# Expanding Virtual Care in Rural Newfoundland and Labrador, an Ethical Analysis

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# Abstract

This research considers whether an expansion of virtual primary care would be ethically justified in light of the current level of primary health care accessibility in rural Newfoundland and Labrador. Currently virtual primary care is not available at the same level as specialist care in the province. However, the provincial government has an obligation to improve the financial well-being of the province. The current provincial economic environment and the potential negative implications of expansion introduce ethical tension. This thesis considers whether there is an ethical obligation to expand virtual care in rural Newfoundland and Labrador.

I will argue that the provincial government has an ethical obligation to expand virtual care in rural Newfoundland and Labrador, referring to the increased accessibility of primary health care for residents. I have two arguments supporting this position: one that draws upon the positive right to health care, and another that invokes the bioethical principle of justice. I will provide support for my argument by describing financial benefits for the province, as well as benefits for residents and for the provincial health care system. I will demonstrate that potential negative implications of expansion do not outweigh the obligation to expand virtual care.

# General Summary

Virtual specialist health care is currently available throughout Newfoundland and Labrador, but virtual primary health care is not. I consider whether expanding virtual care could address the issue of primary health care inaccessibility in rural Newfoundland and Labrador. However, the provincial government has an obligation to improve the financial well-being of the province and to ensure access to health care. These obligations introduce an ethical tension. The central focus of this thesis is whether there is an ethical obligation for the provincial government to expand virtual care.

I argue that there is an ethical obligation due to the potential to improve primary health care accessibility in rural areas. The positive right to health care and the bioethical principle of justice supports this position. My argument also presents benefits for the province and its residents. I will prove that potential negative implications do not outweigh the obligation to expand virtual care.

# Table of Contents

Abstract ........ ii

General Summary ........ iii

Acknowledgments ........ vii

List of Figures ........ viii

List of Abbreviations ........ ix

Chapter 1: Introduction ........ 1

1.1 Purpose of Research ........ 1

1.2 Background on Health Care in Newfoundland and Labrador ........ 1

1.3 Virtual Care ........ 6

1.4 Relevant Current Political Events ........ 10

1.5 Chapter Summaries ........ 14

1.5.1 The Right to Health Care and the Principle of Justice ........ 14

1.5.2 Financial Considerations ........ 16

1.5.3 Addressing Negative Implications of Expansion ........ 17

1.5.4 Positive Implications of Expansion ........ 18

1.5.5 Conclusion ........ 19

Chapter 2: The Right to Health Care and the Principle of Justice ........ 20

2.1 The Right to Health Care ........ 20

2.1.1 How to Understand Rights in General ........................................................................ 20
2.1.2 Legal Accounts of the Right to Health Care in Canada ............................................. 21
2.1.3 The Legal Statements Support an Ethical Obligations............................................... 23
2.1.4 The Obligation to Expand Virtual Care2.2 The Principle of Justice .......................... 25
2.2 The Principle of Justice ..................................................................................................... 27
2.2.1 The Obligation to Ensure Health Care Accessibility Under an Egalitarian Theory of Justice ................................................................................................................................. 28
2.2.1.1 Applying an Egalitarian Theory of Justice to NL ................................................ 29
2.2.2 The Obligation to Ensure Health Care Accessibility Under Other Theories of Justice32
2.2.3 The Impact of Increasing Accessibility through Expanding Virtual Care .................. 34
2.3 The Impact of Barriers to Primary Health Care Accessibility .......................................... 35
Chapter 3: Financial Considerations ...................................................................................... 37
3.1 Provincial Financial Strain ................................................................................................ 37
3.2 Financial Impacts and Poor Health Outcomes .................................................................. 40
3.2.1 Impacts of Financial Constrains in the Health Care System ....................................... 42
3.3 Support for the Obligation to Expand Virtual Care ......................................................... 44
3.3.1 Financial Impacts of Good Health Outcomes ............................................................ 44
3.3.2 Financial Impacts of Expanding Virtual Care in Rural NL ........................................ 47
3.4 Future Economic Benefits .................................................................................................. 48
Chapter 4: Addressing Negative Implications of Expansion ...................................................... 50

4.1 Disproportionate Implementation ........ 50
4.1.1 Responding to Objection with Respect to Disproportionate Implementation........ 53
4.2 Standard of Care ........ 55
4.2.1 Responding to Objection with Respect to Standard of Care ........ 57
4.3 Security and Data Protection ........ 60
4.3.1 Responding to Objection with Respect to Security and Data Protection ........ 62
Chapter 5: Positive Implications of Expansion ........ 65
5.1 Positive Implications for Residents of NL ........ 65
5.1.1 Health Literacy ........ 65
5.1.2 Patient Empowerment ........ 67
5.2 Benefits to the Health Care System ........ 70
5.2.1 Professional Health Education ........ 70
5.2.2 Addressing the Doctor Shortage ........ 73
5.2.3 Modernized Health Care Delivery ........ 76
5.3 Associated Benefits for the Provincial Government ........ 78
Chapter 6: Conclusion ........ 81
References ........ 84

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# List of Figures

Figure 1: NL Healthcare Spending (The Premier's Economic Recovery Team, 2021, p. 172) .... 38

Figure 2: Per Capita Canadian and NL Spending (The Health Accord for Newfoundland and Labrador, 2022, p. 23) .... 38

Figure 3: Provincial Per Capita Health Spending 2019/2020 (The Health Accord for Newfoundland and Labrador, 2022, p. 22) .... 40

Figure 4: The Health Accord's Poll Question Results for the Biggest Factor Affecting Health (The Health Accord for Newfoundland and Labrador, 2021, p. 22) .... 52

# List of Abbreviations

**CMA:** Canadian Medical Association

**DHCS:** Department of Health and Community Services

**FTE:** Full-Time Equivalent

**GP:** General Practitioner

**NL:** Newfoundland and Labrador

**NLMA:** Newfoundland and Labrador Medical Association

***PHIA*:** *Personal Health Information Act*

**PERT:** Premier's Economic Recovery Team

**RHA:** Regional Health Authority

**SDH:** Social Determinants of Health

**The Health Accord:** The Health Accord for Newfoundland and Labrador

**UDHR:** Universal Declaration of Human Rights

**UN:** United Nations

**WHO:** World Health Organization

# Chapter 1: Introduction

## 1.1 Purpose of Research

The purpose of this research is to consider the issue of access to virtual care for primary health care in rural Newfoundland and Labrador (NL). Although virtual care is in use in NL, it does not adequately encompass both specialist and primary health care. I consider whether expanding virtual care to improve the accessibility of primary health care is ethically preferable to the current level of available services in the province.

The central focus of my research is whether the government of NL has an ethical obligation to expand virtual care in rural NL. Ethical tension is introduced due to the government's obligation to improve the financial well-being of the province and obligation to ensure equitable access to appropriate levels of care. I will argue that there is an ethical obligation for the provincial government to expand virtual care in rural NL, referring to the increased accessibility of primary health care for residents of rural NL. I will support this position through arguments concerning the positive right to health care, the promotion of justice through access to health care, the financial benefits for the province as well as the benefits for residents and the health care system in NL. Furthermore, I will demonstrate that potential negative implications of expansion do not outweigh the obligation to expand virtual care in rural NL.

## 1.2 Background on Health Care in Newfoundland and Labrador

Prior to presenting my arguments, which begin in chapter 2, there is relevant background information to consider. Specifically, I will address the distinction between primary and secondary health care services. In addition, I will discuss the current availability of these services in rural NL. I acknowledge that in a sense the entire province can be considered rural due to the unique

geography and dispersed population. However, relative proximity to facilities offering a certain range of services, population size and geography of many small communities in NL can indicate they can be considered part of rural NL. There are varying definitions of 'rural', however the 2019 Rural Lens: Assessing Regional Policy Implications - A Guide for Public Bodies released by the provincial government follows the guidance of the NL Statistics Agency, based on 2016 census data. This report which defines 'rural' as any community not included in the Census Metropolitan Area or the four Census Agglomerations, and those whose populations are less than 5,000[1] (Public Engagement and Planning Division, 2019, pp. 3-6). I will follow the description provided in this report.

Primary health care is the first point of contact with the health care system, coordinating care across the system when specialist care is required. Services include preventative measures, treatment of common disease and illness, as well as specialist referral and coordination (Government of Canada, 2019). These are community-based services necessary for non-urgent health care needs, as well as for promoting good health in the population. Additionally, primary health care provides patients with an opportunity to learn about their health and become engaged in maintaining their own health.

A 2019 study conducted on primary health care for patients with chronic disease determined that primary care facilities in rural NL offered a greater variety of services in comparison to urban facilities (Buote, Asghari, Aubrey-Bassler, Knight, & Lukewich, 2019, p. 11). Potentially, this variety is due to the fact that rural facilities have become a hub for health care services. In comparison, urban areas have a greater concentration of a variety of services across multiple facilities.

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[1] The Census Metropolitan Area refers to St. John's. The four Census Agglomerations are Bay Roberts, Corner Brook, Gander and Grand Falls-Windsor (Public Engagement and Planning Division, 2019, p. 3).

However, the range of services available in rural facilities does not imply sufficient primary health care accessibility for residents. Evidence suggests a shortage of general practitioners (GPs), especially in rural NL. The Health Accord for NL (the Health Accord) supports this in the Health Accord final report. The report acknowledges an overall vacancy rate of 6.5% for GPs in NL, however this is observed to be higher in rural areas (The Health Accord for Newfoundland and Labrador, 2022, pp. 148-149)[2]. As of 2019, 92% of residents believed there were too few physicians in the province (Newfoundland and Labrador Medical Association, 2019).

Health Intelligence Inc. (a Canadian consulting firm) released a report in 2019 commissioned by the Newfoundland and Labrador Medical Association (NLMA), using data from the NLMA. The Health Intelligence assessed needs and supply of GPs by transforming head counts to full-time equivalents (FTEs) counts. The transformation is relevant to adjust for factors such as part-time clinical care, to determine the supply of community care services in the province (Health Intelligence Inc., 2019, p. 4). Adjustment to FTE demonstrates the lack GPs in rural NL compared to the demand. The report acknowledges the national comparison of GP supply which shows NL to have a relatively high supply. However, the national comparison does not account for aspects considered in the FTE transformation. As such, there is a recognized GP deficit in NL with many unattached patients in an aging population (Health Intelligence Inc., 2019, p. 7). From a headcount perspective, there are 629 GPs in NL. However, many family medicine practices involve much more than community-based clinics. The Health Intelligence report considers the proportion of GPs dedicated to patient care, determining that there are actually 431 GPs in NL who are FTEs (Health Intelligence Inc., 2019, pp. 4-7). This report confirms the shortage of GPs in the province.

[2] The Health Accord will be discussed in detail in section 1.4.

A recent release from the NLMA states that 24% of Newfoundlanders do not have a GP. On average this means that as many as 125,000 residents are without a GP. However, this can increase to 37% in rural areas compared to 14% in urban areas such as the Eastern Avalon peninsula (Newfoundland and Labrador Medical Association, 2022). The NLMA suggests that there are not enough physicians recruited to keep up with the demands of the province (Newfoundland and Labrador Medical Association, 2019).

The shortage of GPs, especially in rural areas, is addressed by the recommendations of the 2019 study by Buote and colleagues conducted on primary health care for patients with chronic disease (Bokolo, 2021). In particular, this study suggests there is a great need for primary health care facilities in small communities. In the province approximately 50% of residents live in rural areas, in comparison to the national average of approximately 17%. Additionally, in NL these rural communities are dispersed over a large geographical area (Buote, Asghari, Aubrey-Bassler, Knight, & Lukewich, 2019, p. 11).

According to the NLMA the percentage of residents in the province who do not have a GP has been rising. In 2014 11% of the population were without a GP, this increased to approximately 19% in 2021, and 24% in 2022 (Newfoundland and Labrador Medical Association, 2022). Especially in NL, the demand for accessible primary health care is increasing due to the aging population and the departure of some GPs. An aging population introduces unique health care needs in addition to the accessibility challenges of a rural location. The Health Accord final report recognizes GP turnover ranging from 26%-56% in urban areas and upwards of 113% in rural areas (The Health Accord for Newfoundland and Labrador, 2022, p. 17). At present, approximately 14% of physicians plan to leave the province to work elsewhere in Canada, compared to 3% elsewhere in Canada (The Harris Centre Memorial University, 2019, p. 11). The discrepancy between NL and

other Canadian provinces demonstrates the burnout associated with the shortage of GPs in NL. Furthermore, the Vital Signs Report 2019, by Memorial University's Harris Centre, stated that 36% of NL's physicians are dissatisfied with their work-life balance, compared to 26% elsewhere in Canada (The Harris Centre Memorial University, 2019, p. 11). Burnout and physician dissatisfaction have an impact on primary health care accessibility in NL. An already undersupplied area could be further negatively impacted by physicians leaving NL for a better work-life balance in another province. Additionally, a poor perspective on life in NL as a physician has the potential to negatively impact the recruitment of new medical graduates to practice here. As a result, without reform the accessibility of primary health care in NL can be expected to decrease further.

