2022; Muirhead & Birks, 2019; Oliveira et al., 2021; Pavloff et al., 2017; Speare et al., 2021). Improving access to high-quality healthcare is important, considering the current disproportionate impact of RRI healthcare access on Indigenous populations (Oliveira et al., 2021). Ultimately, defining the role may assist in professional advocacy for overcoming education and support barriers, and in advocating for improved interprofessional relationships.

2.5.4 Frameworks to Support RRI Nursing

Proposed Australian and Canadian rural and remote nursing frameworks aim to address the unique challenges of the RRI context, improve healthcare delivery, and advocate for greater nursing support (Beks et al., 2023b; McCullough et al., 2020; Pavloff et al., 2022). McCullough et al.'s (2020) model, *Making Compromises to Provide Primary Health Care in a Remote Setting,* describes the process in which nurses do the best that they can with what they have and the consequence of making compromises. Pavloff et al.'s (2022) framework takes a community-centered approach, incorporating the social determinants of health describing the health outcomes that are a result of the combined effects of each variable. Finally, Beks et al.'s (2023b)

overview of the *National Rural and Remote Nursing Generalist Framework 2023-2027* focuses on translation into practice, highlighting supporting nursing student placements, training and research in RRI areas. However, despite the professional support of these frameworks, there remains little evidence of translation into practice.

2.6 Research Gaps

Much can be learned from this review of the RRI nursing literature that can be applied to the Yukon Territory context where there is ongoing healthcare system reform to ensure RRI nursing practice is adequately supported. However, there are still many gaps in understanding that can be addressed through further nursing research in RRI areas. Further research should be conducted to determine the current state of Primary Health Care Nursing in Canada, including what specific skills nurses perform beyond their legislated scope of practice and the variability in educational preparation across organizations. Clarifying nurses' responsibilities within the RRI context may enhance interprofessional collaboration and inform targeted educational interventions. A comparative analysis of educational preparation across different Northern organizations in relation to identified education needs may guide recommendations for improving nurse readiness for RRI practice and improving RRI population access to quality healthcare. Interestingly, NPs and physician assistants (PAs) are rarely cited as supporting the RRI nurses by remote communication. Further research should explore why NPs are rarely cited in supporting RRI nurses over the phone, and how they may be leveraged to improve RRI nursing professional support.

This review supports the need for further research to determine what policies, regulations, or legislation surround expanded-scope skills, including identifying the specific mechanisms

governing expanded-scope practices. Further investigation into the barriers and facilitators of implementing RRI nursing frameworks in the real-world setting is also necessary. Improving framework translation into practice will positively impact the delivery of RRI healthcare.

2.7 Limitations

Although this review improved the understanding of nursing roles in RRI areas and highlighted research gaps, it also has some limitations. The initial literature search had a large number of articles; however, many were excluded because full texts were not available in the utilized databases. To strengthen the search strategy, the secondary search was carried out, yet there is still the potential that some literature was missed. The inconsistencies surrounding RRI nursing position titles may have also unnecessarily filtered out literature. Literature was screened for peer reviewed status, but additional quality appraisal was not conducted. In addition, literature was limited to the English language, which may excluded relevant literature from other parts of the world. This review focused on scholarly literature, but inclusion of grey literature like legislation or policies may have assisted in the understanding of expanded scope regulation.

2.8 Conclusion

This review highlights the unique and multifaceted roles of nurses in RRI areas that are distinct from their urban counterparts. These nurses work in resource-limited areas and serve unique populations with complex healthcare needs, often performing above their legislated scope of practice to fill the gap. Despite the role flexibility in meeting the diverse needs of their communities, there is an identified need for improved educational preparation, clearer role definition, and effective translation of RRI nursing frameworks into practice. The lack of research on how policies, regulations, and legislation govern expanded-scope skills in RRI areas

highlights the need for further investigation of expanded-scope regulation to support role clarity and access to safe and quality healthcare in RRI areas. Addressing this research gap forms the basis of this thesis.

Chapter 3: Theoretical Framework

The policy, regulatory, and legislation infrastructure surrounding expanded-scope skills remains unclear and requires further exploration to support nurses working in these roles. The 3-I+E framework was used to guide the research approach to identifying this infrastructure. The 3-I+E framework incorporates four common factors influencing policy development: interests, ideas, institutions, and external factors. This framework has been used previously to analyze health policies, including the scope of practice of healthcare professionals (Bashir & Ungar, 2015; Chiu et al., 2024; Lee, 2022; Myles et al., 2023). Using a 3-I+E lens assisted in identifying the major regulatory actors and policies, regulations, and legislation involved in regulating skills above the RN legislated scope of practice in RRI areas, and in identifying how these concepts were interrelated, as suggested by Gauvin (2014). In the following section, the 3-I+E framework is outlined in detail. The Canadian Nurses Association (CNA) (2015) framework is introduced and its alignment with the 3-I+E framework is outlined.

3.1 3I+E Framework

Ideas refer to the knowledge, evidence, beliefs and/or values of the stakeholders involved (Bashir & Ungar, 2015; Gauvin, 2014). Interests refer to the real or perceived interests or agendas of the stakeholders involved, including an analysis of any advantage to a specific group through the adoption of a policy (Bashir & Ungar, 2015; Gauvin, 2014). Institutions refer to the government structures, policy networks, and policy legacies that may shape, reinforce or constrain policies and their development (Bashir & Ungar, 2015; Gauvin, 2014). External factors refer to practice, political or economic developments or media or news coverage associated with the issue at hand. All these interrelated factors may facilitate or inhibit policy development

related to nursing scope regulation. This framework assisted in considering the wide range of factors involved in scope regulation and in considering ways for improvement.

3.2 CNA (2015) Scope of Practice Boundaries Framework

These ideas, interests, institutions and external factors were identified through data collection and were also informed by the Framework for the Practice of Registered Nurses in Canada developed by the Canadian Nurses Association (CNA, 2015). The Scope of Practice Boundaries Framework outlines the hierarchy of controls on nursing practice (CNA, 2015). In order from the broadest professional regulations to the most specific, controls on nursing practice include (1) health professions or nursing legislation, (2) RN profession regulation, (3) professional guidelines, standards and position statements, (4) employer policies, (5) individual RN competence, and (6) client needs (CNA, 2015). For example, according to the CNA (2015) framework, employer policies on nursing scope of practice should not supersede regulations set out in nursing legislation. The CNA framework informed the identification of the case specific regulatory actors and policies, regulations, and legislation. I used the CNA framework as a guide for information searching. For example, data collection included researching health professions and nursing legislation, professional regulation policies, professional guidelines and standards, and employer policies for each case. The use of a theoretical framework was beneficial in examining nursing scope of practice regulation to better understand the key actors and their roles. The 3-I+E framework was well suited to examine the policies or legislation involved in nursing scope of practice regulation, and the CNA Framework for the Practice of Registered Nurses in Canada supported the identification of relevant documentation. Both frameworks were applied to data collection and analysis to identify the existing policies and legislation, and the

gaps where further support is required.

Chapter 4: Research Design and Methodology

This chapter describes the research design, including the research questions, methodology, philosophical underpinnings, and methods. This chapter also includes a discussion of researcher reflexivity and the approaches used to ensure research quality.

4.1 Research Questions

The purpose of this research was to explore the expanded scope skills performed by RNs in RRI areas of BC and the Yukon, understand the regulatory mechanisms governing these expanded scope skills, and provide a foundation for future research and policy development aimed at addressing the challenges faced by RNs in these settings. This overarching purpose included the following research questions:

1. How do RNs working in RRI areas describe the skills that may be performed beyond the entry to practice scope?
2. How do different regulatory and health system actors govern RNs' performance of expanded scope skills?

The answers to these two research questions can inform advocacy efforts for improved professional support for RNs working in RRI areas.

4.2 Methodology

In the context of RRI areas of Canada, this study used exploratory multiple case study research to facilitate an in-depth understanding of issues among nursing regulation and practice standards in RRI areas of two jurisdictions. This methodology was informed by approaches described by Cresswell and Poth (2023) and Yin (2017). Similar research examining nursing

regulatory structures has also used exploratory case study approaches (Leslie et al., 2023; Leslie et al., 2024; Thiessen et al., 2022). An exploratory approach was most appropriate for the research questions because there was little evidence on the topic, and this research aimed to gain a deeper understanding of the problem. This thesis work examined two unique cases, which were the regulatory structures in the Yukon and BC. These cases were used to provide insight into the differences and similarities among regulatory structures, and how differences noted in the provincial case may be beneficial to implement in the territorial case. Policy work in the Yukon is often informed by existing policies in BC, so comparing these cases was beneficial in making realistic recommendations. As described by Cresswell and Poth (2023), multiple sources of information were used to develop a deeper understanding of the cases and contexts, which included nursing scope of practice legislation and acts, jurisdictional government regulation and bylaws, and semi-structured interviews with nurses working in RRI contexts of the Yukon and BC.

4.2.1 Central Principles

There are several key principles of case study methodology that make it appropriate for the research questions. Case studies are characterized by the in-depth understanding that they generate from the review of multiple sources of information (Cresswell & Poth, 2023). The cases, defined as regulatory structures in one territory and one province, are bound to their locations and the current time. Investigating at the jurisdictional level, rather than the regional or organizational level, was appropriate because scope of practice legislation is applicable within the entire province or territory. The use of multiple sources of information also assisted in triangulation, in which findings were referenced across different sources, strengthening construct

validity (Yin, 2017).

The approach to data analysis differs depending on the type of case study research (Cresswell & Poth, 2023). However, four guiding principles, as described by Yin (2017) were upheld. Firstly, data analysis should demonstrate that all available evidence has been attended to, to support any interpretations (Yin, 2017). This was achieved by conducting a comprehensive review of the publicly available evidence on the scope of practice legislation and acts, and jurisdictional government regulation and bylaws. Secondly, data analysis should also explore plausible alternative interpretations (Yin, 2017). This standard was upheld by reflecting upon findings continuously throughout analysis and discussing these with my supervisors. Any findings that could be interpreted differently were identified as areas for future research, as suggested by Yin (2017). Third, the most significant aspect of the case study (which is answering how expanded scope practice is regulated in each case and making recommendations on its improvement) should be the focus of analysis (Yin, 2017). This was achieved by maintaining focus on the research questions in the analysis and discussion. Finally, the author should be able to demonstrate familiarity with the common thinking and discourses about the research topic (Yin, 2017). This was achieved by drawing upon my experience working as a PHCN in RRI Yukon communities, and from the knowledge I gained from a literature review on the topic.

4.3 Research paradigm: Constructivism

There are different approaches to case study methodologies, and researchers should position their research within a paradigm that outlines the philosophical principles that guide their research (Sibbald et al., 2021). Nursing scope of practice is influenced by each nurse's competence and therefore varies with each context and individual (British Columbia College of

Nurses & Midwives, n.d.a; College of Nurses of Ontario, 2023). In RRI settings, the boundaries of nursing scope of practice are often not well defined through policies and protocols, and there is evidence of subjective interpretation and application of what skills fall within and outside of the nursing scope (MacLeod et al., 2019). In addition, nurses in RRI areas face uncertainty regarding the boundaries of their scope (Feringa et al., 2020; McCullough et al., 2022). Although legislation, regulations, and organizational policies may represent a singular reality, their interpretation along with each nurse's competency levels will differ (Thiessen et al., 2022). Therefore, a constructivist research paradigm that recognizes and acknowledges the multiple interpretations of reality and the influence of context is most appropriate for the research questions, as suggested by Sibbald et al. (2021). A constructivist approach may also assist in recognizing scope of practice misinterpretations, and therefore, assist in highlighting the need for clear and consistent regulatory approaches.

4.4 Methods

This exploratory case study followed Yin's (2017) case study methodology. Yin's (2017) methodology aligns well with exploratory multiple case studies where the researcher has little control over the phenomenon of interest and outlines structured means of data collection and analysis. Yin's structured approach is well suited for novice researchers with limited expertise and experience. Yin's (2017) case study methodology has commonly been used in nursing and health research focusing on role scope and regulation (Thiessen et al., 2022; Leslie et al., 2024; Mattison et al., 2020), supporting its use.

4.4.1 Pre Study Tasks

Several tasks were completed prior to starting this case study research. First, consistent with Yin (2017), a literature review was conducted to build a knowledge base of nursing practice in RRI areas, assess gaps in the literature, and to shape the research questions. The formation of the research questions and purpose of the study guided me in choosing an appropriate methodology, where "how" and "why" questions were most appropriate for a case study methodology (Yin, 2017). I also engaged in reflexive practices like journaling, as suggested by Darawsheh (2014), throughout the research process to identify my influence and perspective.

4.4.2 Design

The design of this exploratory case study included defining and binding the cases, selecting inclusion criteria, and data collection and analysis procedures as described by Yin (2017). The study included two cases consisting of one territorial regulatory structure (Yukon), and one provincial regulatory structure (BC). A review of relevant legislation and interviews of nurses working within each jurisdiction supported analysis of each jurisdiction as a whole. Inclusion of both legislation and nurse experiences was intentionally designed through the constructivist lens to gain a more fulsome understanding of expanded scopes of practice in RRI areas that may vary among nurses based on their individual competence.

4.4.3 Selection of Cases

A stratified purposeful approach was used, where the two cases were purposefully selected to examine their distinct differences. The Yukon Territory and BC were purposefully selected as cases to provide a broader understanding of the problem in different contexts. The Yukon and BC are unique in their health delivery in RRI areas, where the responsibility for

healthcare services is currently provided by the territorial government in the Yukon, and is shared between several government and non-government organizations in BC. The Yukon is currently undergoing healthcare reform that will transition the responsibility for healthcare delivery to a new health authority. Investigating and comparing the differences among these two cases aimed to provide a broader understanding of how skills are regulated among different organizational structures, and to assist in making recommendations for Yukon's case as they transition to the new health authority.

The cases are bound by their relevance to the research question, location and time. This study focuses specifically on RNs working beyond their legislated scope of practice in RRI areas. There are differing definitions of RRI communities in the literature. For the purpose of this research, the CARRN (2020) approach will be used, where RRI areas are defined as one entity and characterized by their geographical isolation from urban healthcare facilities, limited amenities, and where RNs are the primary care providers with more extensive responsibilities. Differentiating the practice of RNs in different RRI settings is not within the scope of this study and has been previously described in Canadian literature by MacLeod et al. (2019). Nursing skills encompassed in the jurisdictional scope of practice are not the focus of this study, and therefore, only skills beyond the defined scope were investigated. Only aspects of nursing regulatory mechanisms relevant to skills beyond the defined jurisdictional scope of practice were included. Only contextual features of nursing practice in RRI areas were included. Their location is defined as their province or territory, and the time is current to data collection in 2025 since this research project does not aim to evaluate regulation history.

4.4.4 Inclusion Criteria for Cases

First, cases were screened by their provincial and territorial legislation surrounding expanded scope nursing practice. Then, publicly available practice guidelines from local nursing regulatory bodies in the Yukon and BC, and the local nursing association in BC were reviewed. Relevant organizational policies were not available publicly, and two email requests to the Yukon employer organization for access were not answered. Organizational policies were not requested from BC employers since evidence on scope was available from the BC regulatory body and professional association. Since the evidence available on regulation of expanded scope nursing was scarce, any information relevant to the subject was included in the grey literature analysis.

This research aimed to recruit three to five nurses working in RRI areas of the Yukon, and three to five nurses working in RRI areas of BC for semi-structured interviews to gain a better understanding of the research problem. Inclusion criteria for participants included having at least six months of experience working a RN in RRI areas where they were a primary care provider, and whose practice included performing skills beyond the jurisdictional RN entry to practice legislated scope.

4.4.5 Data Collection

Data collection procedures followed the process outlined by Yin (2017). A case study protocol was created to keep the data collection process organized and focused, and to assist in identifying any potential problems (see Appendix A). The protocol contained an overview of the case study, data collection procedures, protocol questions, and a tentative outline for the case study report. There were two phases of data collection:

Documents. The first phase of data collection consisted of a review of publicly accessible nursing scope of practice legislation and acts, and jurisdictional government regulation and bylaws. Documents were screened in each jurisdiction, guided by the CNA (2015) Scope of Practice Boundaries Framework and the 3I+E framework. Google search engine was used first to identify legislation using key terms of "nursing" and "legislation" and the first ten results were screened by title, then reviewing individual sites as relevant. A second Google search using the key terms of "nursing", "legislation" and "Yukon" was used next to identify further information in the Yukon, and the first ten results were screened again by title, then reviewing individual sites as relevant.

Then, across each jurisdiction, government, regulatory body, professional association, and employer websites were screened where available. In the case of the Yukon, the professional association does not have a website, and the government and employer are the same organization. I reached out to the YRNA directly for more information on scope and included the email response received in the data. Relevant email correspondence that I received from the YRNA, YNA, and Yukon Government as a registrant in the territory was also included as data. Relevant organizational policies were not publicly available across both cases. Two email requests to the Yukon employer organization requesting access were not answered. Organizational policies were not requested from BC employers since evidence on scope was available from the BC regulatory body and professional association.

Additional sites, such as the University of Northern British Columbia (UNBC), were also searched based on information found from other sources that were already reviewed. National legislation was searched for using Google search engine by searching for the specific documents by name, as referenced in other sources that were already reviewed. Some sites, like the

Canadian Institute for Health Information (CIHI), were searched based on recommendations from my supervisors. Each site outlined in Table 1 was screened primarily by navigating the menu for information relevant to the research questions. Search words “nursing legislation” and “community nursing” were also used. This grey literature search was conducted from March 2025 through April 2025.

Documents were included regardless of the date of publishing, provided that they were the most recent version that was in effect. Documents were only included if they were available in English and were available from the original source. Documents were included if they were relevant to the scope of practice of RNs in RRI areas of BC and the Yukon. I excluded documents if they were not accessible or did not meet this criteria. Data collected from the grey literature search was saved into a spreadsheet and organized by case (Yukon or BC) and regulatory actor. This phase of data collection aimed to identify the institutions involved in regulating skills above the RN entry to practice legislated scope of practice in RRI areas, and their ideas and interests.

Interviews. The second phase of data collection consisted of semi-structured interviews with nurses working in RRI areas of the Yukon and BC. Interviews were used to gain a deeper understanding of the skills that are performed, what frameworks, policies, decision support tools, or other types of guidance documents are available to support these nurse’s practice, and what policy gaps exist. The recruitment poster (Appendix B) was published on the NNPBC website and was shared in CARRN membership email updates. I reached out to professional organizations using the script in Appendix C. The YRNA declined to share the recruitment poster since their regular newsletter was on hold. The YNA declined to share the recruitment poster since they were in the forming stages and did not have protocols around research

engagement at that time. I used the script in Appendix D to reach out to RRI nursing employers as a secondary recruitment measure when I identified that I did not have the desired sample size for BC. These employers were suggested by participants in this study and within my professional network and included the First Nations Health Authority (FNHA) in BC and Venture Healthcare Inc., a relief nursing employer. I did not receive a response from either employer. Word of mouth within my professional networks was also utilized as another secondary snowball sampling strategy. The script in Appendix E was used to respond to interested RNs. The participant information letter (Appendix F) was shared in the response to interested RNs as well. All interested RNs met the recruitment criteria. Interviews were scheduled using the script in Appendix G.

Five interviews were conducted virtually via Microsoft Teams and one was conducted in person. The option for telephone interviews was offered but not requested by any participants. All interviews lasted approximately one hour and were recorded and transcribed with the participants' informed consent. Virtual interviews were recorded using the recording function in Microsoft Teams and participants were given the choice to leave their camera on or off. Virtual interviews were transcribed using the transcribing function in Teams. Immediately following the virtual interview, the original recordings were transferred to my external encrypted and password protected hard drive, and the originals were deleted from the Teams platform. The in-person interview was audio recorded using an external audio recording device. Immediately following the in-person interview, the original recording was transferred to my external encrypted and password protected hard drive, and the original was deleted from the audio recording device. I manually transcribed the in-person interview. All recordings were retained on the hard drive until transcription was completed, and were deleted seven days after the interview at the end of the

day. Only I had access to the original recordings. Deidentified transcripts were accessible to the research team, which consisted of my two supervisors and myself. I began interviews by (1) providing an overview of the results of phase one of data collection and an overview of terms, and (2) obtaining verbal informed consent. Participants were informed that they could withdraw their answers until data analysis had begun. The aim of these interviews was to gain a deeper understanding of the expanded scope skills that are performed, what types of policies or guidance documents are available to support nursing practice, and what policy gaps exist. To uphold privacy and confidentiality, questions (see Appendix H) were broadly asked to not specifically identify any specific personal situations in which nurses may have acted outside of their scope. If specific examples were provided, these were not transcribed or specifically referenced in the research publication.

Data management. Collected data was managed in multiple software applications to assist with organization. Literature, legislation, policies, regulation, or frameworks related to nursing scope of practice were saved in Zotero and my Athabasca University Office 365. De-identified transcripts, codes, field notes, the research manuscript and other related documents that did not contain identifying information were saved in my Athabasca Office 365. Participant contact information, the participant primary list with participant names and corresponding codes, and participant information letters containing identifying information were saved in my external encrypted and password protected hard drive. All these documents containing identifying information were deleted seven days following each participant's interview at the end of the day.

4.4.6 Data Analysis

The analysis approach was informed by Cresswell and Poth's (2023) data analysis spiral

and Yin's (2017) cross case synthesis approach, where the processes of data collection and analysis are interrelated and occur simultaneously, and where cases are analyzed as a whole and then compared to the other. First, I created memos as I verified the interview transcripts and collected and organized grey literature data. The grey literature data and interview data for each case of Yukon and BC were then screened and organized into a spreadsheet by case and by regulatory actor, and more memos and visual representations of the data were noted. Then, deductive reasoning was employed for the creation of initial codes. The research questions informed the creation of codes, and the interview data and grey literature data were organized in an excel spreadsheet according to these codes. Lean coding was employed as recommended by Yin (2017), where a short list of codes was used initially and then expanded only as necessary during subsequent reviews of the data in order to promote succinct themes. Noteworthy quotes were highlighted and saved in the codebook for reference. Inductive reasoning was also employed as I analyzed for other emerging themes and concepts. This process was repeated for each case to maintain data integrity. Then cross case analysis for the fourth analysis phase was employed to compare similarities and differences between the two cases. Throughout the analysis process, I discussed emerging themes and narratives with my thesis supervisors to consider other interpretations of the data and other ideas.

4.5 Reflexivity and Rigour

As Sibbald et al. (2021) describe, constructivism values the researcher's reflexivity and transparency, acknowledging that the researcher's experiences and philosophical lens influence their assumptions and beliefs about the phenomenon and the findings that they develop. Reflexivity in research refers to the ongoing process in which the researcher critically reflects on

their actions, feelings, perceptions, and biases and considers how they may impact the research process (Darawsheh, 2014; Narayanasamy, 2015). Reflexivity is critical in each step of the research process (Darawsheh, 2014). Researchers must be mindful of their rationale for choosing a specific methodology and recognize their influence in data collection and analysis (Darawsheh, 2014). Researcher transparency and reflexivity are critical to conducting ethical research, establishing researcher credibility, and enhancing the study's rigour (Darawsheh, 2014; Darwin Holmes, 2020). In increasing the researcher's self-awareness, reflexivity enables the researcher to provide clear justification and rationale for their decisions in the research process which facilitates the generation of credible data (Darawsheh, 2014).

Rather than attempting to eliminate researcher subjectivity and influence, there is evidence that argues acknowledging and strategically utilizing researcher influence to assist in the in-depth exploration and interpretation of data (Darawsheh, 2014; Darwin Holmes, 2020). This includes my positionality as a Registered Nurse with experience working in a rural emergency department, RRI Yukon nursing stations, and territorial and national immunization programs. I have identified biases about the level of educational preparation and support provided to nurses working in RRI areas from my professional experience, which are also evident in the literature. While I no longer work in remote nursing stations, I have lived in a Yukon community for the past five years where the local nursing station was the only point of access to healthcare. As a registrant, I have not identified any biases about the role of nursing regulators. As a YNA member and board director, I am aware of the key issues impacting nursing practice in the Yukon. I believe my professional experience helped me embrace the culture of RRI nursing practice in order to look deeper into the data for associations or patterns that may have not be evident to other researchers without this experience and knowledge. I

believe that this knowledge and experience helped me relate to participants in interviews and collect more in-depth information.

4.5.1 Reflexivity as a Strategy

Reflexivity may be viewed as a criterion, a strategy or a tool (Darawsheh, 2014). As a criterion, reflexivity is a marker of quality that improves the credibility of research findings (Darawsheh, 2014). As a strategy, reflexivity enables the researcher to meet the criteria of rigour, including ensuring data credibility, study dependability, and conformability of findings (Darawsheh, 2014). As a tool, reflexivity promotes the quality of research (Darawsheh, 2014). For this research, reflexivity was used as a strategy. I recognize that my worldview and positionality will evolve over time and vary with each context or situation, and therefore, I continued to engage in reflexive journalling practices throughout the research process to improve the study's rigour, as recommended by Cresswell and Poth (2023) and Darwin Holmes (2020).

4.6 Potential Issues Associated with Case Study Research

Case studies are often considered a "soft" form of research, despite their complexity (Yin, 2017). To demonstrate quality, Yin (2017) recommends upholding construct validity, reliability, internal validity, and external validity. These markers of quality and potential issues will be described in detail.

4.6.1 Construct Validity and Ethics

A common critique of case studies is that they can be selected and analyzed to confirm a researcher's subjective judgements (Yin, 2017). I upheld construct validity by engaging in reflexive practices and clearly evaluating the specific mechanisms of nursing scope related to

expanded scope skills to answer the research questions. I critically reflected on my biases and position through reflexive journalling as described above. Yin (2017) suggests reporting preliminary findings while still in the data collection phase to a small group of colleagues to offer a different perspective, which I regularly engaged in with my supervisors.

Ethics were considered when working with participants, as recommended by Yin (2017), where I obtained informed consent, protected the participants from any harm or deception, protected their privacy and confidentiality, and selected them equitably. A letter of participant information is available in Appendix F. I have taken the online Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2) course, which provided ethical guidance for research involving humans. Additionally, since my research involved interviews, I obtained approval from the Athabasca University Research Ethics Board prior to starting any interviews to ensure my study upheld respect for people, concern for welfare, and justice (Athabasca University, 2022). I shared the participant letter of informed consent with interested individuals upon their initial outreach to me (see correspondence in Appendix E). Participants were asked to verbally confirm their informed consent at the beginning of the interview, and then I discussed that they may choose to withdraw their consent at any time during the research process. Participants were informed that their identifying information would not be shared with any other research team members. Participants were assigned a unique code by their location and interview number. For example, the first Yukon interview was assigned Y1, and the first BC interview was assigned B1. The file containing the corresponding participant name and code was password protected and saved on the author's external encrypted hard drive.

4.6.2 Reliability

Reliability refers to whether findings can be replicated and aims to reduce errors and biases (Leung, 2015; Quintao et al., 2020; Yin, 2017). However, as described by Quintao et al. (2020) and Yin (2017), repetition of the study is unlikely given the unique circumstances in which each case study is conducted and the influence of the researcher. To strengthen reliability, Yin's (2017) systematic case study protocol was used, and each step of the research process and research decisions were clearly documented as recommended by Ahmed (2024). The use of a protocol to strengthen reliability is also supported by Quintao et al. (2020).

4.6.3 Internal Validity

Internal validity is primarily applicable to case studies that aim to explain a cause-and-effect relationship (Quintao et al., 2020; Yin, 2017). Since the nature of this case study research was exploratory, there was no intention to establish a causal relationship. However, to strengthen internal validity, I ensured that any inferences made regarding nursing scope of practice were questioned and rival explanations were considered (Quintao et al., 2020; Yin, 2017).