Due to the significant percentage of residents without a GP many individuals turn to emergency rooms to receive basic care (Gushe, 2021). Seeking primary health care services in an emergency room is problematic. First, on the individual patient level, it is preferable to see one primary care provider who knows the patient, building the physician-patient relationship. Instead, by seeking basic care at an emergency room a patient may interact with multiple providers who are not familiar with their health history, rather than receiving personalized care at a primary health care facility. Furthermore, the additional strain on the system in emergency care is problematic in that it may divert resources from patients who require urgent care.

Comparatively, specialist health care falls under the category of secondary services. A patient typically receives specialist health care through a primary health care referral (Government of Canada, 2019). As a curative measure, specialist health care intends to treat disease or disjunction. Accessibility is necessary to reduce burdens of disease in a population.

Urban areas offer variety in health care services, as suggested previously. In NL this implies that areas such as the St. John's region or Corner Brook, for example, have a greater variety of health

care services available to residents. A review of the services and programs offered by each Regional Health Authority (RHA) demonstrates this implication. Eastern Health, Central Health and Western Health all have extensive, and relatively similar, services list (Eastern Health, n.d.), (Central Health, n.d.), (Western Health, n.d.). In comparison, Labrador-Grenfell Health has a limited list of services (Labrador-Grenfell Health, n.d.). Areas serviced by the Labrador-Grenfell RHA are generally remote, with a lower population than areas serviced by the other RHAs. Rural areas tend to have less access to specialist health care due to their geographical location.

The 2019 study by Buote and colleagues conducted on primary health care for patients with chronic disease also found that telehealth is being used for specialist health care in rural NL (Buote, Asghari, Aubrey-Bassler, Knight, & Lukewich, 2019, p. 12). Due to the geographical isolation of some rural communities in NL, this is expected. Virtual care is used effectively to improve the accessibility of specialist health care for residents in rural NL by mitigating the effects of geographical barriers to health care.

## 1.3 Virtual Care

I will use the term "virtual care" to describe various types of health care in which the interaction between patient and provider, who are geographically distant from one another, is mediated by technology. These services could include videoconferencing, for instance, as well as phone calls and remote patient monitoring. The Mayo Clinic describes virtual care as the use of digital communication technology to provide access to health care. The goal of virtual care is to make health care more accessible and readily available to individuals in rural areas or those affected by other barriers such as limited transportation (Mayo Clinic Staff, 2020).

The Mayo Clinic's description of virtual care includes several examples of beneficial patient services which can be considered virtual care. Especially relevant to the question of the provincial

government's obligation to expand virtual care, are virtual appointments and patient portals. Generally, virtual appointments first come to mind when considering virtual care. Virtual appointments allow patients to have an appointment with their physician via online videoconferencing or phone calls when an in-person visit isn't required or possible. Patient portals provide an online, secure method to communicate with health care providers regarding personal health information (Mayo Clinic Staff, 2020). These aspects of virtual care serve to increase the accessibility of health care.

The province of NL has employed Telehealth for more than thirty years in rural NL for specialist health care. As of 2017 there were 107 facility-based virtual care locations across the province (Labrador-Grenfell Health, 2017). Facility-based virtual care locations offer patients a space to attend an appointment virtually, rather than requiring them to attend from their own homes. Patients book their virtual care appointments and can travel to a facility in their area for the appointment. The RHAs include a section on their respective websites for virtual care information. Although they are not extensive pages, they provide accessibility information which is valuable for residents seeking such services (Eastern Health, 2018), (Central Health, 2018), (Western Health, 2016). The value of these services is recognized, especially within the Labrador-Grenfell RHA. Virtual care, specifically Telehealth, is demonstrated to increase the accessibility of specialist health care in areas where they are otherwise unavailable (Labrador-Grenfell Health, 2017).

The NL Centre for Health Information provides virtual care information online for patients and health care providers, including a list of Telehealth providers in the province (Newfoundland and Labrador Centre for Health Information). This list demonstrates the wide variety of speciality services available virtually throughout the province. Generally, specialist health care offered virtually includes services such as mental health services, genetics, paediatrics and speech-

language pathology. However, specific services offered through each RHA differ slightly due to availability of those specialists in each area; for instance, oncology is offered only by physicians in Eastern Health. (Newfoundland and Labrador Centre for Health Information).

The COVID-19 pandemic has prompted a shift to a virtual format for many aspects of life. Virtual care has allowed physicians to safely conduct patient appointments. Based on available provincial data, the Canadian Institute for Health Information determined that between February 2020 and September 2020 there were significant increases in virtual care use as a result of the COVID-19 pandemic. Physicians who had provided at least one virtual care service increased from 48% to 83%, while the percentage of patients who received at least one virtual care service increased from 6% to 56%. However, it is noted that the proportion varied among provinces with available data (Canadian Institute for Health Information, 2021). The benefit of virutal care in the context of the COVID-19 pandemic has been experienced globally. For instance, the United States has experienced a significant, and sustained, increase in virtual care usage since April 2020 (Bestsennyy, Gilbert, Harris, & Rost, 2021).

Although virtual care has been used for over thirty years in NL, it has previously been used almost exclusively for specialist health care. The result has been a missed opportunity to improve access to primary health care in rural NL. However, in the context of the COVID-19 pandemic, this has changed similarly to other Canadian provinces. Virtual physician appointments have been utilized to allow residents to practice social distancing, or to maintain health care accessibility for anyone who is self-isolating (Newfoundland and Labrador Centre for Health Information, 2020). Additionally, for years the province has had a free telephone line available to residents to call and speak to a Registered Nurse or Dietitian with health concerns. As of June 2020, the services available through 811 were expanded to provide virtual appointments with nurse practitioners,

improving access to primary health care (Health and Community Services, 2020). Utilizing, and expanding virtual care in NL has contributed to the accessibility of primary health care for residents while maintaining safety during the COVID-19 pandemic.

The observed increase in virtual care usage can be attributed primarily to the increased willingness by patients and providers as a result of the COVID-19 pandemic. In March 2020, the provincial government of NL released a statement regarding the increased accessibility of virtual care due to physician reimbursement for virtual care services. Specifically, they communicated that there would be no cost to patients for virtual appointments that are insured by the NL Medical Care Plan (MCP) (Health and Community Services, 2020).

During the COVID-19 pandemic in NL, phone calls have typically been used for virtual primary health care. Patients were required to call their GP, request an appointment and wait for a return call. My argument in favour of an ethical obligation to expand virtual care in rural NL does not intend for virtual primary health care to continue exclusively in this manner. Although phone calls are adequate for simple appointments, video conferencing software offers higher quality communication for more involved appointments (The Health Accord for Newfoundland and Labrador, 2022, p. 145). Phone calls have served the purpose necessary during the COVID-19 pandemic, however video conferencing may be a preferable method due to the capability of face-to-face conversation. Technology employed for specialist health care, such as Telehealth, has the potential to be employed for primary health care as well. Knowledge from years of experience in specialist care could be utilized to ease the technological transition in primary care.

During the COVID-19 pandemic, GPs have had the capability to conduct many appointments virtually. An expansion of virtual care could continue this practice. However, my argument in favour of an ethical obligation to expand virtual care in rural NL does not intend for virtual primary

care to entirely replace in-person appointments. Similar to the benefit of videoconferencing over phone calls, in-person appointments are preferable in some situations. Although routine visits such as prescription refills or some referrals could easily translate to virtual care, some visits may require a physical examination. The Canadian Medical Association (CMA) provides a list of appointment types which are, and are not, safe to be held virtually. For instance, skin issues and sore throats are safe for virtual appointments, while digestive issues and coughs are not (Canadian Medical Association, 2021). Accordingly, expansion of virtual care offers an opportunity to complement existing services.

A review of virtual care implementation and use in other provincial health systems in Canada suggests that all provinces offer virtual care with the exception of the Northwest Territories and the Yukon. The free telephone line available to NL residents is not unique to the province as other Canadian provinces have similar 811 services available (Benefits by Design, 2021). The availability of virtual care in other Canadian provinces is a factor that favours the position that there is an obligation of the provincial government of NL to expand virtual care in rural NL due to the expectation of consistency between provinces articulated in the *Canada Health Act* (Government of Canada, 2017). This position will be discussed in detail in chapter 2.

## 1.4 Relevant Current Political Events

Due to the ever-changing nature of both health care and politics, political events are relevant for health care resource allocation decisions. Particularly, the NL Premier's Economic Recovery Team (PERT) has recommended reduced expenditures in the health care system[3]. Other developments

[3] I will mention this development in relation to my discussion of my plans for chapter 3 of this thesis in 1.5.2.

include the release of the Health Accord final report, as well as provincial and federal attitudes toward employment of virtual care.

The Health Accord task force was created in November 2020 by the provincial government (The Health Accord for Newfoundland and Labrador, 2021, p. 9). The purpose of the task force was to address the health inequality that exists between NL and other provinces in Canada. The intent was for this task force to reimagine the health care system in NL to better meet the needs of residents (The Health Accord for Newfoundland and Labrador, 2021, p. 9).

The task force was created in response to evidence which presented a compelling case for change in the health care system of NL. Particularly, it is noted in the Health Accord interim report of April 2021 that provincial spending in health care for NL is the highest in the country, while health outcomes are among the worst (The Health Accord for Newfoundland and Labrador, 2021, pp. 13-15). Furthermore, the interim report recognizes the importance of updating the health care system to ensure it is applicable to the needs of the current demographic of the population. The system in NL was created 50 years ago when there were significantly more children residing in the province. An aging population indicates a change in the needs of residents, while the health care system has remained the same (The Health Accord for Newfoundland and Labrador, 2021, p. 5). Updating the health care system implies modernizing the technology used in the delivery of services.

The April 2021 Health Accord interim report identified several strategic areas for improvement. Two such areas are of relevance while considering the government's ethical obligation to expand virtual care: community care and digital technology (The Health Accord for Newfoundland and Labrador, 2021, p. 16). Primary health care is analogous to community care in that it is a community-based practice in which health care providers work with patients to improve their health. The goal is for all residents to have timely access to continuous, community centered care.

With this in mind, digital technology could be used to create an inclusive, integrated system of care, empowering people with access to health care services (The Health Accord for Newfoundland and Labrador, 2021, pp. 35-36). Furthermore, the Health Accord interim report acknowledges the potential of virtual care to contribute positively to the health care system in NL. Due to the high rural versus urban population distribution and extended geography, the commissioners of the Health Accord task force envision that virtual care could have a strong potential to benefit residents of the province (The Health Accord for Newfoundland and Labrador, 2021, p. 31).

The Health Accord final report was published on February 7, 2022. This report provides details in the form of long-term actions to address the strategic areas for improvement provided in the Health Accord interim report of April 2021. The final report states that achieving a self-reflective, rebalanced system, is one of the Health Accord task force's guiding principles. This principle promotes an objective to mitigate inequities and barriers to health care (The Health Accord for Newfoundland and Labrador, 2022, p. 40). This guiding principle suggests that there is a responsibility for the provincial government to address health care inaccessibility throughout NL. The obligations of the provincial government will be discussed in detail in chapter 2. Presently it is relevant to acknowledge the implied support for this obligation through the Health Accord task force's guiding principles.

Accordingly, applicable Actions and acknowledgements from the Health Accord final report will be discussed throughout my argument. For now, it is relevant to acknowledge the work arising out of the Health Accord, with respect to reimagining the health care system in NL. In particular, Action 10.2 of the Health Accord final report is relevant when considering the obligation to expand virtual care in rural NL. The goal of this Action is to adopt and leverage virtual care technologies (The Health Accord for Newfoundland and Labrador, 2022, pp. 143-146). Due to the importance

of virtual care that was acknowledged in the interim report, this Action is not unexpected. The objectives of this Action stated in the final report assist the employment of virtual care as a complementary service within the health care system throughout the province.