4.6.4 External Validity

There are common concerns that case study findings may not be generalizable because they are in-depth investigations of a specific case, or cases, bound to their contexts (Leung, 2015; Yin, 2017). To improve this study's external validity, or generalizability to other RRI settings, a theoretical framework was used, as suggested by Yin (2017), that explains the factors contributing to nursing scope of practice. Choosing two unique cases also helped broaden the researcher's understanding of the problem in different contexts, as suggested by Yin (2017). The context of each case was documented as suggested by Ahmed (2024) and Quintao et al. (2020) for transparency in assessing how these contexts compare to other jurisdictions. However, as

highlighted by Yin (2017), any claims or hypotheses made about other contexts were informed by the case study and not the cases, and were argued to give attention to their flaws.

4.7 Chapter Summary

Throughout this chapter, the qualitative case study methodology and exploratory methods that were used to investigate the expanded scope skills performed by RNs in RRI areas of BC and the Yukon, and the regulatory mechanisms governing these skills were explored in detail. The study focused on two cases: one based on provincial regulatory mechanisms, and one based on territorial regulatory mechanisms. These cases, guided both by examination of legislation and policy as well as semi-structured interviews, provide rich insight into the practice support needs of nurses in RRI areas. To ensure the study upholds the high professional expectations of nursing research, Yin's (2017) systematic approach to case study research was used, along with reflexivity and principles to uphold reliability and validity.

Chapter 5: Results

This chapter of the thesis describes the results of the grey literature search and interviews with nurses working in RRI areas of BC and the Yukon. Both sources of data were key in gaining a deeper understanding of RRI nursing regulation and gaps that impact nursing practice. First, data collection results are described collectively. Then, each case is examined as a whole, using a case-based approach as suggested by Yin (2017). The results of each case will be broken down in line with the research questions: (1) an overview of the expanded scope skills performed by RNs working in RRI areas and (2) an overview of the local regulatory environment in the context of the 3I+E framework of institutions, interests, ideas, and external factors.

Documents

A total of 52 documents, forms and images were analyzed, including government legislation, organizational reports, regulatory body bylaws, regulatory body standards, regulatory body code of ethics, regulatory body regulations, informational documents from regulatory bodies and professional associations, forms, and figures. See Table 1 for an overview of the sites that were searched, and Table 2 for a list of documents that were included in the analysis. Additional information obtained from screening sites outlined in Table 1 was also included for analysis. All information collected during the grey literature search was tracked using an excel spreadsheet that was organized by case and stakeholder. Original documents described in Table 2 were saved to my Athabasca University Office 365 account to ensure consistency during analysis and reporting.

Table 1

Overview of sites screened in the grey literature search

Jurisdiction	Organization	Website
Yukon Territory (YT)	Yukon Registered Nurses Association (YRNA)	https://www.yrna.ca/home
	Yukon Government (YG)	https://yukon.ca/
British Columbia (BC)	BC College of Nurses and Midwives (BCCNM)	https://www.bccnm.ca/Pages/Default.aspx
	BC Government	https://www2.gov.bc.ca/gov/content/home
	University of Northern British Columbia (UNBC)	https://www.unbc.ca/
	Nurses and Nurse Practitioners of BC (NNPBC)	https://www.nnpbc.com/
	Interior Health	https://www.interiorhealth.ca/
	Vancouver Costal Health	https://www.vch.ca/en
	Fraser Health	https://www.fraserhealth.ca/
	Northern Health	https://www.northernhealth.ca/
	Island Health	https://www.islandhealth.ca/
	First Nations Health Authority	https://www.fnha.ca/
Canadian data	Canadian Institute for Health Information (CIHI)	https://www.cihi.ca/

Table 2

List of documents, forms and images included in this analysis

Jurisdiction	Source	Documents
Yukon Territory (YT)	Yukon Registered Nurses Association (YRNA)	YRNA Regulations
		YRNA Bylaws
		Standards of Practice for Registered Nurses
		Scope of Practice for Nursing in the Yukon
		YRNA Code of Ethics
		YRNA 2023-24 Annual Report
		Email correspondence with YRNA registrar
		Joint email correspondence from YRNA and YNA to their membership
	Yukon Government (YG)	Yukon Registered Nurses Profession Act
		Yukon Emergency Medical Aid Act
		Yukon Public Health and Safety Act
		Yukon Health Professions Act
		YG Report on the Results of Engagement on Updating the Health Professions Act
		Email correspondence from YG regarding Health Professions Act update

British Columbia (BC)	BC College of Nurses and Midwives (BCCNM)	Scope of Practice Standards, Limits, Conditions
		Controls on Nursing Practice (image)
		RN and NP Regulation
		Autonomous scope of practice thinking tool
		Acting Within an Autonomous Scope of Practice (certified practice)[b]
		Acting Within an Autonomous Scope of Practice
		Employer Reference for Remote Certified Practice Registration (form)
		Employer Reference for RN First Call Certified Practice Registration (form)
		BCCNM Bylaws
		Legislation Relevant to Nurses' Practice
	Nurses and Nurse Practitioners of BC (NNPBC)	Certified practice Registered Nurse and Registered Psychiatric Nurse competencies
		All 22 NNPBC Certified Practice Area Decision Support Tools (DSTs)[c]
	BC Government	BC Health Professions Act
		BC Health Professions Act Nurses (Registered) and Nurse Practitioners Regulation
Canadian data	Canadian Government	Canada Health Act
		Canada Controlled Drugs and Substances Act
	CIHI	Legislated Scope of Practice Across Canada: Registered Nurses

Note. This is a list of documents, forms and images that were included for analysis. Additional information obtained from sites reviewed in Table 2 was also included for analysis.

[a] This document was published at the time of analysis but has since been rescinded and replaced by practice standards including *Acting Within an Autonomous Scope of Practice (certified practice)* and *Acting Within an Autonomous Scope of Practice*.

[b] These documents were published but not yet in effect at the time of analysis but have since been put into effect.

[c] All 22 decision support tools (DSTs) available at the time of analysis and relevant to RN First Call, Remote Nursing, and Reproductive Health were included, but are simplified to a single item in this table for ease of understanding.

Interviews

A total of six RNs participated in interviews. Five RNs had experience working in RRI areas of the Yukon and one RN had experience working in RRI areas of BC. This research aimed to include three to five nurses with experience in Yukon, and three to five nurses with experience in BC. However, the research team decided to proceed with analysis with only one BC participant as even after multiple recruitment efforts, recruitment was challenging, and since there was ample grey literature available for the BC case. Categories of participant experience were collected, with four participants reporting 0-10 years of experience in RRI areas, and two participants reporting 10 or more years of experience in RRI areas. The interviews were approximately one hour in length, with five completed virtually and one completed in person. Minor edits have been made to direct quotes reported in this chapter in order to ensure clarity while retaining context.

Table 3

Overview of Participants

Jurisdiction	Number of Participants Included
Yukon Territory (YT)	5
British Columbia (BC)	1

5.1 Case 1 - The Yukon

This section of Chapter 5: Results provides an overview of results specific to the Yukon case, broken down by research questions.

5.1.1 Research Question 1: How do RNs working in RRI areas describe the skills that may be performed beyond the entry to practice scope?

The scope of practice of RNs working in RRI areas of the Yukon is broad and not well defined. According to the YRNA, the RN regulatory body in the Yukon, "currently there is no official scope of practice in the Yukon" (P. Banks, personal communication, March 25, 2025). However, nurses in RRI areas of the Yukon require a broad range of knowledge in multiple areas and these nurses provide preventative and primary care services to clients of all ages. As YT1 describes, "an average week would be anything and everything." Table 4 provides an overview of the expanded scope skills that were reported by Yukon participants. Some of the skills most commonly reported include independent and autonomous assessments, suturing, complex wound care, acute chest and limb x-rays, king airway insertion, emergency scene response, expanded medication management, and female pelvic exams. However, there were some discrepancies between participant interviews on the boundaries of these skills. For example, some participants reported different age limitations for performing pediatric x-rays, different wound limitations for suturing, different wound care limitations, and conflicting reports of whether removing an intrauterine device (IUD) is within scope.

Some participants also described individual competence differences. For example, one participant described how their competence in suturing impacts their clinical decision making, where they will not suture some wounds despite this being within their scope. One participant also described their experience with other types of nursing skills that they consider to be part of the expanded scope of practice in RRI areas. This participant described that "soft skills" like organizing medevacs, learning the culture of the community, and working and living in isolation were unique to the RRI context and required orientation.

Table 4

Overview of Expanded Scope Skills Reported by Yukon Participants

Participant	Skill
YT1, YT2, YT3, YT5	King airways
YT1, YT2, YT3, YT4, YT5	Suturing
YT1, YT2, YT3, YT5	Intraosseus (IO) access
YT1, YT2, YT4	Chest needle decompression
YT1, YT2, YT3, YT5	Female pelvic exams/ PAP smears
YT1, YT3, YT4, YT5	Expanded medication administration. May initiate one dose or one course of some medications within a set formulary without a physician or NP order.
	Referenced medications: antibiotics (YT3, YT4, YT5), allergy medications (YT3), pain medications (YT3, YT4, YT5), narcotics (YT3, YT4, YT5), antiseizure (YT3), antiemetics (YT4), muscle relaxants (YT4), antifungals (YT5), antacids (YT5), smoking cessation products (YT5)
YT2, YT3, YT4, YT5	Emergency scene response
YT1, YT2, YT3, YT4, YT5	Independent and autonomous assessments
YT2, YT3, YT4, YT5	Acute chest and limb x-rays, and chest x-rays for the purpose of tuberculosis screening.
YT2, YT3, YT4, YT5	Complex wound care

5.1.1.1 Areas of Uncertainty

Uncertainty on areas of scope were referenced by some participants, especially at the beginning of their career in RRI areas. All participants described that their knowledge and competence improved over time in the expanded scope role. However, one participant described their concern in eliminating uncertainty in areas of scope since these grey areas may give expert nurses the opportunity to use their knowledge and experience to inform their decision making and make the right decision for the patient. This participant cautioned that guidelines or policies that are too rigid could inadvertently cause patient harm.

> Sometimes that skill and judgment experience of advanced providers needs a little more grey to be able to make the right call for the patient. If things are too cut and dry, I feel you might be doing things like medevacking patients unnecessarily because the resources or the references say so. (YT2)

5.1.1.2 Interprofessional Practice

Nurses in RRI areas of the Yukon schedule patient appointments with physicians for services that are beyond their scope of practice, such as intrauterine device insertion. Participants reported that physicians visit the communities between two to five days per month to support these appointments. When the physicians visit the community, they work in parallel to the nurses, where the nurses are still independently leading and running their nursing appointments.

Participants also reported that they will call emergency room (ER) physicians for guidance or medical orders as needed when patients require care that is beyond their education and training. However, some participants reported that ER physicians in the Yukon were not always aware of the RRI context and the scope of practice of RRI nurses, so their support varied. One participant described that they have had to wait hours for the ER physician to return their phone call at times, and they have even had consults refused. This participant described that nurses working in RRI areas should have priority access to ER physicians.

To summarize, participants shared that they routinely perform skills beyond the traditional entry to practice scope of nurses in RRI areas. However, there were different ideas on the boundaries of their scope. Where grey areas exist, or where client needs surpass the RRI nursing scope, nurses reported that it is important to have quick access to professional support.

5.1.2 Research Question 2: How do different regulatory and health system actors govern RNs' performance of expanded scope skills?

This section will detail the Yukon regulatory environment in the context of the 3I+E framework of interests, institutions, ideas, and external factors. To recap the 3I+E framework, interests refer to the real or perceived interests of the stakeholders involved (Bashir & Ungar, 2015; Gauvin, 2014). Institutions refer to the government structures, policy networks and policy legacies that may impact the regulatory environment (Bashir & Ungar, 2015; Gauvin, 2014). Ideas refer to the knowledge, evidence, beliefs, and values of the stakeholders (Bashir & Ungar, 2015; Gauvin, 2014). Finally, external factors refer to practice, political or economic developments or media or news coverage associated with the issue at hand (Bashir & Ungar, 2015; Gauvin, 2014).

5.1.2.1 Interests

The interviews and grey literature search revealed several interest groups relevant to expanded scope nursing practice in RRI areas of the Yukon. The Yukon Government has two different interests in the regulation of expanded scope nursing practice. First, the Yukon Government is responsible for health legislation in the territory, which provides the legal framework for nursing scope of practice, with the primary interest of public safety. Secondly, the Yukon Government Community Nursing Branch is also responsible for the provision of primary healthcare services to meet the needs of individuals living in Yukon communities and therefore has an interest in hiring and management of RRI nurses (Yukon Government, 2025). While the Yukon Government did not respond to requests for information, RRI nursing participants did provide their perspectives on the interests of the Yukon Government as an employer. Two

participants shared their concerns that the Yukon Government as an employer does not share the best interests of the RRI nurses.

> I don't feel that there's a way that really enforces the employer, especially in the Yukon, as they're directly under the government, to ensure safe practice. Where is like it kind of just falls on to the nurse because we are regulated and there's a board if we do things wrong. It can go through a process, and we are held accountable and I just don't feel that that is similarly held for the employer and thus the employer might not be as eager to, like, protect nurses and communities in the same way. (YT3)

One participant also described their concern that the employer is motivated to push nurses through training before they feel competent, so nurses have had to advocate for their own and their colleagues' education needs.

The Yukon Registered Nurses Association (YRNA) is the regulatory body for RNs and NPs in the territory, with the primary interests of patient safety, cultural safety and public protection (YRNA, n.d.a). The YRNA is responsible for (1) setting standards for entry to practice, continuing education, and quality assurance, (2) establishing standards and guidelines for competent and ethical nursing practice, and (3) resolving complaints or concerns about registrants practice and conduct (YRNA, n.d.a). Nurses in the Yukon may register with the YRNA within the classes of full registration, non-practicing registration, interim registration, virtual license class, courtesy license class, or student license class (YRNA, n.d.b). Expanded scope of practice or RRI nursing is not a listed specialty or class.

The YNA is an organization established in 2024, with primary interest of professional advocacy (YRNA, n.d.c). The YNA was established by the YRNA since the Registered Nurses Act limits YRNA's mandate to regulatory activities (YRNA, n.d.c). As a newer organization, YNA is still building and has not shared their mission, values, or priorities yet.

Finally, Yukon nurses working in RRI areas are an interest group with particular regard

for expanded scope. Participants in this research had different nursing backgrounds and experiences, yet shared a common interest in professional development activities to expand their knowledge and skills in order to provide evidence-based care. Several participants were specifically interested in scenario based continuing education that utilizes resources that they have access to in the communities. RRI nursing participants also shared a common interest in supporting the patients that they serve, where they described the holistic care model they use in the communities.

5.1.2.2 Institutions

Through my analysis of grey literature and interview data, I identified five institutions that impacted the practice and regulation of expanded scope nursing in RRI areas of the Yukon. The institutional factors involved in expanded scope of practice regulation are broken down below in the context of the CNA (2015) Scope of Practice Boundaries Framework.

Health Professions and Nursing Legislation. The Yukon *Health Professions Act* (2003) and the *Registered Nurses Professions Act* (2002) provide the legal authority for nursing practice in the Yukon. The Yukon *Health Professions Act* (2003) broadly sets out requirements for the recognition and designation of a health profession, and responsibilities of health profession registrars. The Yukon *Registered Nurses Profession Act* (2002) identifies the Yukon Registered Nurses Association (YRNA) as the registrar for RNs, nurse practitioners NPs, and student nurses in the Yukon, sets out regulations for the YRNA, and defers the responsibility to determine a scope of practice to the YRNA board of directors. In addition to these Acts, the *Yukon Emergency Medical Aid Act* (2002), which is relevant to emergency scene response, also sets out that a medical practitioner may provide emergency medical services to an individual outside of a

medical facility and will not be liable unless there is evidence of gross negligence. Throughout Yukon legislation, RNs are referenced as one entity and RRI nurses or their expanded scope of practice are not referenced.

RN Regulation, Professional Guidelines, and Standards. According to the YRNA Standards of Practice for Registered Nurses (2019), nurses are responsible for practicing in accordance with the relevant legislation, standards, regulatory requirements, and employer policies. However, according to the YRNA registrar,

> Currently there is no official scope of practice in the Yukon. There are historical reasons for that stemming from Devolution dating back to 2003…but scope was largely determined through federal scope & employer policies & procedures… A scope of practice is under development and in the feedback stages…Please note that the current document does not deal with the topics of: (1) Delegation, (2) Supervision, (3) Duty to Report, or (4) Advanced/Expanded practice. YRNA intends to address each of these topics under separate Standards/Guidelines documents. (P. Banks, personal communication, March 25, 2025)

So, while government legislation defers to the YRNA to define a scope of practice, the YRNA has not established a scope of practice since its inception, and therefore, scope of practice has been determined by employer policies.

The drafted YRNA Scope of Practice document (YRNA, 2024a) was shared with the YRNA membership in March of 2025 for feedback. Although the document does not specifically address expanded scopes of practice, the document does provide the following definition:

> Expanded level practice is not based on a physician's order or delegation but on autonomous practice, within policies, procedures, standing orders etc., established by the employer. This practice is authorized by YRNA for specific contexts, settings, and employers. Note, this is not Registered Nurse Practitioner (NP) practice as NP scope is broader and does not require employment with a YRNA-approved employer or employment context. Expanded scope of practice is outside the parameters of this document. Refer to the YRNA directly for support and guidelines (YRNA, 2024a).

Although the Scope of Practice document does not go into further detail on expanded scope

practice, the outlined principles of determining scope are applicable to the context. This scope of practice document uses a competency-based approach, as opposed to a task-based approach, meaning that RNs determine their individual and professional scope by assessing their authority, education, and competence (YRNA, 2024a). RNs are responsible for knowing whether activities require a medical order, and whether the activity is beyond their education, experience or training (YRNA, 2024a). According to the document, RNs have an obligation to manage their individual education needs, and the nature of the education required for specific activities may be dictated by legislation, the regulator, or the employer (YRNA, 2024a). The document advises that when RNs have concerns regarding their scope of practice, they should first address these with their employers, and then the YRNA if outstanding questions remain (YRNA, 2024a).

Employer Policies. Employer policies are currently the primary driver of expanded scope of practice in the Yukon since scope is not defined in the legislation and the drafted YRNA Scope of Practice document has not been published. Yukon employer policies were not accessible for review. Participants describe that there are employer policies on the common expanded scope of practice skills, but they are not comprehensive. One participant described that in the RRI context, nurses may only see certain health presentations once every decade or more, so having a dedicated policy to each condition and skill is not realistic or feasible. Even where policies exist on common conditions, the RRI nurses may not have time to refer to them in emergency situations, or they may experience issues accessing them. One participant gave the example of a tension pneumothorax, where they described that in an emergency situation, they are going to act first to help their patient and not necessarily check the policy. Where there are policy gaps, participants described that they used external resources that had been endorsed by the employer, such as the First Nations and Inuit Health Branch (FNIHB) guidelines, UpToDate,

Bugs & Drugs, and Elsevier Skills. However, participants also described that policies and external resources may not be up to date or specific to the Yukon RRI context, and interpretation may be required:

> A moderate amount [how well the resources and policies aligned with practice]. I feel that there were definitely holes where none of the circles overlapped and I think that allows such a grey area for all of us to practice, which can just be dangerous for patients and dangerous for practitioners, when we have to kind of apply these guidelines that aren't specific. They wouldn't be the same guidelines if they were applied in the rural and remote setting. (YT3)

Some participants also described that they seek out other non-endorsed resources to fill the policy gaps, or to support their decision making when they cannot find employer policies.

The employer in the Yukon also has policies surrounding education for the role. Nurses must complete online and in person education offered by the employer prior to practicing in RRI areas, which generally consists of several weeks of training. In addition, nurses employed in RRI areas of the Yukon reported also engaging in one day of x-ray training at the local hospital and taking the Trauma Nursing Core Course (TNCC). Following this initial orientation, nurses are then paired with an experienced RRI nurse for on-the-job mentorship, which is tailored to their learning needs.

Individual RN Competence. Legacies of RNs passing down information to their colleagues also influences the policy structure of expanded scope nursing practice in the Yukon. Some expanded scope of practice guidance is not written in policy or resources and therefore is passed down verbally from nurse to nurse, or through employer memos. Nurses in RRI areas have learned to use their experience and knowledge to inform their decisions where policy gaps exist, and this president has informed some participant opinions of preferring less rigid policies.

> A lot of information was handed down from nurse to nurse to nurse. What can we do? What can't we do? Things were written in memos and nurses who had been around a

> long time would be able to recall the memo and hand it down. Just that verbal kind of communication. And maybe you might be able to pull the memo out, maybe not. So, I don't think that's great either. I think that needs to be changed and have more policy. I just worry about the rigidity of the policies that we create going forward, making them still able to have critical thinking by people on the ground, is really my big beef and I think is very important. (YT2)

RRI nurses in the Yukon recognize the uniqueness of this nursing practice, and there is a legacy of RRI nurses supporting their colleagues. These nurses have historically gained competence and confidence through on-the-job-learning and mentorship. One participant described their experience as a newer nurse where they would consult physicians and refer to their resources and colleagues more often for help. Then, as they gained more experience, they felt more confident in their decision making. However, learning from a community of nurses requires experts to share knowledge. One participant describes their concern of how the ongoing national nursing shortage may impact this informal system of learning with the following:

> Now in this health professional, sort of staffing crisis that we have right now, we are lacking some of those more advanced providers to properly mentor the younger providers to just ongoing good practice, right? To get them those skills, they need to become the advanced experts that they need to feel comfortable to operate in those environments. (YT2)

Client needs. The historical context of client needs in RRI areas also plays a role in expanded scope of practice. In RRI areas of the Yukon, the nurse is the primary care provider and is often the only provider available to deliver health services. Some participants report that in situations where a patient requires higher levels of care, the RRI nurse will recommend that the patient is transferred to Whitehorse General Hospital (WGH). However, some patients may refuse to go to the hospital, which creates difficult situations as YT5 describes:

> I tightened it [sutures] up really good, telling him all the time that yes, we are, but we really shouldn't. He should have gone to Whitehorse, but he didn't want to, and he needed it. So I got the sign and I did it.

5.1.2.3 Ideas

Three ideas were identified during data analysis, including the perceived gaps in regulation among RRI nurses in the Yukon, a need for a scope of practice in the territory, and a need for context specific training and resources.

Perceived Gaps in Regulation Among RRI nurses. When asked about their thoughts regarding the current system of how expanded scope skills are regulated in the territory, some Yukon participants shared concerns that there may be gaps in regulation. Some participants reported that the regulator does not have a meaningful role in the regulation of expanded scope skills in their perspective, and they would like to see greater involvement of the regulator as a protective mechanism to prove they are working within their scope where it is not currently defined. One participant shares their concern of the current regulation landscape in the context of working without supervision in Yukon communities and the impact this may have on patient safety:

> I personally think that they [expanded scope skills] need more regulation. I think that practicing in this autonomous scope, especially when we're practicing without supervision of other practitioners quite often, that we should be regulated, more closely and should have more specific scopes of practice and ways to prove competency in those things, because it relies on the employer and I don't think that that is the safest for our patients and the communities at the end of the day. So, I definitely would like more regulation in it. (YT3)

Need for Formalized Scope of Practice. The YRNA recognizes the need for a formal scope of practice for RNs in the territory. As mentioned, YRNA (2024a) has drafted their Scope of Practice document that includes an appendix of skills that RRI nurses may perform autonomously, but they have yet to release a formal and distinct scope of practice for nurses working in RRI areas. The YRNA is forming a working group to inform the new document for expanded scope of practice and is seeking subject matter experts in this field.

Need for Context Specific Training and Resources. Most participants describe that they can't be prepared for everything as a nurse working in RRI areas, and they do the best that they can with their knowledge and what resources they have access to. As one participant described, they may only see certain patient presentations once every ten or more years, but they still have to be prepared to competently provide care in these situations. These types of high acuity low occurrence (HALO) events may influence nurses' perceptions of their preparation, especially in RRI areas where they are working alone with limited resources. Some participants described that they received a good orientation that consisted of online education modules, in class orientation and skills teaching, and mentorship from experienced RRI nurses in communities. During this orientation, nurses are certified by their employer in three expanded scope skills: IO insertion, chest needle decompression, and suturing. Then, nurses recertify these three skills every year through their employer to maintain their competence. However, there is no existing certification process for other expanded scope skills, such as x-rays and vaginal exams. These expanded scope skills are taught initially and then RRI nurses are responsible for maintaining their competence independently. One participant described their perspective in that additional certifications should be required for the other expanded scope skills, but that the certification process should be based on the skill and competency of the provider.

> The training and the recertification program that we have going on for the three emergency skills. I think that some version of that for some of the other skills is a reasonable thing to do until you could be considered to be, like a tenure that's proven. Like doing a vaginal speculum exam. It's a hard skill to learn to do it well, and the implications to the patient, if not done well, could be very devastating. And if you're not doing it frequently, you could be causing more harm than benefit if you're not doing it well. But once you've developed that skill, it is sort of like riding a bike. Some skills need to have a higher monitoring process at first until you're considered to be like an advanced expert user. (YT2)

Some participants also reported that there were gaps in this orientation where some advanced

skills were not formally taught and were learned on the job. These participants reported the need for additional context specific training, particularly for emergency scene response. YT4 describes that this gap in education has potential safety impacts for nurses and patients:

> More training for scene response MVAs is what I'd like. I would like nurses to go with maybe the paramedics in Whitehorse or the city for a rotation, just so we can see what they do, and maybe it would help us more. And especially for how they're getting people out of a vehicle. For the longest time, I've worked here like 7-8 years, and I didn't know that if the airbag doesn't pop, it can pop anytime. I just found that out not long ago. That would have been nice to know, right. (YT4)

5.1.2.4 External Factors

In addition to the 3I factors above, there are other external factors that shape the context of the regulatory environment in the Yukon.

Nursing Education in the Yukon. Yukon University currently offers a diploma program for licensed practical nurses (LPNs), and a bridging program for LPNs to obtain a Bachelor of Nursing degree (BN) has recently been offered virtually through a partnership between the Yukon Government and the University of New Brunswick (Yukon Government, 2024; Yukon University, n.d.). There are no other BN programs offered in the Yukon, which means that many RNs currently practicing in the territory were likely educated in other jurisdictions where there are more defined scopes of practice. Therefore, when these external nurses come to work in the Yukon, they may perceive a gap in regulation, as YT2 describes:

> I think that what we have right now may seem inadequate for some entry level providers, because I think they may be coming from southern institutions, whether hospitals or education facilities, where everything is documented…and everything is so well defined, and there's no gray zones, that when they come up here it may feel daunting and nerve wracking because they just kind of have this autonomous practice without the guidance. (YT2)

Yukon Health Professions Act Update. In the fall of 2024, the Yukon Government

announced their interest in updating the Health Professions Act to become an umbrella legislation to regulate all health professionals in the territory, and they began engagement with healthcare professionals and the public to inform policy decisions (YRNA, n.d.d; Yukon Government, 2025). There is emerging conflict between the Yukon Government, the YRNA and the YNA regarding the engagement methods used and potential updates to this legislation. While the Yukon Government report on the results of the engagement session emphasizes that no decisions have been made regarding the regulation of health professionals, the YRNA states that the Yukon Government intends to bring RN professional regulation in house, and therefore, ending the current RN co-regulation model in the territory (YRNA, n.d.d; YRNA, 2024b; Yukon Government, 2025). The Yukon Government shared a survey with health professionals by email on the Health Professions Act updates in December of 2024, and the YRNA and YNA jointly shared the following in email correspondence to their membership in response:

> We have concern that the survey does not provide sufficient context to allow for informed responses and in several instances, is factually incorrect. In addition, the survey structure does not allow for meaningful comments or elaboration. We are also concerned about how YG is engaging with our profession and the public as we do not believe that process is inclusive or evidence-based. As YG is not providing you with the context and information you deserve in order to provide informed input to its survey, the YRNA and YNA invite you to reject the YG survey by not responding to it and voicing your concern to YG. (YRNA and YNA chairs, personal communication, January 10, 2025)

While the survey and engagement sessions did not specifically focus on RRI nursing practice or expanded scopes of practice, the Yukon Government survey did ask respondents whether they believed that a defined restricted activity list within the Health Professions Act would be most effective for managing restricted activities (Yukon Government, 2025). Of the 287 responses to the survey, which comprised of different health professional designations with predominantly RNs and physicians, most (58%) responded that they would prefer a restricted activity list within

the Health Professions Act (Yukon Government, 2025).