Due to the long-term nature of the Actions, the Health Accord final report also promotes necessary short-term measures while the task force continues to plan for the long-term updates to the provincial health care system. For instance, areas without good access to primary health care are recognized as high priority areas that require immediate action through implementation of community care teams (The Health Accord for Newfoundland and Labrador, 2022, p. 137). Such prioritization has the capability to address the impact of the doctor shortage discussed in 1.2.

While the work of the Health Accord task force was ongoing, the provincial government made initial plans to address the doctor shortage and primary care accessibility issue through interim measures announced in October 2021. Creating several new community care teams, as well as expanding existing clinics in the St. John's area, acknowledges the importance of collaborative care (Government of Newfoundland and Labrador, 2021). As a result, the provincial government is demonstrating commitment to following the guidance of the Health Accord, as discussed above. Additionally, the provincial government has committed to increase virtual care services. However, the provincial government plans to enact this expansion in concert with existing emergency services to assist with the provision of urgent care (Government of Newfoundland and Labrador, 2021, pp. 1-2). Although the use of virtual care in concert with urgent care is a step in the right direction, virtual care remains underused for primary health care.

The increased use of virtual care in NL due to the COVID-19 pandemic aligns with previously formulated provincial goals prior to the pandemic, to improve the accessibility of primary health care. The provincial Department of Health and Community Services (DHCS) released a framework

in 2018 which acknowledged the importance of virtual care for primary health care accessibility. The framework outlines a plan for primary health care reform in NL. Goal 3.3 of the framework focuses on fully utilizing technologies that are available to reduce barriers to primary health care, particularly in rural areas (Department of Health and Community Services, 2018, p. 32). Acknowledging the potential of virtual care technology demonstrates the desire of the provincial government to utilize virtual care to improve primary health care accessibility. The issue at hand is the uncertainty regarding access to virtual care for primary health care after the pandemic.

Due to the pandemic, the federal government has worked in collaboration with provincial and territorial governments to put digital supports in place for Canadians. Together these governments have begun considering a national action plan to maintain the momentum regarding digital supports in health care and other areas resulting from the COVID-19 pandemic (Government of Canada, 2021). There is obvious value in equitable access to health care services achieved by the increased accessibility resulting from virtual care. Furthermore, these supports build on commitments made in 2003 as part of The Accord on Health Care Renewal to work towards targeted reforms in supporting information technology, such as Telehealth (Government of Canada, 2019).

## 1.5 Chapter Summaries

Each of the following chapters of this thesis will address a different aspect relevant to the central question of whether there is an ethical obligation for the government of NL to expand virtual care in rural NL.

### 1.5.1 The Right to Health Care and the Principle of Justice

I have two arguments supporting the ethical obligation of the provincial government to expand access to primary health care through virtual care: first, an argument about the right to health care,

and second an argument about the bioethical principle of justice. Chapter 2 will present both supporting arguments in favour of the increased accessibility of primary health care as a result of expansion of virtual care in rural NL.

The first argument derives this obligation from legal standards, specifically the United Nations (UN) Universal Declaration of Human Rights (UDHR) and the expectations of the *Canada Health Act*. Based on Article 25 of the UN UDHR, all people have a fundamental right to health care (though this right does not extend to health itself). The *Canada Health Act* maintains that Canadian citizens are owed health care services, which supports the fundamental right to maintain the health of Canadians. These legal obligations are grounded in ethical obligation, specifically referring to the fundamental right to health care from which they are derived. This is primarily supported by the language utilized in both the *Canada Health Act* and the UN UDHR. Additionally, the *Canada Health Act* is an important statement of values shared widely by Canadians. These values maintain an obligation for provincial governments to provide equal access to health care. Barriers impeding access, such as geographical barriers experienced by residents of rural NL, are contrary to the provincial government's obligation to ensure accessible primary health care.

The second argument is based on the bioethical principle of justice. Primarily, this consideration of justice is relevant due to the barriers to fair opportunity in accessing health care experienced by residents of rural NL. Due to concentration of health care services in urban areas, residents of rural NL have the potential to be disadvantaged due to their geographical location. Several theories of justice will be considered to demonstrate that geographical barriers to accessible primary health care are unjust. The provincial government can mitigate geographical barriers by increasing primary health care accessibility in rural NL through the expansion of virtual care, thereby promoting justice.

### 1.5.2 Financial Considerations

The health care system in NL is currently under financial constraint. The 2020 provincial budget projected over $3 billion spent on health care, representing 37.7 per cent of total expenditures. Additionally, actual health care expenditures demonstrated an unsustainable increase since 2005 (The Premier's Economic Recovery Team, 2021, pp. 170-171). Current provincial financial constraint has resulted in the appointment of the PERT, as mentioned in 1.4. The Big Reset, released in May 2021, outlined the PERT's recommended areas of cost savings. Recommendations with respect to health care spending contribute to the present tension between the government's obligation to improve the financial well-being of the province and obligation to ensure equitable access to health care. An argument could be made that the obligation to reduce spending outweighs the potential obligation to expand virtual care in rural NL.

A financially constrained system could limit RHAs' capabilities to administer health care, potentially resulting in additional barriers impeding access to primary health care. Upfront costs of expansion could be considered contrary to economic obligations while further limiting the RHA's capabilities. However, against this objection I maintain that accessibility is a significant concern in situations of financial constraint. Drawing on considerations of justice, I maintain that economic obligations do not outweigh the responsibility to provide access to health care.

As I will argue in chapter 2, allowing health outcomes to remain below national averages to save on initial costs of implementation is not defensible. Furthermore, an economic argument could be made in favour of expanding virtual care due to potential long-term financial stability. An expansion of virtual primary care could likely include methods of future cost-savings. Virtual care has the potential to allow the provincial government to meet its obligation to reduce spending, while providing quality health care to improve provincial health outcomes.

### 1.5.3 Addressing Negative Implications of Expansion

There are potential negative implications of an expansion of virtual primary care that may constitute objections to my argument that the provincial government has an ethical obligation to expand virtual care in rural NL. Addressing these potential negative implications is necessary. In chapter 4 I will describe several potential negative implications, following each with a rebuttal.

Logistically, new technology cannot be introduced everywhere at once, which introduces the issue of disproportionate implementation. Prioritization could lead to unequal access in areas experiencing need but not given priority. Unequal access might seem to prevent the government from fulfilling the obligation to reduce health inequities in the province. However, I support disproportionate implementation as a defensible process due to the prioritization of locations experiencing the greatest need or the most primary health care accessibility. This is particularly relevant when considering that the many rural communities experiencing the greatest need are Indigenous communities. The Truth and Reconciliation Commission's Call to Action 19 calls on the Federal government to establish methods to measure and close gaps in health between Indigenous and non-Indigenous communities (Government of Canada, 2019). Gaps in health can likely be attributed to inaccessibility of primary health care services in these communities due to their geographical location. As a result, there is increased responsibility for various levels of government to increase accessibility for these communities. Expansion supports the provincial government in meeting these obligations.

Another argument considers the potential negative implications for quality of care received. The issue is the risk that individuals who receive virtual primary health care could receive substandard care. This risk is problematic because it is not defensible for quality of care to depend on geographical location. I will argue that if virtual care were substandard, it wouldn't be defensible

to employ anywhere. However, the years during which virtual care has been employed in NL, as well as global use as a result of the COVID-19 pandemic, suggests that the quality of virtual care is comparable to traditional care delivery methods. I will argue this point in chapter 4.

Finally, an argument concerning potential negative implications for data security and protection will be considered. An expansion of virtual care would result in an increased reliance on digital technology. The concern is that this could lead to an increase in security vulnerability, subsequently placing residents of the province at risk of a cyber breach that could compromise their personal and health information. The provincial government has obligations as a custodian under the *Personal Health Information Act* (*PHIA*). An argument could be made that this risk outweighs the obligation to expand virtual care in rural NL. However, I will provide support to demonstrate that security risks do not outweigh the benefit of expanding virtual care in rural NL as a way of improving primary health care accessibility.

### 1.5.4 Positive Implications of Expansion

The purpose of chapter 5 will be to explore potential positive implications of expanding virtual care in rural NL. I recognize these implications to fall under two main categories: benefits to residents of rural communities and benefits to the health care system.

Expanded virtual care will likely bring benefits to residents of rural communities with respect to health education for patients, as well as opportunities for empowerment and embracing one's own health. Not only will residents have increased access to primary health care services, but they can have access to information which increases their knowledge and understanding of their own health. Accordingly, health education improves patient health literacy. As a result, expansion promotes patient-centered, team-based community care.

Additionally, expanded virtual primary care could likely bring benefits to the health care system in NL. In addition to health education for residents, virtual care offers the opportunity to further develop education for health professionals, which could result in an increase in knowledge and in the development of skills for health care providers, not just at the student level but also for those currently practicing. Furthermore, I will argue that an expansion of virtual primary care could help address the doctor shortage, as well as help with the recruitment and retention of new graduates. Furthermore, expanding virtual care would promote the modernization of health care technology which has long term benefits for the health care system in NL.

Moreover, an expansion of virtual primary care could be beneficial for the provincial government. I will argue that such an expansion would help the provincial government in meeting their own goals with respect to the DHCS 2018 framework and the Health Accord final report.

### 1.5.5 Conclusion

The final chapter will summarize key points of my argument. I will return to the central question of whether the government of NL has an ethical obligation to expand virtual care in rural NL. I argue that positive implications outweigh negative implications of expansion. These arguments show that there is good ethical support for my claim that there is an obligation to expand virtual care in rural NL.

# Chapter 2: The Right to Health Care and the Principle of Justice

I have two arguments supporting the ethical obligation of the provincial government to expand access to primary health care through virtual care: an argument that draws upon the idea that there is a right to health care, and an argument that invokes the bioethical principle of justice. The following sections will consider each supporting argument in turn, with respect to the increased accessibility of primary health care in rural NL as a result of expanding virtual care. Following this I will discuss the impact of barriers to primary health care accessibility in NL, specifically considering inequities in accessibility

## 2.1 The Right to Health Care

### 2.1.1 How to Understand Rights in General

The first argument derives the obligation to expand virtual care in rural NL from legal standards. Rights theory describes a "right" as a source of protection of life, freedom, expression and property (Beauchamp & Childress, 2019, p. 400). Rights provide an individual with a justified claim that they can legitimately assert against other individuals or groups who enable access to the goods protected by rights, or who threaten them. Rights determine what others are morally required to do or not do (Beauchamp & Childress, 2019, p. 401). There is a violation of a right when an unjustified action is undertaken against an interest which is protected by a right (Beauchamp & Childress, 2019, p. 403).

There is a distinction between positive and negative rights. Positive rights imply that individuals are owed some services and compel others to assist. Contrastingly, negative rights protect individuals against interference or coercion. There is no significant difference in moral importance between these two because they both exemplify basic rights (Beauchamp & Childress, 2019, p.

404). An example of a positive right is the right to health care or right to public health services. An example of a negative right is the right to religious freedom or the right to refuse medical treatment.

### 2.1.2 Legal Accounts of the Right to Health Care in Canada

The Universal Declaration of Human Rights (UDHR) is a document proclaimed by the UN in 1948. The UN UDHR sets out fundamental human rights and common standards of treatment for all people. Recognition of the dignity and equal rights of all people is considered the foundation of justice, providing everyone with a common standard for achieving justice (United Nations, 2021). The 30 fundamental human rights, or articles, are observed and protected internationally.

Article 25 covers a range of rights as well as social protections. Under this article, everyone has the right to medical care to achieve a standard of living adequate for their health and well-being (United Nations, 2021). Article 25 recognizes that health care, food, clothing, housing, and social services are essential components of a standard of living adequate for health and well-being. Essentially, this means that people have a positive right to health care services since such services are necessary for assisting people to achieve a standard of living adequate for health and well-being.

In Canada, the federal government's roles in health care include setting and administering national principles for the system under the *Canada Health Act*, financial support to the provinces and territories, and several other functions. Provincial and territorial governments are responsible for the administration and delivery of health care services. Publicly funded insurance plans are expected to meet national principles set out under the *Canada Health Act*, covering medically necessary hospital and physician services. The system is financed through taxation, both federally

and provincially (Government of Canada, 2019). The publicly funded system shows that Canadians value access to quality health care without barriers.

The values of equity and universal access are at the foundation of Canada's health care system, demonstrated by the three pillars of the *Canada Health Act*: comprehensiveness, universality and accessibility (Government of Canada, 2017). The *Canada Health Act* recognizes the responsibility of governments to facilitate reasonable access to health care for citizens.