Health System Transformation. In 2024, the Yukon Government began action to create a health authority, an arm's length organization that will deliver front line healthcare services (Pressman, 2024). Since its announcement, a board of directors has been appointed to oversee the multi-year transition to the new health system (Howarth, 2025). Since the Yukon Government is currently an employer of RRI nurses and defines expanded scope nursing practice through their policies, this change has the potential to impact RRI nursing scope. It is unclear exactly how this government restructuring will be carried out, or how this change will impact the day-to-day work of RRI nurses. However, concerns have been raised by the Yukon Federation of Labour (2024) regarding the limited engagement of unions and frontline workers in this process. This change presents an opportunity for RRI nurses to share their expertise and knowledge regarding healthcare delivery in Yukon communities to inform the advancement of health policy and nursing roles.

5.2 Case 2 - British Columbia (BC)

This section of Chapter 5: Results provides an overview of results specific to the BC case, broken down by research questions.

5.2.1 Research Question 1: How do RNs working in RRI areas describe the skills that may be performed beyond the entry to practice scope?

Nurses working in RRI areas of BC also require a wide range of knowledge and skill to assess and treat patients of all ages and all health presentations. While there is only data from one BC nurse, this data suggests important findings. As BC1 describes, "we generally deal with whatever walks through the door." Nurses in RRI areas of BC take additional training and hold

certifications from the BCCNM to practice in this expanded scope and setting. Table 5 provides an overview of expanded scope skills reported by BC1 and as found in BCCNM resources. Table 6 outlines the diseases, disorders, and conditions that nurses may diagnose and treat according to their certified practice areas, and the classes of medications that nurses may initiate autonomously in accordance with the applicable NNPBC DST. These skills and scope go beyond that of the entry to practice RN. As BC1 suggests from their experience, "in reality, rural remote nurses are functioning very much like nurse practitioners". However, the BCCNM and NNPBC resources are not reflective of all the skills that RRI nurses in BC are practicing. Some expanded scope skills, such as emergency scene response, are not defined within the RRI nursing role and are a result of filling the healthcare gaps within RRI communities. BC1 describes from their experience:

> We have confirmed with the college about that [emergency response] because we are not trained as first responders, that is not our job. But also, another sort of point of contention is when there isn't enough staff except for there might be a driver and someone has to get to Whitehorse. So, what is our responsibility in the back of an ambulance, we're not trained to work back there, we don't necessarily know where everything is back there, but you can't just leave a patient dying in your clinic… What do you do? And so I know that there's some legislation that would protect the nurses, you know the 'Good Samaritan Act' and that kind of thing. And so, we sort of got this grey area email back from them [the college] stating that if this is what the doctor orders, and if this is in the best interest of the patient, it is likely a good thing for the nurse to get the patient, however they can with whatever means they have, as quickly as possible. So, we do what we can.

Table 5

BC Expanded Scope of Practice Skills in RRI Areas

Source	Skill
BC1	Emergency scene response
BC1, BC Government (2023) Health	Suturing
	Cervical exams and screening

Professions Act RN and NP Regulations	IO insertion
	Supraglottic airways
BC1, BCCNM (2025) Practice Standard: Acting Within Autonomous Scope of Practice	Independent and autonomous assessments, following the NNPBC DSTs for contraceptive management, sexually transmitted infections, remote practice and RN first call.
	Independent medication prescribing, dispensing and administering from a set formulary, following the NNPBC DSTs for contraceptive management, sexually transmitted infections, remote practice and RN first call.
	Following NNPBC DSTs for contraceptive management, sexually transmitted infections, remote practice and RN first call.
	Diagnosis of specified diseases and disorders according to NNPBC DSTs for contraceptive management, sexually transmitted infections, remote practice and RN first call.

Table 6

BCCNM (2025) Certified Practice Areas and Their Autonomous Practice

BCCNM Certified Practice Area	Diseases, disorders, and conditions that may be autonomously diagnosed and treated in accordance with the applicable NNPBC DST	Drug schedules and therapeutic classes that may be autonomously initiated in accordance with the applicable NNPBC DST
Reproductive Health – Contraceptive Management	May prescribe, dispense, administer, insert, or remove contraception.	Schedule I: 1. Sex Hormones (hormonal contraception) Schedule II/III/unscheduled
Reproductive Health – Sexually Transmitted Infections	May diagnose and treat the following diseases and disorders: 1. Chlamydia trachomatis 2. Neisseria gonorrhea 3. Mucopurulent cervicitis 4. Trichomoniasis 5. Bacterial vaginosis 6. Urethritis/recurrent urethritis 7. Lower urinary tract infection 8. Genital warts 9. Treatment of contacts of those with sexually transmitted infections	Schedule I: 1. Antibacterials 2. Antivirals 3. Antiprotozoals 4. Antimitotics Schedule II/III/unscheduled
Remote Practice	May diagnose and treat the following diseases, disorders, and conditions for pediatric and adult clients unless indicated as adult only: 1. Eye: conjunctivitis, minor corneal	Schedule I: 1. Antibacterials 2. Antivirals 3. Antiprotozoals

	abrasion 2. Ear-Nose-Throat: acute otitis media, pharyngitis, ceruminosis (adult only), dental abscess (adult only) 3. Genitourinary: lower urinary tract infection 4. Respiratory: acute bronchitis (adult only) 5. Integumentary: abscess and furuncle (adult only), cellulitis, impetigo, bites 6. Pain: use of nitrous oxide/oxygen for pain management (adult only)	4. Antihistamines 5. Bronchodilators Schedule II/III/unscheduled
RN First Call	May diagnose and treat the following diseases and disorders and conditions for pediatric and adult clients unless indicated as adult only: 1. Eye: Conjunctivitis, minor corneal abrasion; 2. Ear-Nose-Throat: Acute otitis media, pharyngitis, dental abscess (adult only); 3. Urinary Tract: Lower urinary tract infection (adult only).	Schedule I: 1. Antibacterials 2. Antivirals 3. Antiprotozoals 4. Antihistamines Schedule II/III/unscheduled

Note. There is also a BCCNM Certified Practice Area for 'Opioid Use Disorder', but this was not found to be within the RRI Nursing scope and therefore is not described in Table 6.

5.2.2 Research Question 2: How do different regulatory and health system actors govern RNs' performance of expanded scope skills?

This section will detail the BC regulatory environment in the context of the 3I+E framework of interests, institutions, ideas, and external factors. Recapping the 3I+E framework, interests refer to the real or perceived interests of the stakeholders involved (Bashir & Ungar, 2015; Gauvin, 2014). Institutions refer to the government structures, policy networks and policy legacies that may impact the regulatory environment (Bashir & Ungar, 2015; Gauvin, 2014). Ideas refer to the knowledge, evidence, beliefs, and values of the stakeholders (Bashir & Ungar, 2015; Gauvin, 2014). Finally, external factors refer to practice, political or economic developments or media or news coverage associated with the issue at hand (Bashir & Ungar,

2015; Gauvin, 2014).

5.2.2.1 Interests

There are several interest groups relevant to expanded scope nursing practice in RRI areas of BC. First, the BC Government is an interest group responsible for legislation that provides the legal authority for nurses to practice in the province, with the primary interest of public protection. The BCCNM is the nursing regulator, responsible for professional registration, establishing professional standards and guidelines, and resolving complaints against registrants, with the primary interest of public safety (BCCNM, n.d.a). The NNPBC is the nursing professional association in the province, which sets out decision support tools (DSTs) to guide RRI nursing practice, with the primary interest of their registrants and advancing the profession (NNPBC, n.d.a). BC Health Authorities are employers of RRI nurses in the province, which have interests in the provision of health services. RRI nurses in BC are considered an interest group for the purpose of this research, whose interests are informed by the BC1 interview. Interest themes reported by BC1 included professional development and competence, access to context specific resources, and providing care to their community.

5.2.2.2 Institutions

Through my analysis of grey literature and interview data, I identified six institutions that impacted the regulation of expanded scope nursing in RRI areas of BC. These institutional factors involved in expanded scope of practice regulation are broken down below in the context of the CNA (2015) Scope of Practice Boundaries framework.

Health Professions and Nursing Legislation. The BC *Health Professions Act* (1996) provides the legal authority for RNs to practice in BC. This Act establishes BCCNM as the

regulator in the province, and the RN and NP regulations within the Act set out the scope of practice of RNs (BCCNM, 2021). The BC *Registered Nurses and Nurse Practitioners Regulation* (2008) clearly outlines restricted activities that do not require an order, restricted activities that require an order, and restricted activities for certified practice registrants. For example, certified practice nurses may perform a procedure on tissue below the dermis or below the surface of a mucous membrane, may cast a bone fracture, and may make a diagnosis according to the RN regulations (Registered Nurses and Nurse Practitioners Regulation, 2008).

RN Professional Regulation. In BC, nurses must be certified with the BCCNM in a certified practice area to carry out certified practice restricted activities (BCCNM, n.d.b). To become certified, RNs must complete education programs that have been approved by the BCCNM and apply to the college with an employer reference (BCCNM, n.d.b). In order to obtain RN first call and remote practice certification from the BCCNM, nurses in BC complete education courses offered through UNBC, which consist of several months of online training, an in-person workshop, and an examination (BCCNM, 2025; UNBC, n.d.a; UNBC, n.d.b). Education courses for reproductive health and opioid use disorder certifications are offered through the British Columbia Institute of Technology (BCIT) and the British Columbia Centre for Disease Control (BCCDC) (BCCNM, 2025). Once certified, RNs are then required to recertify with BCCNM every year with proof of practice in their certified practice area within the past three years, and with examples related to their certified practice in their self-assessments and professional development plans (BCCNM, n.d.b).

Professional Guidelines and Standards. BCCNM has several standards on their website that are relevant to certified practice in RRI areas. For example, the *Acting within Autonomous Scope of Practice (Certified Practice)* and the *Prescribing (Certified Practice)* standards provide

general guidelines relevant to these practices (BCCNM, n.d.a; BCCNM, 2025). For more specific guidance on patient assessments, treatments, and expanded scope skills, RRI nurses are to follow the NNPBC DSTs. There are DSTs available on the assessment and diagnostics of all systems and contraceptives, and care and treatment plans for specific conditions, which are outlined in Table 7 (NNPBC, n.d.b). For example, within the *Care and Treatment Plan: Conjunctivitis – Adult and Pediatric DST,* diagnostic flowcharts, treatment goals, pharmacological and non-pharmacological interventions, potential complications, client education, monitoring and follow up, consultation and/or referral and documentation guidance is outlined (NNPBC, 2025). However, BC1 describes that the DSTs are not well aligned to the reality of their practice, "when we have these sort of guidelines such as the DSTs and the coursework, it's good but it really just doesn't even touch the surface of what we're actually doing here."

Table 7

Overview of DSTs available from NNPBC

Certified Practice Areas	Name of DST
RN First Call and Remote Nursing	Assessment and Diagnostic Guideline: General
	Assessment and Diagnostic Guideline: Eyes
	Care and Treatment Plan: Corneal Abrasion
	Care and Treatment Plan: Conjunctivitis
	Assessment and Diagnostic Guideline: Ear, Nose & Throat
	Care and Treatment Plan: Otitis Media
	Care and Treatment Plan: Pharyngitis
	Care and Treatment Plan: Dental Abscess Adult
	Assessment and Diagnostic Guideline: Cardio-Respiratory
	Assessment and Diagnostic Guideline: GI GU
	Care and Treatment Plan: UTI
Remote Nursing	Care and Treatment Plan: Ceruminosis (Impacted Cerumen: Adult)
	Care and Treatment Plan: Bronchitis Acute Adult
	Assessment and Diagnostic Guideline: Integumentary
	Care and Treatment Plan: Cellulitis
	Care and Treatment Plan: Impetigo
	Care and Treatment Plan: Bites & Scratches

	Care and Treatment Plan: Localized Abscess and Furuncle Adult
	Care and Treatment Plan: Use of Nitrous Oxide/Oxygen in Pain Management: Adult
Reproductive Health - Contraceptive Management	Assessment and Diagnostic Guideline: Contraceptive Management
	Care and Treatment Plan - Combined Hormonal Contraceptives
	Care and Treatment Plan - Progestin-Only Hormonal Contraceptives

Note. This table is based on DSTs that were available during data collection.

Employer Policies. BC employer policies were not accessible for review. However, BC1 describes that their RRI employer does not have policies related to expanded scope practice, BC1, "…a lot of over-the-counter prescriptions that we dispense, medication that the college [BCCNM] says that we can according to our institutional policies, but those policies don't exist." In the absence of employer policies, BC1 reports that in their experience, they often refer to the NNPBC DSTs, and external resources such as Up to Date and Bugs and Drugs. The absence of employer policies also means that the individual clinic has taken initiative to outline educational requirements for their nursing team to practice in the RRI setting. BC1 describes that the team of nurses working at their clinic will take the BCCNM approved education to become certified in RN First Call, Remote Practice, Contraceptive Management and Sexually Transmitted Infections, in addition to a Papanicolaou (PAP) test education course and public health training.

BC1 reports that historically, their clinic would consult the nearest hospital for ER physician support over the phone when they required guidance or orders. More recently, they report that RRI nurses in BC have gained access to a program called Real Time Virtual Support (RTVS), which provides physician video call support from a variety of specialties. As BC1 describes:

> Essentially, it's a physician who is there just to serve rural remote places. We have an iPad, we press a button and basically the doctor is there to help you. The whole premise of the program is to help nurses. It's so great. It's amazing. Most of them [physicians] have worked in a lot of these nursing stations or have worked in other sort of rural remote areas so they're very familiar with, 1, we have an expanded scope of practice, 2, we know

> what we're doing, 3, we know our population, and 4, we have nothing here.

Individual RN competence. Legacies of RNs passing down information to one another also plays a role in the expanded scope of practice in BC. BC1 shared from their experience that existing resources such as the NNPBC DSTs were not aligned to the reality of their RRI nursing practice in BC, so they used their knowledge, experience, and external resources to create a scope of practice for their team that suited the context at their clinic.

> We have just made our own in house standards… So it is all laid out, I have a nice teams document with a bunch of things, this is what you have to get when you work here, this is the job, this is what's required of you… But, we're thankful and lucky to have a lot of nurses who have worked in the arctic, who have worked in [other jurisdiction], who have worked at all the [other clinics], who function exactly the same as what we do here. We have borrowed documents from other organizations so we sort of have been able to gather what people are doing at other places. (BC1)

BC1 describes that this autonomy has allowed them to guide their practice in the way that they see fit, but also comes with little support from their employer.

> Like I said, [employer] didn't even know that we existed. That's sort of how it felt. So, no. Very little support, I mean the nice thing about… A lot of this is sort of this negative impact, not having support, but we also have a lot of autonomy. (BC1)

Client Needs. The needs of clients in RRI areas also influence the nursing scope of practice. In RRI areas of BC, the nurse is the primary care provider and often the only provider available to provide health services. BC1 describes that in their experience, some patients refused to be transferred to the nearest hospital, and therefore, they felt pressured to provide health services beyond their scope since the patient would not be able to access health services otherwise in the community.

> There's a decision support tool, it very clearly says, you know, you can't do it [suturing] on the face. However, because we live so far away, you end up sometimes stretching those things. I would never do something that I wasn't confident with, but if it was this little 80 year old man that says, you know, my modelling career is done, and I'm not going to go to [nearest hospital], so can you please just do it, then I might say, hey, I

> would tell them, this is beyond my scope of practice, I've done this many times, but just so you know, and then yeah. (BC1)

However, access to RTVS may make a difference in situations where patients refuse to be transferred to higher levels of care because the nurse can video call the physician or specialist for support and teaching through the skills.

> There's a lot of old people who, some of them, would just rather die. I'm not kidding you. They are just like I'll just see what happens, and if I die, then that's fine too. And you're like, oh god, ok I will help you with this. And then I think it's really good with these physicians on video because you can do a briefing and say ok, this is the scenario. They might say absolutely not, we're not doing this. And they might say 100%, you're totally good, I've worked with you before, I'm going to walk you through this. Let's do some drawings, let's do some education first, I'm going to go in there and watch you, or I won't watch you, you call me when you're done if you have any questions, and then it is what it is. (BC1)

5.2.2.3 Ideas

Several ideas were identified during data analysis, including the perceived gap in expanded scope regulation and the need for more comprehensive and context specific resources. The expanded nursing scope of practice in RRI areas of BC is defined and regulated in theory through BCCNM certified practice and NNPBC DSTs, but it may not match the reality of RRI nursing practice. Based on BC1s statement for example, the lack of employer policies means they are operating in grey areas that are not covered by the NNPBC DSTs or employer policies. BC1, "There's nobody saying that I can dispense cetirizine for somebody's allergies for 3 days. There's nowhere in an [employer] policy does it say that I can do that." As a result, BC1 describes that they are self-directing their scope using their knowledge and experience from other clinics and jurisdictions.

> In terms of like, how I think the capacity or the relationship between NNPBC or the BCCNM with [employer], like to me it's just non existent, with any of them. None of them know what we're doing here. Nobody is regulating what happens here. It is self-

> regulated, it's like me, and some really amazing nurses who travelled around a lot and know what the standard should be. (BC1)

BC1 compares RRI nursing practice in BC to that of NPs, stating that they would like to see the regulator formally recognize the reality of nursing scope in RRI areas so that additional resources can be made available to support their practice.

> In reality, rural remote nurses are functioning very much like nurse practitioners already. And so, I think that it would almost be better for everybody if the regulatory bodies admitted that and realized that, and then just gave us the tools that we need to practice the way that we're practicing anyways. (BC1)

BC1 suggests that other more comprehensive resources, such as the FNIHB guidelines, would be better suited than the existing resources they have access to from NNPBC.

5.2.2.4 External Factors

Finally, the following external factors also shape the context of the regulatory environment in BC. These include upcoming legislation changes and policies and procedures from other jurisdictions.

Upcoming Legislation Change. The current *Health Professions Act* in BC will be replaced by the updated *Health Professions and Occupations Act* (HPOA) as of April 1, 2026 (BCCNM, n.d.c). While this legislation change will not change the scope of practice of RNs in their day-to-day practice, BCCNM (n.d.c) has rescinded their Scope of Practice Standards, Limits and Conditions document and is transitioning to a learning module based format with supporting practice standard documents on their website.

Policies and Procedures from Other Jurisdictions. BC1 described that since there are gaps in policies and guidance documents, some nurses may use their knowledge and experience from working in RRI areas of other jurisdictions to inform their practice. This means that

policies and procedures from other external RRI nursing organizations may influence the individual scope of practice of RRI nurses working in BC. It is unclear how these practices would be regulated on an individual level.

Chapter 6: Cross Case Synthesis and Discussion

BC and the Yukon each have distinct regulatory environments that influence the practice of RRI nurses. This chapter consists of a cross-case analysis and synthesis, in which the cases are analyzed alongside each other to identify common patterns, themes, and broader generalizations. A discussion of professional training, potential regulatory ambiguities, and the influence of individual nurse competence extends this analysis using additional scholarly literature.

6.1 Nursing Roles in RRI Areas of BC and the Yukon Exceed Entry to Practice Scope and Require Specialized Knowledge and Skill.

Nurses in RRI areas of BC and the Yukon have similar roles, where they function as the primary care providers for the communities in which they are situated. RRI nurses in BC and the Yukon provide health services to clients of all ages and all health presentations, including primary and emergency care, mental health, public health and health promotion services, and other administrative tasks. The roles of RRI nurses in BC and the Yukon are partly shaped by the needs of their communities because they are often the only healthcare provider situated in the community, and because the boundaries of their roles are not well defined. The roles of RRI nurses in BC and the Yukon are also partly shaped by their individual competence and knowledge, which is reflective of the CNA (2015) Scope of Practice Boundaries Framework.

6.1.1 Yukon has a Broader Range of Expanded Scope of Practice Skills.

Nursing roles in RRI areas of BC and the Yukon involve performing skills beyond the traditional entry to practice nursing scope. Expanded scope skills shared by roles in BC and Yukon include complex wound care, including suturing, IO access, vaginal exams and screening, supraglottic airway insertion and maintenance, independent and autonomous assessments and

diagnosis of limited conditions according to employer or external resources, and autonomous treatment of some conditions according to a set formulary. However, nurses in RRI areas of the Yukon have a broader range of expanded scope skills in comparison with BC. Nurses working in RRI areas of the Yukon may order and perform acute limb and chest x-rays, chest x-rays for the purpose of tuberculosis (TB) screening, and may perform chest needle decompression for the purpose of decompressing a tension pneumothorax. Emergency scene response is a routine expectation of RRI nurses in the Yukon, and while nurses in RRI areas of BC may respond on scene on occasion based on their individual decision making, this is not a routine expectation. Most participants' description of their scope of practice was generally aligned with the drafted YRNA (2024a) Scope of Practice document that is pending publication.

Table 8

Overview of Expanded Scope Nursing Skills According to Jurisdiction

Skill	Scope	
	BC	Yukon
Independent and autonomous assessments	Yes	Yes
Independent and autonomous diagnosis of limited conditions	Yes	Yes
Autonomous treatment of limited conditions according to a set formulary	Yes	Yes
Complex wound care, including suturing	Yes	Yes
Female pelvic exams and screening	Yes	Yes
Limited ordering and performing of acute chest and limb x-rays	No	Yes
Emergency scene response	Yes	Yes
IO access	Yes	Yes
Supraglottic airways	Yes	Yes
Chest needle decompression	No	Yes

Note. The scope of practice outlined for BC and Yukon in Table 8 is based on data collected during this research. Because of the small sample size and individual variations in scope, some skills could vary among professionals.

6.1.2 RRI Nurses Engage in Specialized Training to Become Competent in Expanded Scope Skills, but There are Gaps.

In both cases, Yukon and BC participants reported engaging in specialized training to become competent in expanded scope skills. Nurses in BC engage in standardized training through UNBC, BCIT and BCCDC to qualify for their Certified Practice Area status. In the Yukon, tailored education for the role is offered through the employer's orientation. Both nurses working in BC and Yukon then engage in on-the-job mentorship with experienced RRI nurses. The length of this mentorship in BC and Yukon is tailored to the new nurse's learning needs. However, training gaps exist in both cases. Both nurses working in RRI areas of BC and Yukon reported that they have knowledge gaps in emergency scene response. Yukon participants specifically referenced the need for hands on emergency scene response training that utilizes the tools that they have access to in the health centres. Some Yukon participants also described that International Trauma Life Support (ITLS) training would be more specific to their context rather than TNCC, as ITLS focuses on prehospital care (ITLS, n.d.). Continuing education to maintain competence in expanded scope skills was a common theme among participants, which is not unique to this research. The need for and importance of continuing education that is specific to the RRI context has been well documented in the literature (Burrows et al., 2019; Fournier et al., 2021; MacKay et al., 2021; McElroy et al., 2022; McDonnell et al., 2019).

6.2 Gaps in Regulation of Expanded Scope of Practice

6.2.1 Yukon Context

While nurses working in RRI areas of the Yukon have a broader scope than those working in BC, there are fewer regulations in place to support practice. The Yukon Government

legislation defers to the YRNA to establish a scope of practice for RNs, however, the YRNA does not currently have a scope of practice in place. With a scope of practice document drafted by the YRNA and not yet implemented, there are no documents to address the scope of practice of RNs working in RRI areas. Therefore, the scope of RNs working in RRI areas of the Yukon is currently largely determined by the latter half of the CNA (2015) Scope of Practice Boundaries Framework, which consists of employer policies, individual RN competence, and client needs. Employer policies and external resources such as the FNIHB guidelines are partly filling the gap of outlining scope of practice boundaries, but they are not fully encompassing. There are gaps in employer policies according to Yukon participants, and external resources are not always aligned to the context and resources available in RRI areas.

The interests of the RRI nursing employer in the Yukon are the provision of primary healthcare service. Some participants in this research raised their concerns regarding the employer's competing interests that influence their level of support in the role. In one example, YT5 describes the employer's motivations to push nurses through their training and mentorship sooner to staff health centres. Related news of several health centre closures in the Yukon due to staffing shortages highlights the challenges of delivering healthcare in RRI (Hatherly, 2025; MacIntyre, 2025). In another example, YT3 describes their concern that this current regulation model does not hold the employer accountable for ensuring patient safety in a RRI working environment, where there is limited to no supervision. This regulatory environment in the Yukon has created a power imbalance where the employer's interests are not well aligned with their responsibilities. The employer in the Yukon is the primary driver of scope, is responsible for creating and administering expanded scope training, and hiring and management of RRI nurses, and the employer's primary interest is the provision of healthcare services. This environment

where RRI nurses do not have a clear professional role delineation may contribute to the nurse solely filling healthcare gaps, as cautioned by Wiggins et al. (2022). Regulation of nursing scope, including monitoring of continuing education to maintain provider competency, is better aligned with the interests of the YRNA, which has the primary interest of public safety, and from there, the employer may set context specific policies and restrictions.

6.2.2 BC Context

In contrast, the expanded scope of practice of nurses working in RRI areas of BC is regulated through certification with the BCCNM, which requires approved education courses and annual recertification. In BC, NNPBC provides DSTs to guide expanded scope of practice, however, the comprehensiveness of these DSTs was raised as an issue in BC1's interview. NNPBC's DSTs align with the certified practice area scopes which are outlined in the BCCNM (2025) practice standard, *Acting Within Autonomous Scope of Practice (Certified Practice).* This practice standard limits RNs in their certified practice areas to only diagnosing and treating specified conditions. However, based on the account by BC1, in reality, RRI nurses in BC may be assessing and treating a broader range of conditions. BC1 describes that as the only healthcare provider in their community, they are often working beyond these limitations because many patients are unwilling to travel several hours by road to the nearest hospital where they can access higher levels of care. In some of these situations, BC1 reports that they knowingly work beyond their scope. In other situations, such as emergency scene response, it is unclear whether this falls within the certified practice area scope, and RRI nurses may be navigating the grey area using their individual judgement.

6.2.3 Flexible Regulation Model

Flexible regulatory environments that are based on the practice context, health needs of patients, individual provider competence, and policy requirements of the provider are used in other jurisdictions such as Australia (Leslie et al., 2021). This is the model that the YRNA is moving towards with their new scope of practice document (YRNA, 2024a). A flexible scope of practice model that navigates the balance between the firm certified practice scope limitations in BC and the regulatory gaps in the Yukon should be considered in the regulation of RRI nursing practice to support nurses in recognizing and working to their full legislated scope. The drafted YRNA scope of practice document begins to shift the responsibility for defining nursing scope back to the regulator in the territory, but given that it has not been published yet, it is not yet helpful to nurses in practice. It is unclear what the expanded scope of practice document will entail but based on the feedback of nurses in this research, it should advise on authority for expanded scope of practice and continuing competency requirements. It may also be beneficial to involve the YNA in the building of this document to ensure that the voice and interests of RRI nurses are well represented.