Under the *Canada Health Act*, provinces and territories must satisfy the criteria of universality, accessibility, comprehensiveness, public administration, and portability in order to receive full federal funding. The pillar of accessibility in particular ensures reasonable access for all residents (Government of Canada, 2017). The obligation to expand virtual care being discussed here is an issue of the accessibility of medically necessary primary health care services.

As stated in 1.2, in NL 125,000 residents do not have a GP. This number comes from an May 2022 poll of residents regarding their access to a GP (Newfoundland and Labrador Medical Association, 2022). Due to the provincial doctor shortage many residents experience primary health care inaccessibility. Additionally, a high percentage of GPs plan to leave the province in comparison to the rest of Canada (The Harris Centre Memorial University, 2019). These departures would result in an increase in the inaccessibility of primary health care in NL. Inconsistency in accessibility of primary health care would be contrary to the criteria of the *Canada Health Act*.

Such an inaccessibility of access to primary care is contrary to a positive right to health care which is articulated in the *Canada Health Act*. As discussed, the positive right to health care held by Canadians implies a right to reasonable access to health care services which provide fair opportunity to achieve a standard of living adequate for their health and well-being. The poor

accessibility to primary health care implies that many NL residents do not have fair opportunity to achieve a standard of living adequate for their health and well-being.[4]

### 2.1.3 The Legal Statements Support an Ethical Obligations

Under the *Canada Health Act*, Canadian governments have a legal obligation to provide medically necessary health services. As health care is a provincial responsibility, provincial governments could make the policy decision to refuse coverage for medically necessary services, thereby risking incurring federal fines. Such policy decisions would violate the obligations of the *Canada Health Act,* nonetheless. So, providing medically necessary health care is a legal obligation of the provinces. This legal obligation is grounded in an ethical obligation, considering the fundamental right to health care from which it is derived. This position is supported by two considerations. First, the language utilized in the *Canada Health Act* and the UN UDHR which state the legal right to health care suggests ethical obligations in addition to legal. Second, the *Canada Health Act* in particular is a piece of legislation that transcends the law to make a statement about the ethical obligations of governments to their citizens.

The first consideration is that the language used in the *Canada Health Act* and the UN UDHR suggests ethical obligations in addition to legal. The preamble of the *Canada Health Act* focuses on improving the well-being of Canadians. The Parliament of Canada recognizes that Canadians have made significant progress in reducing the impact of poor health among all income groups through the system of insured health services. Further improvements to Canadians' well-being are

[4] Although the NLMA's May 2022 poll suggests an average of 24% of residents do not have access to a GP, it is notable that this is not consistent with the most recent Statistics Canada data. According to Statistics Canada, only 12.5% of NL residents do not have access to a GP (Statistics Canada, 2020). Regardless of the true percentage of those lacking access, everyone in Canada should have access to a GP. According to my argument, if virtual care can be expanded so that fewer NL residents lack access to a GP, then there is an ethical obligation for the provincial government to provide it.

achievable through collective action against social, environmental and occupational causes of disease. Furthermore, future improvements in Canadian's health will require cooperation between governments and other groups (Government of Canada, 2017). The language of the *Canada Health Act* preamble presupposes that improving the well-being of Canadians is one of the roles of governments. From an ethical perspective, having a "good" government implies a responsibility to improve the well-being of citizens. The language of the *Canada Health Act* suggests an ethical obligation to perform as a "good" government which is foundational, even apart from the legal requirements.

Additionally, the preamble of the UN UDHR recognizes the importance of universal rights, as well as the inherent dignity and worth of all humans. All groups, institutions and individuals are responsible for promoting respect for the rights and freedoms of the UDHR. Measures are expected at all levels of society to secure universal and effective recognition and observance of these rights. This expectation is held for both members of state and among people under their jurisdiction (United Nations, 2021). The legal obligations stated in the UN UDHR are derived from more fundamental ethical rights. The ethical foundation of the UN UDHR is that humans are entitled to services that protect their inherent dignity and worth. The language of this preamble suggests that governments have an ethical obligation, in addition to legal, to promote respect of the rights and freedoms of the UN UDHR.

The second consideration is that the *Canada Health Act* is a piece of legislation that transcends the law to make a statement about ethical rights. The *Canada Health Act* plays a role similar to the *Canadian Charter of Rights and Freedoms* due to its centrality to life in the country (Kaposy, et al., 2016, p. 258). The *Canada Health Act* articulates foundational values of equity and universal access to health care which contribute to the collective identity of Canadians in a way that is not

shared by other pieces of legislation. The *Canada Health Act* is as much about shared values as it is about the law. The values of the *Canada Health Act* support the view that there is an ethical obligation (not just a legal obligation) of the provincial government to ensure comprehensiveness, universality, and accessibility.

Since the *Canada Health Act* makes a statement about the ethical obligations of governments, failure to meet the five program criteria outlined in the *Canada Health Act* is ethically problematic in that such a failure would mean that the provincial government has failed to meet its ethical obligations to residents. Furthermore, an inaccessibility of necessary health care implies that residents do not have fair opportunity to achieve a standard of living adequate for their health and well-being. Their right to health care is violated by barriers reducing the accessibility of primary health care.

The values of the *Canada Health Act*¸ as well as the language of the *Canada Health Act* and UN UDHR, demonstrates an ethical argument in favour of increasing primary health care accessibility. Barriers impacting accessibility are contrary to the government's ethical obligation described by the *Canada Health Act* and violate the positive right to health care.

### 2.1.4 The Obligation to Expand Virtual Care2.2 The Principle of Justice

Expanding virtual care to include primary health care in rural NL can assist in fulfilling the provincial government's ethical obligations by mitigating barriers to accessible health care. Virtual care employed for *specialist* services in rural NL has increased the accessibility of such services, as demonstrated by Labrador-Grenfell Health, discussed in 1.3 (Labrador-Grenfell Health, 2017). Expansion of virtual care would likely have a similar impact on primary health care accessibility

in rural NL, thereby assisting the provincial government in fulfilling their obligation to ensure health care accessibility.

A 2013 study was conducted on the impact of virtual care on self-efficacy, health behaviors, and health status for chronically ill adults (Jaglal, et al., 2013). The results of this study demonstrated a positive impact on the accessibility of services for individuals living in rural communities. Furthermore, statistically significant improvements were observed after four months for various measures, including well-being, symptom management and self-rated health (Jaglal, et al., 2013). This study shows the effectiveness of virtual care with respect to health care accessibility. A similar strategy directed at virtual primary health care could lead to a reduction in the percentage of individuals without access to a GP, thereby increasing primary health care accessibility.

There are limitations of positive rights which are relevant to consider. The provincial government cannot be reasonably expected to do everything to provide people with health care. Their responsibility to citizens is limited by what is medically possible and meets the standard of care, the demands or complexity of the available services, as well as the financial feasibility. For instance, if a service does not exist yet it evidently cannot be provided; or if a service is extremely difficult, risky, and expensive it is not reasonable to place the responsibility on the provincial government to ensure that service is accessible.

However, these limitations explicitly correlate to the obligation to expand virtual care in rural NL to assist in increasing the accessibility of primary health care. Through acknowledgment of these limitations, it follows that the provincial government does have a responsibility to provide services which are technically possible, not overly demanding, and are financially feasible for the province. Such a responsibility supports the positive right of Canadians to health care, which provides an opportunity to achieve a standard of living adequate for health and well-being. Additionally,

fulfilling this responsibility would promote the province's ability to meet the five criteria of the *Canada Health Act* by providing reasonable access to medically necessary services which are publicly funded.

Virtual care is technically possible, with a wide variety of online tools and software available. The practice of offering primary health care through virtual care is not overly demanding since it is not significantly different than traditional practices. Primarily the only difference is the additional training for patients and providers required to familiarize themselves with the technology being used. However, this is not unrealistic as such training can be incorporated into continuing education developed for primary health care providers and patients. Considering the financial feasibility, it is necessary to examine financial constraints the province is currently experiencing. This consideration will be the focus of chapter 3.

## 2.2 The Principle of Justice

Some positive rights, such as the positive right to health care, can be grounded in the bioethical principle of justice (Beauchamp & Childress, 2019, p. 404). Accordingly, my second argument draws upon this bioethical principle. Justice obligates fair, equitable and appropriate treatment of others according to what they are owed (Beauchamp & Childress, 2019, pp. 267-268). I maintain that justice requires access to primary health care. Accordingly, barriers to accessible primary health care are unjust and must be mitigated. First, I will consider the obligation to ensure access to primary health care under an egalitarian theory of justice in 2.2.1. I will show that there are similar obligations under other theories of justice in 2.2.2.

### 2.2.1 The Obligation to Ensure Health Care Accessibility Under an Egalitarian Theory of Justice

An egalitarian theory of justice advances the idea that justice requires treating all people equally. For instance, John Rawls's egalitarian theory of justice emphasizes equal access to social primary goods which every rational person values. Income, rights, and opportunity are considered to be social primary goods (Rawls, 1999, pp. 52-58). An egalitarian theory of justice must have an account of what goods must be shared equally. Under an egalitarian theory of justice, social primary goods are used to define by what respects justice requires equal treatment. If "equality" in the context of justice means anything, it must mean that we are equal with respect to important aspects of our lives that contribute to our well-being. An equality of access to trivial goods would not be justice. Income, rights, and opportunity are among the social primary goods because they contribute to our well-being. These ideas about egalitarianism are reflected in the UN UDHR, for instance. Equal access to income, rights, and opportunity aligns with the UN UDHR based on the language of the preamble. Ensuring equal access to social primary goods establishes a standard level of achievement and rights for all people. This standard level enables individuals to pursue their individual higher social interests without undeserved, and unequal, disadvantages which restrict their ability to access equal opportunities.

Norman Daniels articulates an interpretation of Rawls's egalitarian theory of justice and demonstrates the relevance of a "fair equality of opportunity" principle to health care systems. Particularly, the distribution of health care services should promote an individual's ability to achieve their fair share of opportunities in society (Daniels, 2008). Health care accessibility is necessary to provide individuals with fair access to equal opportunities. This is because health care is required to ensure adequate functioning, improving the undeserved disadvantages of health

inequities which restrict individuals' ability to access equal opportunities. Furthermore, Daniels suggests that health care systems should promote preventative measures in particular (Daniels, 2008). The emphasis on preventative care can be attributed to the capability of these measures in improving health outcomes. Preventative measures reduce inequities and promote fair access to equal opportunities. As discussed in 1.2, a major role of primary health care is preventative care. Daniels' interpretation of an egalitarian theory of justice suggests a requirement for health care systems to emphasize equal access to primary health care in order to promote fair equality of opportunity.

Accordingly, an egalitarian theory of justice is a relevant perspective to use to consider the obligation to expand virtual care in rural NL. In addition to Daniels's focus on the importance of preventative measures, the general emphasis on treating all people equally is applicable to accessible primary health care. As described above in 2.1, accessible primary health care promotes the positive right to health care by ensuring all people are treated equally with respect to their ability to achieve a standard of living adequate for their health and well-being. Equal access to primary health care establishes a standard level of achievement adequate for health and well-being. Subsequently this enables all people to pursue their higher interests without the undue disadvantage of health inequities impeding their ability to access equal opportunities. As a result, an egalitarian theory of justice supports equal access to primary health care. Access to primary health care is a social primary good under an egalitarian theory of justice.

##### *2.2.1.1 Applying an Egalitarian Theory of Justice to NL*

Primary health care inaccessibility can be attributed to barriers restricting access for residents in some areas. These barriers establish an unfair distribution of burdens and benefits with respect to primary health care accessibility, creating inequality with respect to access to primary health care.

Specifically, I am referring to geographical barriers which reduce the accessibility of primary health care for residents in rural NL. I will acknowledge that diminished access to some goods and services is often implicitly involved with living in a rural area. As implied in 2.2.1 equal access to trivial goods, or social secondary goods, is not a requirement of an egalitarian theory of justice since they do not contribute to our well-being. Unlike other goods and services, accessible primary health care is a social primary good whose unequal distribution can become a justice issue. From the perspective of an egalitarian theory of justice, geographical barriers negatively impact individuals seeking a social primary good which can contribute to adequate functioning to improve the undeserved disadvantages of health inequities which restrict their ability to access equal opportunities.