6.3 Different Perspectives of Novices and Experts

Multiple participants described the notion that they could not be prepared for everything because of the wide variability in patient care needs, and that their competence improved over time while working in the role. This notion aligns with From Novice to Expert, a model introduced by Benner in 1982, which explains how nurses progress through the stages of learning and gain knowledge and skill (Benner, 1982; Thomas & Kellgren, 2017). Expert and proficient nurses use their extensive experience and intuition to guide their decision making, and

are able to modify their care based on evolving situations in real time, which aligns with participants in this research with ten or more years of experience who described that grey areas were empowering to make clinical decisions that were right for their patients (Thomas & Kellgren, 2017). Expert nurses in this research were comfortable navigating grey areas using their knowledge and skill from previous patient encounters in RRI areas. Participants with less experience, who aligned with the advanced beginner or competent stages of the Novice to Expert model, had some previous experiences to inform their decision-making but still referenced policies for rules around expanded scope skills. Where there were policy gaps or where resources did not align with the context, expert nurses could navigate this seamlessly, and more novice nurses referred to external resources for guidance. The gaps in the current regulatory environment in the Yukon may therefore have the greatest impact on more novice RRI nurses, since they require more policies and guidelines to base their decisions on. As one Yukon participant highlighted, it is important to have expert RRI nurses to mentor more novice RRI nurses in order to build their competence and confidence. However, there may not be enough expert nurses to mentor novice nurses in the context of the ongoing nursing shortage which is impacting RRI areas of the Yukon (Hatherly, 2025; MacIntyre, 2025).

6.4 Need for Context Specific Resources in both BC and the Yukon

Across both cases and across all expertise levels of participants, there was a common theme of needing more context specific resources. Because the RRI nursing scope is so broad, nurses require access to evidence and resources to inform their decision making. Yukon participants in this research described that employer policies are not easy to access, are not realistic to use in real time, and are often not up to date. BC1 described that the NNPBC DSTs

are useful, yet are not comprehensive enough to guide most of their work. However, employing decision support tools, such as the NNPBC DSTs, and standards of practice may be an effective alternative in both cases if the DSTs and standards are relevant to all expanded scope skills that RRI nurses are performing. Ensuring RRI nurses have access to adequate tools may reduce the burden of uncertainty that they experience when not knowing whether a task is within their scope, and how to proceed.

Chapter 7: Implications, Limitations and Conclusion

This research builds upon the literature base relevant to nursing practice in RRI areas and the unique regulatory structures of this profession. This research provides insight into the regulatory mechanisms governing expanded scopes of practice in BC and the Yukon, including the perspectives of RRI nurses and how these mechanisms impact their work. With a better understanding of the scope of practice of RRI nurses in BC and the Yukon, and the regulatory mechanisms relevant to their practice, regulators, employers and professional advocacy bodies may work towards a goal of filling the regulatory gaps to better support nurses in these contexts.

7.1 Implications

The findings of this research have implications for governments, nursing regulators, nursing advocacy bodies and RRI nursing employers, in addition to theoretical implications.

7.1.1 Governments

Governments in BC and the Yukon are provided with an in-depth analysis of how existing legislation surrounding expanded scope practice, or lack thereof, impacts nursing practice in RRI areas. It is recommended that the Yukon Government take this issue into consideration when creating the new Health Professions Act and consider whether a flexible regulatory framework that minimizes uncertainty around scope of practice boundaries may be more appropriate for the Yukon context.

7.1.2 Nursing Regulators

The YRNA could consider whether a unique and flexible scope of practice for nurses working in RRI areas would be feasible and appropriate. It is also suggested that the YRNA

consider defining standards of practice for the RRI context that nurses uphold by means of standardized and context specific education and training. It is recommended that nursing regulators in BC consider how they can expand their resources and standards to accurately reflect the scope of practice of RRI nurses.

7.1.3 Nursing Professional Associations

It may be beneficial for the YNA and NNPBC to consider collaborating on evidence-based resources for RRI nurses that accurately reflect the context of this work. BC and Yukon share similar contexts, and therefore Yukon may be able to leverage existing resources to support nursing practice and adapt these as necessary.

7.1.4 RRI Nursing Employers

Finally, it is recommended that RRI nursing employers in BC and the Yukon critically evaluate the existing training that they offer and strongly consider offering or supporting additional context specific training for the expanded scope of practice on a regular basis. The literature specifically identifies advanced specialty courses, medication safety protocols, preceptorship programs, interprofessional practice training, and cultural safety training as potential education needs in the RRI context (Corner et al., 2023; McElroy et al., 2022; Pavloff et al., 2017; Speare et al., 2021; Wood et al., 2021). RRI nursing employers are strongly encouraged to employ the professional development and mentorship initiatives outlined in the Canadian Nursing Retention Toolkit, which includes offering resources and support for professional development (Health Canada, 2024). Nurses working within the broad RRI scope should be supported in recognizing their knowledge gaps and accessing training to improve the services that they can provide to RRI communities.

7.1.5 Theoretical Implications

This research also has theoretical implications. The 3I+E framework assisted in identifying the regulatory actors in BC and the Yukon, and their influence. The Yukon Government is making significant health system changes by moving towards a health authority model and by creating a health professions act that will replace existing legislation. It is unclear at this time how these changes will impact the scope of practice of nurses working in RRI areas. The recent creation of YRNA's scope of practice document and the formation of the YNA may be related developments that could support the nursing profession during the transition. Moving forward, it will be important for all regulatory stakeholders to consider how best to collaborate given their unique interests and ideas. Going forward, the 3I+E framework may facilitate further investigation of nursing regulation systems including the impact of key events, such as the forthcoming health practitioner regulation legislation in BC.

7.2 Limitations

This research included a small sample of nurses working in RRI areas of BC and Yukon, which may influence the generalizability of the findings to other contexts. This research did not include nurses working in RRI areas who are employed by external travel agencies, so their experiences could be different than those that were captured in results of this research. Because this research only included one BC participant, the findings may be skewed to their specific practice context and may not be generalizable to all RRI contexts in BC. Employer policies and resources were not accessible in the BC or Yukon context, which may have influenced the analysis of the institutions, ideas, interests, and external factors of these regulatory actors. Finally, exploring the content of RRI nursing education that is offered in BC and Yukon was

outside of the scope of this research and was not analyzed, and therefore, specific recommendations on nursing education in RRI areas could not be offered. This research is specific to the time in which it was conducted in the midst of health system transformation in the Yukon, and therefore, may not be relevant after changes to the health system have been made.

7.3 Recommendations for Future Research

Since the existing knowledge base on the regulation of expanded scope nursing in RRI contexts was scarce, this research took an exploratory approach to better understand the context and problem. The findings of this research have indicated several areas that require further inquiry. Further research using the 3I+E framework should be conducted as the Yukon transitions to their new regulatory and health system delivery models to analyze how these changes have impacted nursing scope and health service delivery in RRI areas. The 3I+E framework could be leveraged to assess the influence these changes have on each regulatory actor, including any advantage or disadvantage to a particular stakeholder.

Because of only one BC interview participant within this multiple case study, further research is recommended to explore the scope of practice of nurses across different RRI contexts and health authorities in BC. Additional research that captures a broader range of BC RRI nurse experiences may be used to assess how the NNPBC DSTs align with practice, since it was suggested to not align in the experience of BC1. Similarly, further research in the Yukon context could assess employer policies since some participants suggested these policies did not align with practice. Further research into these policies, support tools, and RTVS may assist in providing specific recommendations on professional support for RRI nurses.

This research did not explore the content of education and training programs provided to

RRI nurses to prepare them for their roles. Further research is recommended to assess the content of these education programs and how they align with the reality of the RRI context. Further exploration of education programs may assist in providing specific recommendations on how these programs may be updated to better prepare RRI nurses.

BC and Yukon were purposefully selected as cases for this research. However, further research is recommended to expand the knowledge base of RRI nursing scope of practice in other Canadian jurisdictions. Exploration into the roles of RRI nurses across other provinces and territories may assist in identifying similarities and differences of the roles and regulation in different contexts. McCullough et al. (2022) suggest that RRI nursing in the Australian context may be considered a specialty practice area given the uniqueness of the role from other nursing practice areas. This notion could be considered in future Canadian research as the knowledge base is expanded, and the role boundaries are more clearly delineated. Recognizing RRI nursing as a specialty practice may assist in advocating for more robust policy infrastructure to support the role.

7.4 Conclusion

The specific regulatory mechanisms impacting nursing regulation in RRI areas have been largely unexplored. This research offers insight into the expanded nursing scope of practice in RRI areas of the Yukon and BC, and the regulatory environment. The findings of this research suggest that nurses working within these contexts are knowledgeable and experienced in advanced skills that enable them to meet the broad range of health needs within their communities. However, both BC and Yukon cases revealed potential regulatory ambiguities that place nurses in difficult positions, requiring them to navigate uncertain scope boundaries when

they may be the only healthcare provider available to assist patients. The findings of this research also corroborate a common need for more context specific and accessible continuing education and practice supports. Yukon is in the midst of health system and policy reform, which presents an opportunity for changes that could positively impact the professional regulation of nurses. Governments, regulatory bodies, professional associations, and RRI nursing employers can consider these findings in future decision-making. Further research is also needed to build on this knowledge base and help provide role clarity around scope of practice for RRI nurses. Ultimately, RRI nurses have a unique role and practice context, and they should be supported in working to their full scope of practice.

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Appendix A: Case Study Protocol

Section A: Overview of the case study

- **Study aim:** This research aims to identify how nursing skills beyond the entry to practice scope of RNs are regulated in RRI areas of the Yukon and British Columbia (BC). This research is intended to support nurses in RRI areas by defining their unique scope of practice boundaries, which may build the case for stronger professional advocacy and employer support.
- **Research questions:**
    - What specific skills are performed by RNs in RRI areas that are beyond the entry to practice scope?
    - Who are the major regulatory actors and in what way do they regulate expanded scope skills?

Section B: Data collection procedures

- Preparation prior to data collection: create a case study database and test the interview questions on a pilot case.
- Phase I: Review of publicly accessible nursing scope of practice legislation and/or acts, jurisdictional government regulation and/or bylaws, and organizational policies. Sources may include provincial or territorial government websites, employer websites, nursing regulator websites, or nursing association websites. Any policies that are not publicly accessible may be requested by email to the authoring organization or access to information (ATI) requests.
- Phase II: Semi-structured interviews with nurses working in RRI areas of the Yukon and BC. Participant recruitment will be conducted via BC and Yukon nursing associations. A tentative participant interview guide is available in Appendix H.
- Protecting participants:
    - Obtain informed consent.
    - Protect the participants from any harm or deception.
    - Protect participant privacy and confidentiality.
    - Select participants equitably.
    - Apply for Athabasca University Research Ethics Board approval prior to starting any interviews to ensure the research will uphold respect for persons, concern for welfare and justice.

Section C: Protocol questions

1. Institutions
    - What stakeholders are involved in nursing scope of practice regulation in RRI areas and what is their influence?
    - What government structures, policy networks, or policy legacies shape, reinforce or constrain current scope of practice policies or legislation and their development?
    - How are nurses affected by the current regulatory environment?
    - Are there any structure or policy gaps?
2. Interests
    - What are the real or perceived interests or agendas of the stakeholders involved?
    - Is there any advantage to a specific group through the adoption of current policies or lack thereof?
3. Ideas

- What knowledge, evidence, beliefs, and/or values do the stakeholders hold?

Section D: Tentative outline of the case study report

- Audience: Faculty of Health Disciplines at Athabasca University, nursing regulators, policy makers, RRI nursing employers, nursing advocacy bodies, nursing scholars
- Individual case descriptions
- Cross case synthesis
- Findings related to what skills nurses perform beyond the entry to practice scope in RRI areas
- Findings related to which institutions are involved in nursing scope of practice regulation, their ideas and interests, and how they regulate expanded scope skills
- Findings related to what policy or legislation gaps exist
- Suggestions on what policy infrastructure is required to assist RNs to define their scope of practice and competence obligations
- Suggestions for nursing regulators and employers

Appendix B: Recruitment Poster

PARTICIPANTS NEEDED FOR
RESEARCH IN RURAL, REMOTE AND ISOALTED NURSING PRACTICE

We are looking for volunteers to take part in a study of Registered Nurses' scope of practice in rural, remote and isolated (RRI) areas of British Columbia (BC) and the Yukon.

Volunteers should be:

- Registered Nurses (RNs) with at least 6 months of experience working in RRI areas of BC and/or the Yukon where they were the primary care provider for the community, and
- Whose practice included performing skills outside of their legislated scope of practice (ex., suturing, x-rays, etc.)

Participants in the study will be invited to take part in a 60-minute interview.

In appreciation for their time, participants will receive a $50 gift card honorarium.

To learn more about this study or to participate, please contact the principal investigator:

April Goulin, Master of Nursing student, Athabasca University
agoulin1@athabasca.edu

This study is supervised by:

Dr. Kathleen Leslie, PhD, JD, BScN, RN
Associate Professor
Faculty of Health Disciplines
Athabasca University
kleslie@athabascau.ca

Dr. Jacqueline Limoges, PhD, RN
Associate Professor
Faculty of Health Disciplines
Athabasca University
jacqueline.limoges@athabascau.ca

This study has been reviewed by the Athabasca University Research Ethics Board. Should you have any comments or concerns about your treatment as a participant, the research, or ethical review processes, contact the Research Ethics Officer at 1.780.213.2033 or by e-mail to rebsec@athabascau.ca

Athabasca University

Appendix C: Email script – Outreach to nursing associations for primary recruitment

Hi (insert nursing association name),

My name is April Goulin, and I am a Master of Nursing student at Athabasca University. I am conducting research to explore the scope of practice of Registered Nurses (RNs) in rural, remote and isolated (RRI) areas of British Columbia (BC) and the Yukon. I would like to ask your organization to share my recruitment poster (attached) with your RN distribution list to identify volunteers who may be interested in participating.

This study came to fruition because of my experience and the challenges I encountered while working as a Primary Health Care Nurse (PHCN) in RRI Yukon communities. This study aims to identify the advanced skills performed by RNs in RRI areas of BC and the Yukon, make recommendations to ensure RN competence and professional support, as well as provide a foundation for future research and policy development aimed at addressing the challenges faced by RNs in these settings. It is the intention that the findings of this research will be utilized to advocate for more professional support for nurses working RRI areas. The study consent form is also attached for greater detail of the study methods.