Residents of NL face barriers to accessing primary health care due to lack of GPs. Health care services are typically concentrated in urban areas, leaving rural areas underserved (Daniels, Justice and Access to Health Care, 2017). NL exemplifies this notion with residents of rural NL facing additional barriers to accessing a GP. As stated in 1.2, nearly 25% of residents in rural areas are without a GP in comparison to 14% on the Avalon Peninsula (Newfoundland and Labrador Medical Association, 2022). These statistics demonstrate the geographical barriers to primary health care that residents of rural NL experience in comparison to residents of urban NL.

Due to geographical barriers, residents of rural NL must often travel to where health care is more accessible. Residents of rural communities in Labrador may be required to travel up to twelve hours if the services needed are in St. John’s (Labrador-Grenfell Health, 2017). Furthermore, the Health Accord asserts that low coordination throughout the health care system has led to gaps which create challenges for people attempting to access health care. Discussion of Action 9.2, focused on improving coordination in the system, acknowledges that patients may have to travel long distances

repeatedly for multiple appointments due to lack of coordination (The Health Accord for Newfoundland and Labrador, 2022, pp. 104-105).

Requiring travel to access primary health care in general is problematic in that it results in unequal accessibility between rural and urban NL. Residents of rural NL are disadvantaged due to the lack of primary health care, particularly GPs, in their immediate areas. The necessity to travel to access health care is especially problematic in the context of NL due to the dispersed nature of rural communities and weather patterns. Furthermore, harsh winters and high winds introduce additional challenges for travel. Depending on the means of transportation required, for instance, air travel, individuals may be delayed in receiving care. For those who have the capability to drive to other areas to receive care there is an added risk to their safety especially during winter months.

That an individual's geographical location within the province determines their ability to access primary health care is an unfair distribution of benefits and burdens in society. This distribution is problematic because some areas have greater access to benefits than others, implying that areas with limited access to primary health care experience a higher proportion of the burden of health care inaccessibility in the province. Under an egalitarian theory of justice, these geographical barriers violate the obligation for equal access to primary health care. Geographical barriers have created an unfair distribution of the benefit of primary health care services while some individuals experience the increased burden associated with necessary travel. Accordingly, geographical barriers are unjust due to the disadvantage in seeking primary care which they create, impeding fair equality of opportunity for those impacted. An egalitarian theory of justice obligates mitigating geographical barriers experienced in rural NL, promoting equal access to primary health care throughout the province. As I have argued, expanding virtual care could reduce or eliminate these inequalities.

### 2.2.2 The Obligation to Ensure Health Care Accessibility Under Other Theories of Justice

As I have outlined in 2.2.1, an egalitarian theory of justice would favour fair access to primary care in NL. However, other prominent theories of justice also support an ethical obligation of governments to provide good access to primary health care. I will now address these other theories of justice.

Utilitarianism is a consequentialist theory which obligates maximizing the benefit experienced for the maximum number of people (Beauchamp & Childress, 2019, p. 388). A utilitarian theory of justice is grounded in the theory of utility which requires maximizing value over disvalue (Beauchamp & Childress, 2019, p. 272). Generally, a utilitarian theory of justice requires maximizing well-being for groups of people. As discussed in 2.1.2, the UN UDHR considers accessible health care necessary for ensuring a standard of living adequate for well-being. Social utility can support an obligation to provide all citizens with a decent level of health care (Beauchamp & Childress, 2019, p. 273). As a result, the obligation of utilitarian theory of justice aligns with accessible primary health care. Geographical barriers, as discussed in 2.2.1.1, diminish the maximization of value. Rather than promoting accessible primary health care, such barriers impede accessibility. Barriers to accessibility negatively affect people's ability to achieve a standard of living adequate for their well-being. Consequentially, from a utilitarian perspective, barriers to accessible primary health care are unjust and must be mitigated.

Libertarianism as a theory of justice focuses on individual rights to social and economic liberties. These rights are protected through fair procedures (Beauchamp & Childress, 2019, p. 273). A libertarian theory of justice maintains the morality of actions rather than outcomes (Beauchamp & Childress, 2019, p. 394). Libertarianism is concerned with the choice and freedom of individuals

rather than their welfare and well-being. Accordingly, this theory of justice does not recognize a right to health care. As a result, a libertarian theory of justice appears to not support an obligation to ensure primary health care accessibility. However, this theory of justice supports utilitarian or egalitarian distribution if it is chosen freely by all those impacted (Beauchamp & Childress, 2019, p. 274). A case can be made in support of a libertarian obligation to ensure primary health care accessibility since Canadian and NL citizens have rationally voted and chosen a publicly funded health care system. Collective votes, and choices, led to the *Canada Health Act*, which articulates a positive right to accessible health care. On this interpretation, a libertarian theory of justice applied to the Canadian context would support ensuring accessible primary health care.

A communitarian theory of justice focuses on relationships between individuals and their connection to communities. In such a theory, particular attention is given to the way communities shape individuals (Beauchamp & Childress, 2019, pp. 275-276). Communitarianism can be considered the opposite of libertarianism due to the emphasis on the community rather than the individual. Under a communitarian theory of justice, a fair distribution of benefits in society is required. Health care is generally considered a benefit because of its contribution to achieving a standard of living adequate for well-being. A communitarian theory of justice obligates good accessibility of primary health care for all community members, on the understanding that accessible primary care is good for the community.

The capabilities theory of justice emphasizes the importance of the capabilities of individuals to do the things that they value. Martha Nussbaum's capabilities theory includes ten central human capabilities. As a core capability bodily health, implying that the capability to have good health, is considered essential for human life and dignity (Beauchamp & Childress, 2019, pp. 277-278). Considering this core capability, generally individuals should be able to achieve good health.

Capabilities theory obligates accessibility of resources necessary for living a flourishing life. Health care is clearly such a resource (Beauchamp & Childress, 2019, p. 279). The purpose of health care in general, and primary health care specifically, is to assist individuals in achieving good health. Ensuring primary health care accessibility can be considered an obligation of a capabilities theory of justice.

The well-being theory of justice focuses on well-being itself, rather than just the capabilities that typically lead to well-being. This theory of justice maintains that all people should experience well-being associated with a decent life so that they are able to pursue other areas of life as they individually choose (Beauchamp & Childress, 2019, p. 279). Similar to an egalitarian theory of justice, this theory places emphasis on the promotion of social primary goods to allow individuals to achieve a standard level of achievement, enabling them to pursue individual higher social interests. Health is considered a core element of well-being. Under a well-being theory of justice, it is necessary for governments not just to promote the capability to be healthy but to actually enable people to achieve good health (Beauchamp & Childress, 2019, pp. 279-280). The *Canada Health Act* implies that governments can enable their citizens to achieve good health through accessible health care. As a result, under a well-being theory of justice, there is an obligation to ensure primary health care accessibility.

### 2.2.3 The Impact of Increasing Accessibility through Expanding Virtual Care

Increased access to primary health care through expanding virtual care promotes justice through mitigation of geographical barriers. As previously discussed, geographical barriers are unjust according to several theories of justice. The theories discussed require that barriers be mitigated to promote justice.

Offering primary health care through virtual care could reduce the impacts of geographical location on primary health care accessibility in rural NL. Rather than requiring travel, individuals would have the capability to access primary health care from within their communities, potentially from within their homes. Residents living in rural NL would experience fair opportunity to access primary health care. As a result, the expansion of virtual care to include primary health care assists the provincial government in meeting the obligations of justice with respect to primary health care accessibility and geographical barrier mitigation.

## 2.3 The Impact of Barriers to Primary Health Care Accessibility

In NL approximately 50% of the population resides in rural communities, compared to the national average of approximately 17%. (Buote, Asghari, Aubrey-Bassler, Knight, & Lukewich, 2019, p. 11). This statistic is relevant because it demonstrates the need for many health care facilities servicing these smaller communities. Furthermore, the high percentage of the population residing in rural communities demonstrates the significant impact of the unjust inaccessibility of primary health care in rural NL. In the absence of good rural primary health care, approximately half of the population faces unfair, and unjust, primary health care inaccessibility. Consequently, the provincial government is failing to promote the values of the *Canada Health Act* for approximately half of the citizens they are responsible for. All Canadian citizens should have access to primary health care. However, that the percentage of residents in NL with accessibility issues is so large is relevant in that it demonstrates the significant impact of geographical barriers. Subsequently, the high percentage exemplifies the extent to which the requirements of justice are being violated.

The significance of the percentage of residents in NL experiencing health care inaccessibility is supported by the Health Accord final report. Action 9.16 aligns with the guiding principle of rebalancing the health care system in NL, as discussed in 1.4. An objective of this Action is to

implement community care teams in areas with limited primary health care accessibility, specifically rural NL (The Health Accord for Newfoundland and Labrador, 2022, pp. 136-137). This Action acknowledges inequities in primary health care accessibility experienced in rural NL due to geographical barriers. By prioritizing areas experiencing geographical barriers, the Health Accord final report supports the obligation to reduce these inequities. The result is direct action to mitigate barriers, thereby reducing inequities in accessibility, and to promote the values of the *Canada Health Act* for citizens currently experiencing unjust primary health care inaccessibility.

There are several layers of concern when considering inequities in primary health care accessibility in NL. I have demonstrated the inequities experienced between residents of rural and urban areas in NL in 2.2.1.1. Similarly, there are inequities between the island of Newfoundland and the mainland portion of the province, Labrador. A significant portion of the population of Labrador resides in remote, rural communities. There are significant accessibility challenges associated with the geographical location of these communities in relation to the location of health care providers in urban centers such as St. John's (Labrador-Grenfell Health, 2017). As a result, a large percentage of residents in Labrador experience inaccessibility in comparison to residents on the island of Newfoundland. Additionally, there exists an inequity of accessibility between Indigenous communities and other communities. Health gaps between Indigenous communities and other communities will be further discussed in chapter 4, along with the government obligation to close these gaps. Presently, it is relevant to acknowledge that these gaps include inequities to accessible primary health care due to the geographical location of their communities.

# Chapter 3: Financial Considerations

When it comes to the issue of expanding virtual primary care within the province, financial considerations are relevant due to the impact of the economic environment on health care provided to residents. Currently, the province experiences financial constraints due to debt incurred over time. An argument could be made that the obligation of the provincial government to reduce health care spending outweighs obligations to spend money in order to further the positive right to health care. I will argue against this notion. I maintain that financial constraints of the provincial government support the obligation to expand virtual care in rural NL. Among other reasons, expansion of virtual care actually has the potential to contribute to long term economic sustainability in NL which can reduce financial constraints impacting the health care system.

## 3.1 Provincial Financial Strain

The province of NL has been facing financial strain for several years as a result of significant incurred debt. As suggested in 1.4, the Premier's Economic Recovery Team (PERT) was appointed to respond to current provincial financial trouble. Recommended areas of cost savings were released in the May 2021 report (The Premier's Economic Recovery Team, 2021). Particularly, this report included recommended cost savings for the health care system. The recommendations with respect to the health care system are relevant due to a tension between the government's obligation to improve the financial well-being of the province and the obligation to ensure equitable access to health care.

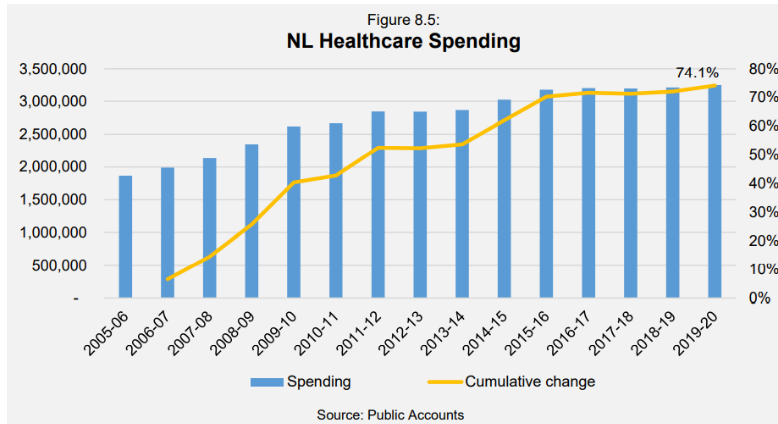


*Figure 1: NL Healthcare Spending (The Premier's Economic Recovery Team, 2021, p. 172)*

The 2020 provincial budget projected over $3 billion to be spent on health care, representing 37.7% of total expenditures. Of this, hospitals account for 39.6%, and physician 15.1%. Actual health care expenditures in the province have demonstrated an unsustainable escalation, increasing by 74.1% since 2005, as demonstrated by Figure 1 above (The Premier's Economic Recovery Team, 2021, pp. 170-172). Furthermore, this level of health care spending is significantly higher than Canadian averages, demonstrated by Figure 2. There has been an observed increase in health care spending of 232% in NL over 38 years. In comparison, health care spending for Canada as a whole has increased by 101% during the same time (The Health Accord for Newfoundland and Labrador, 2022, p. 23).

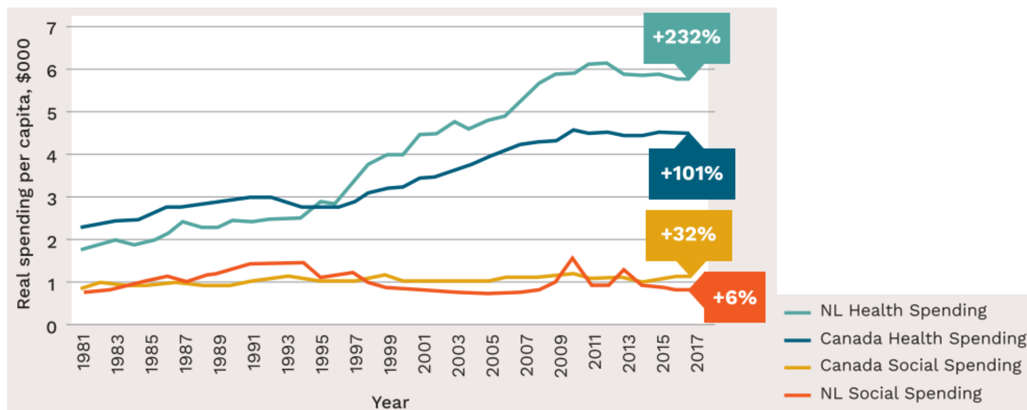


*Figure 2: Per Capita Canadian and NL Spending (The Health Accord for Newfoundland and Labrador, 2022, p. 23)*

In NL the RHAs are responsible for administering health care within their jurisdictions with annual budgets allocated by the provincial government. Publicly funded health care services, including acute care, long term care and community based services, are delivered by the RHAs (Department of Health and Community Services, n.d.). It is notable that the RHAs have a combined budget of $2.5 billion and a combined net debt of $710 million (The Premier's Economic Recovery Team, 2021, pp. 172-173). Financial constraints of the provincial government are relevant due to the direct impact they have on the economic capabilities of RHAs to provide health care. In order to promote residents' right to accessible health care as discussed in 2.1, the provincial government must ensure the RHAs have adequate funding to provide health care.

The PERT recommends a 4.15% reduction per year to the RHAs over six years (The Premier's Economic Recovery Team, 2021, pp. 172-173). PERT recommendations align with the goal of reducing financial constraints in the health care system. If the provincial government adheres to the recommendations of the PERT, it will reduce health care spending.

Due to the financial constraint and associated need to reduce health care spending, it is necessary to consider the financial impact of expanding virtual care in rural NL. An argument could be made that the government's obligation to reduce health care spending, thereby reducing financial constraints, outweighs the potential obligation to expand virtual care in rural NL. Primarily this is because implementing new technology will incur costs, including training, software and hardware, where new infrastructure is needed. Upfront costs could be considered contrary to the government's budget conscious position, and recommendations of the PERT. However, I maintain that the economic obligations of the provincial government do not outweigh the responsibility to ensure health care accessibility. Furthermore, we can also question the assumption that expanding virtual

care would be too costly. In fact, expansion of virtual care has the potential to contribute to long term economic sustainability in NL, with respect to health care spending.

## 3.2 Financial Impacts and Poor Health Outcomes

NL spends more per capita on health care than other provinces (The Health Accord for Newfoundland and Labrador, 2022, p. 22). Figure 3, below, provides a comparison of per capita health care spending between provinces. Geography and a dispersed population have contributed to higher health care spending per capita in NL, in comparison to other provinces. However, the Health Accord final report acknowledges that these factors cannot entirely account for the significant difference observed (The Health Accord for Newfoundland and Labrador, 2022, p. 21).

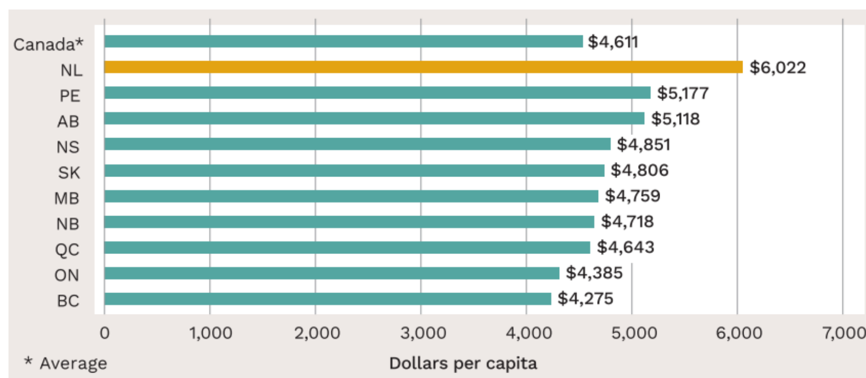


*Figure 3: Provincial Per Capita Health Spending 2019/2020 (The Health Accord for Newfoundland and Labrador, 2022, p. 22)*

Despite having the highest health care spending per capita in the country, health outcomes in NL remain the worst in Canada (The Health Accord for Newfoundland and Labrador, 2021, pp. 13-15). Furthermore, poor health outcomes can contribute to more health care spending. Poor health outcomes include high rates of chronic disease, prescription medication use and unhealthy behaviours, such as smoking. These factors, combined with genetic factors, result in lower life expectancy and high health care costs (The Premier's Economic Recovery Team, 2021, pp. 170-171). As a result, the provincial government is increasingly financially constrained while residents continue to experience poor health outcomes.

Increased spending does not necessarily correlate to better health outcomes. It is possible that reducing health care spending, and failing to expand virtual care, would not impact health outcomes in the province. However, there is also the possibility that health care outcomes would continue to decline. The potential decline could be due to barriers that are introduced, or strengthened, by reduced health care spending. As mentioned, the PERT recommends a 4.15% reduction per year to the RHAs over six years (The Premier's Economic Recovery Team, 2021, pp. 172-173). Decreased funding allocated to the RHAs would limit their ability to provide health care, which will be considered in detail below in 3.2.1.

Other provincial governments manage health care spending while promoting better health outcomes. As discussed in 2.1.3, the *Canada Health Act* articulates Canadians' right to accessible health care which provide fair opportunity to achieve a standard of living adequate for their health and well-being. The good health outcomes observed in other Canadian provinces imply that other provincial governments are meeting their obligations to promote residents' right to health care. Evidently, other provinces achieve this while simultaneously meeting economic obligations, implying that this is reasonable for NL as well. It is unjust for primary health care inaccessibility to be allowed to prevail in the interest of meeting economic obligations.

Accordingly, I maintain that it is not defensible for the provincial government of NL to allow poor health outcomes to prevail in the interest of meeting economic obligations. At issue in this chapter is the question of whether it is justifiable for the province to save on initial costs by deciding not to implement and expand virtual primary care. Allowing health outcomes in NL to remain below national averages by not investing in primary care is problematic due to the inconsistency in health outcomes present between provinces.

As I will argue in 3.2.1, accessible health care is so fundamental to promoting citizens' well-being that the provincial government should prioritize promoting accessible health care over economic obligations. Due to the fundamental nature of health care, and problematic inconsistencies between provinces, the provincial government has an obligation to find the money to fund it, thereby reducing barriers to accessibility. This obligation could imply re-organization to promote more efficient means of proving care, thereby reducing associated costs and subsequently reducing necessary health care spending. Regardless of the strategy taken, the outcome must be access to health care that residents need, that is comparable to other provinces, and that promotes their positive right to health care. Re-organization and addressing barriers to accessibility aligns with the guiding principles of the Health Accord task force, as described in the final report, particularly with respect to a rebalanced system (The Health Accord for Newfoundland and Labrador, 2022, p. 40). Expanding virtual care has the potential to improve the efficiency of NL's health care system by promoting appropriate preventative measures that can improve health outcomes, to be discussed in 3.3.

### 3.2.1 Impacts of Financial Constrains in the Health Care System

Financial constraints that result in limitations in the health care system can impact residents' ability to access health care. As a result, provincial financial constraints potentially correlate to barriers to accessible health care. For instance, limitations affecting the types of services available could mean that medically justifiable services are not available in the province despite being available in other provinces. This limitation results in a geographical barrier for residents of NL due to the requirement of traveling to another province to receive health care. This travel requirement exemplifies an inconsistency between provincial health care systems that could be contrary to

obligations of the *Canada Health Act* (Government of Canada, 2017). Specifically, residents of NL could experience unequal accessibility in comparison to other provinces.

Similarly, a limitation in types of services available could result in rural NL experiencing inaccessibility of some services that are available in urban areas. This inaccessibility could result in a need for rural residents to travel to receive care that is readily accessible for residents of rural NL, exemplifying an instance of geographical barriers to accessible health care. As discussed throughout 2.2, there is a relevant question of justice when geographical barriers impede accessibility. I argued in 2.2 that there is a government obligation to mitigate such barriers, implying that limitation in types of services available throughout the province is an unjust barrier.

In a situation of unlimited resources, the provincial government would have the capability to fund all services, thereby eliminating limitations. However, this is an imaginary and impossible scenario. The current reality is a financially constrained system with legitimate need to decrease overall spending. It is relevant to consider whether geographical barriers are unjust in the current situation of financial constraint. However, in a sense this question has already been addressed in section 2.2, where I argued that justice requires providing access to primary care. Justice arguments apply when resources are limited. If adequate funding is available, accessibility is not a concern. In a situation of unlimited resources, the justice argument I have provided in 2.2 is not needed. However, in situations of financial constraint, accessibility is a significant concern because barriers exist which impede accessibility for residents of rural areas. Instead, the arguments I have provided throughout 2.2 apply specifically to situations of financial constraints. Accordingly, in the current situation of financial constraint, geographical barriers to accessible primary health care are unjust and there is a government obligation to mitigate them.

## 3.3 Support for the Obligation to Expand Virtual Care

Rather than being an argument against expansion of virtual care, financial constraints in the province could actually *support* the obligation of the provincial government to expand virtual care in rural NL. I have demonstrated this in 3.2.1 through the discussion of the relevance of the justice argument of 2.2 with respect to financial constraints.

Furthermore, discussion in 3.2 suggests that the financial impact of poor health outcomes could lend support for an obligation of the provincial government to expand virtual care in rural NL. This is particularly relevant due to the PERT's recommended budget cuts in health care (The Premier's Economic Recovery Team, 2021, pp. 170-173). I will now consider how to improve the health of residents in a financially constrained situation.

### 3.3.1 Financial Impacts of Good Health Outcomes

Generally, funding preventative measures can be more cost-effective than funding curative measures, based on evidence from other jurisdictions. For instance, cost expenditures are typically higher for treatment than prevention in many health care systems of industrialized nations (Russell, Gold, Siegel, Daniels, & Weinstein, 1996). Additionally, countries with weaker primary health care systems have been observed to have higher health care spending (Starfield, Shi, & Macinko, 2005). This implies that increased use of primary health care has the potential to be a more cost-effective priority for health care spending in NL. Although specific costs related to primary health care and specialist health care are not provided, the findings of the PERT support this perception. Based on the PERT, in 2017 NL spent $6,443 per capita on health care while other provinces spent $5,196 per capita, on average. Furthermore, hospitals (an example of specialist health care) account for 39.6% of health care spending in the province (The Premier's Economic Recovery Team, 2021, pp. 170-171). As suggested by Russell, et al. (1996) and Starfield, et al. (2005), higher health care

spending may be indicative of inaccessible primary health care. The doctor shortage and geographical barriers, discussed in 1.2 and 2.2 respectively, demonstrate NL's issue with respect to inaccessible primary health care. NL might spend more per capita than other Canadian provinces on average due to inaccessible primary health care and high demand for specialist health care.

Though there is an apparent correlation between accessibility of preventative measures and reduced health care spending, a traditional numbers-based economic analysis may not adequately demonstrate the indirect benefits of accessible primary health care. A holistic approach should consider the benefit of improved health outcomes, which is a challenging thing to quantify for an economic analysis.