I am happy to meet virtually to discuss any questions you may have. Thank you for your consideration.

Kind regards,

April Goulin, RN, BScN

Appendix D: Email Script: Outreach to Nursing Employers for Secondary Recruitment Measure

Hi (insert organization name),

My name is April Goulin, and I am a Master of Nursing student at Athabasca University. I am conducting research to explore the scope of practice of Registered Nurses (RNs) in rural, remote and isolated (RRI) areas of British Columbia (BC) and the Yukon. I would like to ask your organization to share my recruitment poster (attached) with your RN distribution list to identify volunteers who may be interested in participating.

This study came to fruition because of my experience and the challenges I encountered while working as a Primary Health Care Nurse (PHCN) in RRI Yukon communities. This study aims to identify the skills performed beyond the Registered Nurse (RN) scope of practice in RRI areas of BC and the Yukon, make recommendations to ensure RN competence and professional support, as well as provide a foundation for future research and policy development aimed at addressing the challenges faced by RNs in these settings. It is the intention that the findings of this research will be utilized to advocate for more professional support for nurses working RRI areas. The study consent form is also attached for greater detail of the study methods.
I am happy to meet virtually to discuss any questions you may have.

Thank you for your consideration.
April Goulin, RN, BScN

Appendix E: Email Script: Response to Interested RNs

Hi (insert name),

Thank you for your interest in participating in this study exploring the scope of Registered Nurses (RNs) in rural, remote, and isolated (RRI) areas of British Columbia (BC) and the Yukon. My name is April Goulin, and I am a Master of Nursing student at Athabasca University and the principal investigator. The attached consent form provides details about the study purpose and what the study entails. Please review this information and let me know if you have any questions.

We are looking for volunteers:

- Who are Registered Nurses (RNs) with at least 6 months of experience working in RRI areas of BC and/or the Yukon where they were the primary care provider for the community, and
- Whose practice included performing skills outside of their legislated scope of practice (ex., suturing, x-rays, etc.)

Please respond with a brief description of how you meet the eligibility criteria above, with as little or as much detail as you feel comfortable disclosing.

I look forward to discussing your interest further. Thank you,

April Goulin, RN, BScN

Appendix F: Participant Information Letter

Principal Investigator (Researcher):
April Goulin, RN
agoulin1@athabasca.edu

Supervisors:
Dr. Jacqueline Limoges PhD, RN
Dr. Kathleen Leslie, PhD, JD, RN

Study Title: Exploring Nursing Practice in Rural, Remote and Isolated Contexts

What is the purpose of this research?

The purpose of this research is to explore how expanded scope nursing is regulated in rural, remote and isolated areas of British Columbia and the Yukon, and to identify policies and practices that can better support nurses in these contexts.

What am I being asked to do?

- If you choose to participate, you will engage in a one-hour interview with the principal investigator, April Goulin. The interview can be conducted in person in the Whitehorse area, over the phone, or via Microsoft Teams based on your preference.
- During the interview, you will be asked a standardized set of questions about expectations to perform advanced skills, what advanced skills may be performed, what guidance is available to support RNs in performing these skills, your thoughts on the preparedness of RNs and your thoughts on the regulation of these skills. You will not be asked to disclose any specific situations in which you performed skills beyond your scope to protect your privacy. You will also be asked to answer general demographic questions. Clarifying or follow-up questions may be asked when necessary.
- With your permission, virtual interviews will be audio-recorded using Microsoft Teams, and telephone or in-person interviews will be recorded on the researcher's audio recording device.

Taking part in this study is your choice.

You can choose if you want to take part in this study. You can also change your mind any time and withdraw from this study or choose not to answer any questions. Whatever choice you make, there will be no consequences to you. If you wish to withdraw from this study, contact April at agoulin1@athabasca.edu. Withdrawal of your interview responses is possible for one week after your interview, when your data will be anonymized. After this point, it will not be possible to withdraw your responses.

This document has important information to help you make your choice. Take time to read it. It is important that you have as much information as you need and that all your questions are answered. See the "where can I get more information" section if you have more questions.

Who is conducting the research?

This research is being conducted by April Goulin, RN, a Master of Nursing student at Athabasca University. This research is supervised by Dr. Jacqueline Limoges PhD, RN and Dr. Kathleen Leslie, PhD, JD, RN.

How are my rights as a research participant protected?

The research team involved in this study is committed to protecting your privacy and has multiple safeguards in place to do so. These safeguards include:

- Saving interview audio recordings in a password protected file to the principal investigator's password protected and encrypted hard drive and not the cloud-based service.
- De-identifying your information following the interview and storing interview transcripts in a password protected file that is only accessible to the principal investigator and supervisors on the principal investigator's office 365 account.
- Not sharing your identifying information with any other person for any other purpose without your consent.
- Reporting on data in a general way so you will not be identified.

However, while every precaution has been taken to protect your private and confidential information, the risk of loss or misuse of the information cannot be completely eliminated. In the unlikely event that this occurs, you will be notified at the first reasonable opportunity.

This study will use the Microsoft Teams platform to collect data during virtual interviews, which is an externally hosted cloud-based service. When information is transmitted over the internet privacy cannot be guaranteed. There is always a risk your responses may be intercepted by a third party (e.g., Government agencies, hackers). Further, while the researchers will not collect or use IP address or other information which could link your participation to your computer or electronic devices without informing you, there is a small risk with any platform such as this of data that is collected on external servers falling outside the control of the research team. If you are concerned about this, we would be happy to make alternative arrangements (where possible) for you to participate, for example, via telephone. Please contact april goulin for further information.

Are there risks or benefits to participation?

- You may not receive any direct benefit from participating in this study.
- The likelihood of being harmed as a result of participating in this study is extremely low. However, by agreeing to participate you are not giving up or waiving any legal rights in the event that you are harmed during the research.
- All information will be held confidential, except when legislation or a professional code of conduct requires that it be reported. You will not be asked to disclose any specific situations in which you acted beyond your scope of practice.

- If you feel upset as a result of discussing topics during the interview and need additional mental health support, you can access Canadian Mental Health Association (CMHA) resources in Yukon by calling **1-844-533-3030** or in British Columbia by calling **310-6789** (no area code).
- If you are distressed and/or in crisis, you may also call or text the nation-wide crisis helpline toll-free at **9-8-8. If it's an emergency, please call 911.**

Is there compensation or cost to participate?

To show appreciation for your time taken to participate in this study, you will be compensated with a $50.00 CAD Amazon e-gift card. Even if you cannot complete the whole interview or chose to withdraw your responses, you will still receive the e-gift card. There is no cost to you to participate in this study.

Where can I get more information?

This study is approved by the Athabasca University Research Ethics Board (REB). If you have any questions regarding your rights as a participant in this study, please contact the REB at rebsec@athabascau.ca or *780.213.2033*.

If you have any questions about this study, want additional information, or wish to withdraw your participation please contact April Goulin at agoulin1@athabasca.edu

Conflict of Interest

The researchers have no conflict of interest to declare.

Next Steps

If you consent to participating in this study, please join the interview at the mutually agreed upon date and time. You will be asked once more to provide verbal consent before the interview and any audio recording starts.

Project Title: Exploring Nursing Practice in Rural, Remote and Isolated Contexts
Date:_____ Participant name: _____

Principal Investigator:
April Goulin, RN
Master of Nursing, Student
Faculty of Health Disciplines
Athabasca University
agoulin1@athabasca.edu

Supervisors:
Dr. Kathleen Leslie, PhD, JD, RN
Associate Professor
Faculty of Health Disciplines
Athabasca University
kleslie@athabascau.ca

Dr. Jacqueline Limoges, PhD, RN
Professor
Faculty of Health Disciplines
Athabasca University
jacqueline.limoges@athabascau.ca

Informed Consent:
Your verbal consent at the beginning of the interview means that:

- You understand what the research project is about and what you will be asked to do.
- You understand the risks and benefits.
- You have been able to ask questions about this project and you are satisfied with the answers to any questions you may have had.
- You understand that participating in the project is entirely voluntary and that you may end your participation at any time without any penalty or negative consequences, up until data analysis has begun.
- You understand that if you choose to end your participation **during** data collection, any data collected from you up to that point will be destroyed.
- You understand that your data cannot be removed once the data analysis has begun.
- You agree to participate in this research project.

	Yes	**No**
I agree to be audio-recorded	☐	☐
I agree to the use of direct quotations	☐	☐

Appendix G: Email Script: Interview Scheduling

Hi (insert name),

Thank you for your interest in participating in this study exploring the scope of Registered Nurses (RNs) in rural, remote, and isolated (RRI) areas of British Columbia (BC) and the Yukon. I am writing to inform you that we would like to proceed with an interview with you to discuss your work experience in RRI areas of (insert BC or Yukon). This interview will be approximately one hour in length.

In response to this email, please:

1. Let me know if you prefer meeting via Microsoft Teams, over the phone, or in person in the Whitehorse area.
2. Let me know which of the following meeting times work best for you:

- (insert 3-4 different meeting dates and times with at least one weekend option, one evening option, and one daytime option)

I have attached the consent form which outlines what the study entails again for your reference. If you have not already, please review this information and let me know if you have any questions. We will review this consent form at the beginning of our interview and there will be an opportunity to discuss any questions that you may have.

I look forward to meeting with you soon!

April Goulin, RN, BScN

Appendix H: Participant Interview Guide

Interview set up:

- Obtain consent.
- Acknowledge any prior relationships that may exist between the principal investigator and the participant if relevant (i.e., colleagues).

Prior to engaging in interview questions:

- Review definitions used in research to ensure mutual understanding:
    - Rural, remote and isolated (RRI)
    - Expanded scope nursing
    - Advance directives
    - CNA Scope of Practice Boundaries framework
    - Advanced skills
- Review the preliminary findings of phase one of data collection:
    - **BC**
        - Currently, the BC Health Professions Act and the RN and NP regulation provide the legal authority for nursing practice in BC. Legislation in BC sets out broad limits on RN scope.
        - The BCCNM standard, limits and conditions outline a more detailed scope of practice for each nursing specialty or certification.
        - Within this, BCCNM has a Remote Certified Practice designation that provides an expanded scope, beyond the entry to practice scope.
        - NNPBC provides DSTs for the Remote Certified Practice Area.
        - Organizational policies are not publicly accessible. However, the NNPBC resources are publicly available and are endorsed by BCCNM

    - **YT**
        - The Yukon Government legislation delegates the definition of RN scope of practice to the YRNA through the RN Profession Act.
        - YRNA has explained that there is currently no official scope of practice for RNs in the Yukon, but they have drafted a scope of practice document to fill this gap.
        - Currently, the YRNA scope of practice document states that: “Expanded level practice is not based on a physician’s order or delegation but on autonomous practice, within policies, procedures, standing orders etc., established by the employer. This practice is authorized by YRNA for specific contexts, settings, and employers. Note, this is not Registered Nurse Practitioner (NP) practice as NP scope is broader and does not require employment with a YRNA approved employer or employment context. Expanded scope of practice is outside the parameters of this document. Refer to the YRNA directly for support and guidelines.”

- The employer policies related to expanded scope of practice are unclear as these are not publicly available.

Participant interview questions:

1. Can you tell me a little bit about yourself and how you came to be a nurse in rural, remote or isolated area?
    a. Can you please confirm which jurisdiction you have experience practicing nursing in, in RRI contexts? (i.e., BC and/or Yukon)
    b. Can you please confirm how many years of experience you have practicing in RRI areas?
        a. 1 year or less
        b. 1-10 years
        c. 10 or more years
2. What would a typical week look like for you practicing in rural, remote and isolated areas?
3. What are some examples of situations where you have practiced advanced skills?

    For example, skills like suturing minor wounds, ordering and/or performing xrays, or formulating and/or communicating a diagnosis.
    a. So I am hearing that you have experience with skills including... Are there any other types of advanced or expanded scope skills that you have experience with in RRI areas?
    b. Are there any limitations on the situations where you can practice of these skills? Or is this a widespread expectation?
4. Where would you look to for guidance on when or how to perform these skills?

    For example, any frameworks, policies, decision support tools, or other types of guidance documents (Refer to CNA Scope of Practice Boundaries framework)
    a. What are your thoughts on how these guidance documents or tools align with the reality of nursing in RRI areas?
5. How prepared did you feel to perform these skills when you first started?
    a. How prepared do you feel now, after practicing for x years?
6. What are your thoughts on the current system of how these advanced skills are regulated?
    a. Do you have any concerns or changes that you would like to see?

Appendix I

Athabasca University

CERTIFICATION OF ETHICAL APPROVAL

The Athabasca University Research Ethics Board (REB) has reviewed and approved the research project noted below. The REB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2) and Athabasca University Policy and Procedures.

Ethics File No.: 25934

Principal Investigator:
Ms. April Lesperance, Graduate Student
Faculty of Health Disciplines\Master of Nursing

Supervisor/Project Team:
Dr. Kathleen Leslie (Co-Supervisor)
Dr. Jacqueline Limoges (Co-Supervisor)

Project Title:
Exploring Nursing Practice in Rural, Remote and Isolated Contexts

Effective Date: March 28, 2025 **Expiry Date:** March 27, 2026

Restrictions:

Any modification/amendment to the approved research must be submitted to the AUREB for approval prior to proceeding. Any adverse event or incidental findings must be reported to the AUREB as soon as possible, for review.

Ethical approval is valid ***for a period of one year.*** A request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

An Ethics Final Report must be submitted when the research is complete *(i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable))* or the research is terminated.

Approved by: **Date: March 28, 2025**

Venise Bryan, Chair
Faculty of Health Disciplines, Departmental Ethics Review Committee

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Athabasca University Research Ethics Board
1 University Drive, Athabasca AB Canada T9S 3A3
E-mail rebsec@athabascau.ca Telephone: 780.213.2033