Generally, preventative services are effective and efficient in raising levels of health and improving quality of life, statistically reducing mortality (Russell, Gold, Siegel, Daniels, & Weinstein, 1996). As a preventative measure, accessible primary health care is effective in promoting good health outcomes, as discussed in 1.2. By treating non-urgent needs, and preventing poor health outcomes, accessible primary health care can effectively reduce reliance on specialist health care. Consequently, the demand for specialist care would be expected to decrease. The impact of primary health care accessibility on specialist health care demand lends support to the obligation of the provincial government to expand virtual care in rural NL. Rather than focusing spending on specialist health care to manage the burden of disease, expanding virtual care could enable the provincial government to promote accessible primary health care that prevents poor health outcomes. Expansion of virtual care in rural NL could thus effectively help reduce health care spending in the province.

As discussed in 1.2, currently due to the doctor shortage in NL individuals may turn to emergency rooms to receive basic care (Gushe, 2021). Access to appropriate health services, rather than

requiring emergency room visits for basic care, can reduce health care spending. Primarily, this reduction is due to the cost effectiveness of treating common illness through primary health care (Starfield, Shi, & Macinko, 2005). Expansion of virtual care in rural NL enables patients to access primary health care that is appropriate to their needs. This access can subsequently reduce the frequency of emergency room visits for basic care. As a result, overall demand in the health care system could be reduced to a manageable level, requiring less funding. The expected reduction in health care spending would support the government's economic obligations.

Furthermore, the Health Accord final report suggests that focusing on prevention of disease through the social determinants of health (SDH) could reduce provincial health care spending. Specifically, Action 6.2 of final report aims to integrate the SDH and a rebalanced health care system with all decisions that influence health (The Health Accord for Newfoundland and Labrador, 2022, pp. 59-60).[5] As shown in Figure 2, social spending in NL has increased by just 6% during the time that health care spending has increased by 232% (The Health Accord for Newfoundland and Labrador, 2022, p. 23). Focusing on the SDH implies redirecting some spending to increase NL's social spending, which can indirectly reduce health care spending. Action 6.2 appears to support the notion that it is generally preferable to avoid the burdens of disease than to treat them once they occur (Daniels, Justice and Access to Health Care, 2017). Primary health care is similarly a preventative measure: it addresses the root causes of poor health outcomes, rather than just treating symptoms as they occur. Accordingly, primary health care pursues the same goals as Action 6.2 with respect to integrating the SDH and a rebalanced health care system. Expansion of virtual care in rural NL is essentially an investment in primary health care accessibility that is thereby consistent with the Health Accord final report.

[5] The relationship between health outcomes and the SDH will be discussed in detail in 4.1.1.

Reducing the demands on the health care system would reduce the amount of money that RHAs require to adequately administer health care. Promoting good health outcomes through the SDH and accessible primary care would have a positive impact on health care spending in a system experiencing financial constraints.

### 3.3.2 Financial Impacts of Expanding Virtual Care in Rural NL

This chapter considers the financial impacts of expanding virtual care. Despite potential initial costs of implementation, I maintain that expanding virtual care in rural NL supports provincial economic obligations. Expanding virtual care in rural NL is essentially a method of investing in accessible primary health care capable of improving health outcomes in the province. Accordingly, ensuring accessible primary health care through expansion of virtual care would be a financially responsible action by the provincial government.

A 2021 review investigates the cost-effectiveness of various virtual care modalities in primary care (Guzman, Snoswell, Caffery, & Smith, 2021). I have argued that virtual primary care has the potential to reduce health care spending in NL. The 2021 review by Guzman and colleagues provides an economic evaluation of virtual care that supports this position.

The review supports that virtual primary care has the potential to reduce health care spending. Guzman and colleagues determined that integration of virtual care for primary health care is cost effective in clinically appropriate settings where it reduces overall health care demand, and specialist heath care use (Guzman, Snoswell, Caffery, & Smith, 2021). This model can be applied to expansion of virtual care in rural NL, where virtual care can reduce the necessity of specialist care for residents by ensuring primary health care accessibility. Additionally, the review acknowledges that virtual care triage was capable of reducing emergency room visits and no-show

appointments (Guzman, Snoswell, Caffery, & Smith, 2021). A decrease in no-show appointments and non-urgent emergency room visits would result in a reduction in the demand on the health care system. Based on the findings from this review, expansion of virtual care in rural NL could likely be a cost-effective method of providing primary health care that reduces overall demand on the health care system. Accordingly, this review supports the benefit of expanding virtual care in a financially constrained situation to meet economic obligations.

In summary, the provincial government's responsibility to reduce health care spending due to financial constraints supports the expansion of virtual care in rural NL. Increased accessibility to preventative measures is a means of improving health outcomes which is cost effective, supporting economic obligations to reduce health care spending. Furthermore, the expansion of virtual care in rural NL has the potential to reduce the inconsistencies between NL and other Canadian provinces. Particularly, expansion of virtual care could reduce inconsistencies with respect to health care spending and health outcomes, discussed in 3.2. As a result, expanding virtual care would demonstrate action by the provincial government to meet the criteria of the *Canada Health Act*.

## 3.4 Future Economic Benefits

There are economic reasons in favour of expanding virtual primary care. Though the province has experienced a trend of increasing health care spending, an economic analysis of health care costs should include methods of future cost-savings. Economic responsibly implies creating sustainable improvements rather than temporary reductions in health care spending.

Accordingly, it is relevant to consider the impact of virtual care on future expenditures. In 3.3, I have provided an argument explaining why the expansion of virtual primary care is consistent with financial constraints. Virtual care has the potential to allow the provincial government to meet their obligation to reduce spending, while providing accessible primary health care to improve

provincial health outcomes. Maintaining the accessibility of primary health care through virtual care has the potential to continuously produce these benefits. Expansion of virtual primary care could contribute to a sustainable reduction in health care spending.

Furthermore, as residents of the province experience better health outcomes the overall health of the province improves. Although the Health Accord final report acknowledges that the Health Accord task force was not specifically tasked with investigating methods of cost reduction in the health care system, it articulates the long-term effects of good health outcomes. A healthier population will reduce the demands on the health care system, which the final report recognizes as an opportunity to reduce costs in the health care system (The Health Accord for Newfoundland and Labrador, 2022, p. 26).

In addition to ensuring NL remains current with respect to its health care system, to be discussed in 5.2, expansion sets a foundation for future virtual care applications. Virtual care use, acceptance, and capability has rapidly increased due to the COVID-19 pandemic, as discussed in 1.3. It is expected that this technology will continue to evolve, further expanding the capabilities of virtual care. Future technological advancements could enable further cost-savings for the province through improved efficiency and accessibility, for example. It is recommended by the PERT that technology is an enabler and NL should prioritize using technology to expand health care delivery (The Premier's Economic Recovery Team, 2021, p. 104). Accordingly, the PERT supports leveraging technology as a method of long-term cost savings for the province. Additionally, expansion now would create a foundation on which the province can leverage in the future. Expanding virtual care in rural NL can support integrating future technological advancements to improve the health care system, potentially reducing future initial implementation costs.

# Chapter 4: Addressing Negative Implications of Expansion

There are potential negative implications that may contribute to an opposition to the provincial government's ethical obligation to expand virtual care in rural NL. Specifically, these could include disproportionate implementation, the risk of substandard care, as well as security and data protection concerns. Due to the anticipated contribution to opposition to my position, it is necessary to address these potential negative implications. I will describe each objection and provide a rebuttal to demonstrate that these potential negative implications do not outweigh the obligation to expand virtual care in rural NL.

## 4.1 Disproportionate Implementation

The first argument opposing expanding virtual care in rural NL could be made with respect to how virtual care is implemented. Logistically, new technology cannot be introduced everywhere all at once as the scope is too extensive. Furthermore, the financial constraints of the province, discussed in chapter 3, could limit provincial capabilities to implement new technologies. As a result, a method of prioritization would likely be employed to determine where to start.

The expectation is that locations with the greatest need would be prioritized, so that required new technology is introduced in these areas first. Prioritization in this way gives preference to areas determined to experience greater levels of primary health care inaccessibility. The negative implication of such prioritization is that some areas of the province will have the ability to access primary health care through virtual care before others. Essentially, this is disproportionate implementation of technology, where there is an initial unequal distribution of virtual care accessibility in the province.

Disproportionate implementation could be used as an argument opposing the obligation to expand virtual care in rural NL due to potential impacts on accessibility for those areas of the province that are not prioritized. The issue is that this negative implication could lead to inaccessibility of virtual care for some areas of the province. Disproportionate implementation of virtual care, resulting in inaccessibility for other areas, could be viewed as unfair distribution of primary health care. Accordingly, disproportionate implementation has the potential to be a justice issue.

As discussed in 1.2 and 3.3.1 respectively, primary health care is beneficial as a preventative measure that is effective in improving health outcomes. Canadians have a positive right to access primary health care, discussed throughout 2.1. Inaccessibility is a violation of the positive right to health care, inhibiting ability to achieve a standard of living adequate for health and well-being. Inequalities which reduce primary health care accessibility have the potential to increase the burden of poor health outcomes for some individuals.

Essentially, disproportionate implementation could be viewed as a geographical barrier to accessible virtual primary health care. As discussed in 2.2, health care inaccessibility as a result of geographical location is unjust under several theories of justice. From an ethical perspective, disproportionate implementation could be problematic because it is alleged to be contrary to the positive right to health care, and values articulated in the *Canada Health Act*.

Generally, it is recognized that poor health and health inequities are as a result of interactive effects in society, not just health care access. Inequities are often a result of unfair social institutions (Beauchamp & Childress, 2019, p. 299). The social determinants of health (SDH) are suggested to have a stronger effect on health outcomes than behavioural choices (Raphael, Bryant, Mikkonen, & Raphael, 2020, p. 14). This is supported by the strategy committee created by the Health Accord task force that specifically focused on the SDH. As shown below in Figure 4, data collection during

town hall meetings held by the Health Accord task force demonstrates the impact of the SDH on health outcomes in NL (The Health Accord for Newfoundland and Labrador, 2021, p. 22).

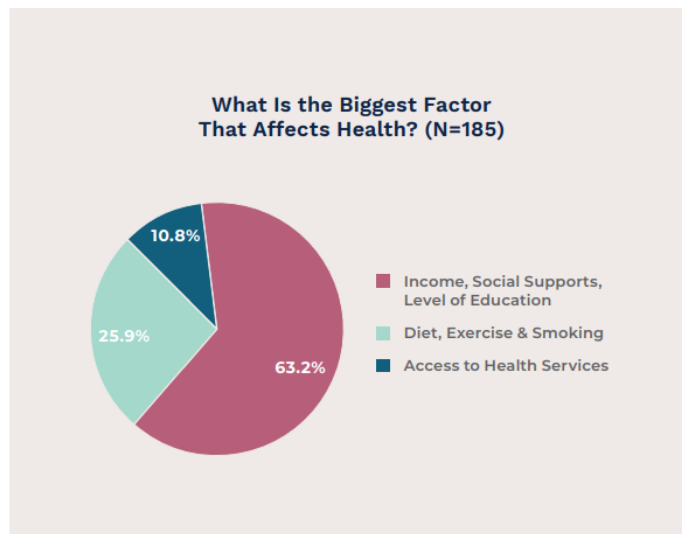


*Figure 4: The Health Accord's Poll Question Results for the Biggest Factor Affecting Health (The Health Accord for Newfoundland and Labrador, 2021, p. 22)*

The contribution of the SDH to poor health outcomes in some people leads to health inequities among residents. This is relevant considering that NL has worse health outcomes than other provinces, and that the provincial government has an obligation to improve health outcomes to meet the requirements of the *Canada Health Act*, as discussed in 3.2.

Prioritization of some areas of the province over others in the expansion of virtual care could be interpreted as favouring individuals living in some geographical locations over others. Accordingly, disproportionate implementation has the potential to contribute to the inequities already experienced in rural NL based on geographical location. Subsequently, disproportionate implementation could contribute to the impact of the SDH on health inequities in the province. According to this potential objection, an increase in health inequities due to unequal access resulting from disproportionate implementation would prevent the government from fulfilling their obligations to citizens.

### 4.1.1 Responding to Objection with Respect to Disproportionate Implementation

As discussed in 1.3, virtual care is currently employed in all RHAs to an extent, enabling accessible specialist health care. Existing technology has the potential to facilitate expansion to include virtual primary health care in rural NL. Leveraging existing facilities and technology will encourage expansion and mitigate the need for disproportionate implementation. As a result, the potential objection discussed above could perhaps be disregarded as a non-issue.

However, existing technology may not facilitate expansion of virtual care to include primary health care in all areas of rural NL simultaneously. As a result, it is still necessary to determine a strategy for initial implementation. Locations that experience the greatest levels of primary health care inaccessibility have the greatest need. Initial implementation could prioritize these areas for access to virtual primary health care.

Areas that do not initially receive access to virtual primary health care would be those judged to have better accessibility without requiring virtual care. Areas that are not prioritized would not have their accessibility reduced. Rather than becoming a barrier to accessing primary health care, disproportionate implementation encourages equitable access by prioritizing areas that are the worst off, supporting an overall increase in primary health care accessibility throughout the province.

Under an egalitarian theory of justice, some inequalities in accessibility are allowable if they benefit everyone (Beauchamp & Childress, 2019, p. 274). Initially employing disproportionate implementation promotes a fair distribution of accessible primary health care, encouraging equitable primary health care accessibility. Equity in this sense supports fair access to primary health care, thereby showing consistency with the requirements of an egalitarian theory of justice.

Daniels suggests that institutions impacting health care distribution should be arranged, and health care resources should be allocated, to allow individuals to achieve fair share of opportunities in society, thereby promoting fair equality of opportunity (Beauchamp & Childress, 2019, p. 275). Prioritized areas would experience the greatest inaccessibility of primary health care due geographical barriers to primary health care. Accordingly, disproportionate implementation promotes fair equality of opportunity.

Furthermore, many of the rural communities experiencing the greatest inaccessibility of primary health care are Indigenous communities. The Truth and Reconciliation Commission's Call to Action 19 calls on the federal government to establish methods to measure and close gaps in health between Indigenous and non-Indigenous communities (Government of Canada, 2019). As discussed in 1.2 and 3.3.1 respectively, primary health care is a preventative measure that is effective in promoting good health outcomes. Accordingly, there is an obligation on various levels of government to increase primary health care accessibility for Indigenous communities.

The response of the federal government to the Truth and Reconciliation Commission's Call to Action 19 supports this obligation. The federal government has committed to providing funding that aims to keep Indigenous families healthy. Particularly this funding includes $97.6 million per year to sustain access to critical health care in 79 remote and isolated communities, as well as support to accessible, quality, and Indigenous-controlled health care in remote and isolated communities (Government of Canada, 2019). The commitment and response of the federal government to the Truth and Reconciliation Commission's Calls to Action has set a precedent for provincial government involvement. It is relevant for the provincial government to recognize the increased obligation that they have to Indigenous communities. A prioritization of areas experiencing the greatest levels of primary health care inaccessibility for initial implementation of

virtual care would acknowledge the inequitable accessibility and health outcomes experienced by Indigenous communities. Disproportionate implementation is justified on these grounds.

## 4.2 Standard of Care

Another argument opposing expanding virtual care in rural NL is the potential negative implications for standard of care. Standard of care ensures consistency in the quality of care offered in different regions. Maintaining standard of care across the province is necessary to ensure that all residents receive an adequate, equal level of care. This is an important factor in protecting the right to a standard of living adequate for health and well-being. This concept is derived from language of the UN Universal Declaration of Human Rights (UDHR) and the *Canada Health Act*. As described in 2.1.2, Article 25 of the UN UDHR articulates the common right to a standard of living adequate for health and well-being, including health care (United Nations, 2021). The Canadian government supports this concept through the criteria of the *Canada Health Act* that all provincial health care systems are expected to adhere to. Particularly, language of the preamble of the *Canada Health Act* specifies access to quality health care (Government of Canada, 2017). Consequently, there is a common understanding that health care must be of a certain quality, or meet a particular standard of care. The provincial government has an obligation to ensure accessible, quality health care for all residents.

Expanding virtual care to increase the accessibility of primary health care in rural NL allows residents of rural NL to avail of virtual primary health care. In some areas, residents could have options for care method, depending on current local primary health care accessibility. However, expanding virtual care in rural NL implies residents of rural areas would be more likely to avail of virtual care in comparison to other areas in the province where in-person primary health care is

accessible. In some remote and rural communities, particularly in Labrador, residents may only be able to access virtual primary health care.

The objection here is that expanding virtual care to address accessibility issues in rural NL could subject residents to a level of care that is not equal in quality to areas of the province where in-person primary health care is accessible. Evidently this is problematic because it is not defensible for some residents to receive substandard care while others have the choice which enables them to access primary health care that meets the standard of care. Furthermore, it is not defensible for some individuals to receive substandard care due to their geographical location. As discussed in 2.2, geographical barriers to accessible primary health care are unjust. Similarly, inaccessibility of quality primary health care is unjust. To allow substandard care to prevail in the province would be contrary to the requirements of the *Canada Health Act*.

Generally, there are challenges for patients associated with virtual care which could impact virtual quality of care. Due to the nature of virtual care, and any digital technology, connectivity is of significant importance. Residents without reliable internet connection, or access to the required technology, may not be able to access particular modes of virtual primary health care such has videoconferencing. As mentioned in 1.4, my argument does not intend for expansion to only utilize phone calls due to the benefit of a face-to-face conversation that is supported by videoconferencing. It could be argued that connectivity challenges could restrict residents' capability to access quality primary health care. Additionally, technology literacy can be a challenge for residents due to the rapid advancements of health care technology. Specifically considering virtual care, the evolution of this technology has accelerated due to the COVID-19 pandemic, as discussed in 1.3. Furthermore, NL has an aging population which introduces unique health care needs, as acknowledged in 1.2. Lower levels of technology literacy could be expected in an aging population.

Low technology literacy has the potential to be challenging for patients seeking virtual primary health care, impacting the quality of the care that patients are able to receive. Unfamiliarity with the technology could impede a patient's ability to adequately communicate with their health care provider, thereby reducing the quality of care received. An argument could be made that these challenges could be especially problematic if residents can only access virtual primary health care due to the risk of geographical barriers to quality primary health care. Accordingly, it is problematic for residents of rural NL to experience undue challenges because such challenges are unique to virtual care, which would be the only primary care option in the area.

It is problematic for quality of care to depend on service delivery type. The risk of substandard care could introduce the issue of pushback among health care providers who have obligations with respect to caring for patients[6]. The concern is that virtual primary health care does not meet the same standard of care as in-person appointments, implying that providers who integrate virtual care into their practice would be offering substandard care. As a result, not only would the patient receive care that does not meet the standard of care, but the health care provider would be offering services that are not of adequate quality.

### 4.2.1 Responding to Objection with Respect to Standard of Care

Provided that it is true that virtual care is substandard care, I argue that it is not defensible for it to be employed in any capacity. All Canadians have a positive right to accessible, quality health care that cannot be influenced by geographical location, as supported by discussion throughout chapter 2. Knowingly offering substandard care is ethically problematic. Accordingly, an expansion of

[6] Physician obligations will be discussed in 5.2.2.

virtual care could imply an increase in residents exposed to substandard care and should not be encouraged by the provincial government.

The claim that virtual care is substandard care would imply that NL's established use of virtual specialist care is ethically problematic. So, it is necessary to examine whether it is accurate to state that virtual care is substandard care. Despite the validity of patient challenges, it is apparent that the 30-year employment of virtual specialist care has been beneficial for residents of rural NL. Referring to 1.3, in the Labrador-Grenfell RHA residents have experienced an increase in the accessibility of quality health care as a result of virtual care adoption. Residents in the Labrador-Grenfell RHA have expressed their support and acceptance of virtual care (Labrador-Grenfell Health, 2017). Patient testimony from an NL perspective provides evidence that opposes the notion that virtual care is substandard care.

Additionally, there have been recent government actions taken to reduce the impact of connectivity challenges and technology literacy. There is a federal government initiative to ensure that 98% of Canadians have reliable connectivity by 2026, (The Health Accord for Newfoundland and Labrador, 2022, pp. 140-141). In NL, the provincial government has committed to supporting this initiative by providing up to $20 million of the $136 million budgeted for this collaboration (Executive Council: Industry, Energy and Technology, 2022). By promoting connectivity in rural areas, the federal and provincial governments lend support to improved health care accessibility.

However, additional supports are necessary to account for limitations. Community care centres can be employed to increase the accessibility of virtual care and improve health literacy (The Health Accord for Newfoundland and Labrador, 2022, pp. 140-141). According to Action 10.2 of the Health Accord final report, discussed in 1.4, community care centres will house care teams capable of supporting virtual care adoption through the technology resources and training they will possess

(The Health Accord for Newfoundland and Labrador, 2022). Through expansion of virtual care in rural NL the provincial government could promote improvements to technology literacy which would enable patients to effectively access digital technology beneficial to their health. Consequently, patients would be empowered to seek quality virtual primary health care[7].

As suggested above, if virtual care were substandard, it would not be defensible for it to be employed in any capacity. However, as discussed in 1.3, virtual care use has significantly increased globally in recent years due to the COVID-19 pandemic. Similar to virtual specialist health care in NL, the extensive use of virtual primary health care during the COVID-19 pandemic opposes the notion that virtual care is substandard. Virtual primary health care enabled patients to maintain continuous care with their primary health care provider during the COVID-19 pandemic.

According to the 2021 National Survey of Canadian Physicians, physicians are fairly satisfied with virtual care options for providing patient care. The results of the survey indicate that virtual care is believed to improve access, enabling quality and efficient care for patients (Canada Health Infoway and the Canadian Medical Association, 2021). This survey was conducted during the COVID-19 pandemic, so it is expected that the benefit of reduced transmission of the virus has contributed to physicians' acceptance at this time. However, the benefits of virtual care during the pandemic do not totally account for the positive response of the physicians surveyed. Due to their obligation to benefit their patients, physician endorsement is likely indicative of the quality of care that can be offered virtually.

Expanding virtual care in rural NL not only increases primary health care accessibility, but it maintains access to quality care that is comparable to traditional care delivery methods. Expansion

[7] This will be discussed further throughout 5.1.

has the potential to assist the provincial government in meeting the obligations of the *Canada Health Act*. The quality of virtual care provides further reason that the provincial government has an obligation to expand virtual care.

## 4.3 Security and Data Protection

The last argument opposing expanding virtual care in rural NL I will consider concerns potential negative implications for data security and protection. Expanding use of virtual care to include primary health care increases the number of patients that avail of these services. The concern is that the overall growth in digital technology use in the province could lead to an increase in vulnerability to data security attacks.

This vulnerability is relevant considering the recent significant cyber breach experienced by the provincial health care system. On Saturday October 30, 2021, a cyber incident impacted critical IT systems which support health care providers in NL. The breach affected patients and employees of Eastern Health, Central Health and Labrador Grenfell Health (Health and Community Services, 2021). Although the systems were restored there was a period of time when all electronic systems were down. The outage included staff emails in addition to electronic patient information, thereby effecting communication across the health care system. There is concern with regards to the potential of comparable cyber breaches in the future.

Expanding virtual care to include primary health care in rural NL would increase the reliance on digital technology in the province. Virtual primary health care appointments themselves will require the use of technology. As well, communication between health care providers and information storage that relies on digital technology would be expected to increase. The negative implication of expansion from this perspective is an associated increase in the risk for another cyber breach which could compromise personal and health information.

A data breach, such as the one that occurred in October 2021, is problematic due to the impact on security and data protection. A breach of personal and health information implies that data protection has failed. The *Personal Health Information Act* (*PHIA*) is a health-sector specific privacy law that establishes rules that the custodians of personal health information must follow. Custodians include, but are not limited to, health care workers, the RHAs, and the provincial government. Based on the *PHIA*, custodians have an obligation to ensure that the personal health information in their control is protected against theft, loss and unauthorized access (Government of Newfoundland and Labrador, 2011). A cyber breach could be contrary to the requirements of the *PHIA* for custodians, despite the uncontrolled nature of such adverse incidents.

Opposition to expansion of virtual care in rural NL could be due to the increased risk associated with increased reliance on digital technology throughout the province. Through expanding virtual care, the provincial government could be placing the security of personal and health information of residents at risk of another cyber breach. An argument could be made that such a risk is contrary to the security obligations for custodians articulated by the *PHIA*. Consequentially, this risk could be a violation of the obligations of the provincial government to ensure personal health information in their control is protected.

Although the *PHIA* is a legal document, it also makes a statement about the ethical obligations of governments to their citizens. The *PHIA* articulates values of privacy and consent that are important for the ethical treatment of NL residents. Accordingly, from an ethical perspective it would be problematic for custodians of personal health information, including the provincial government, to violate their obligations under the *PHIA*.

Furthermore, another cyber breach and total system shutdown could disrupt services for communities dependent on virtual care, in addition to being a threat to personal health information.

Expansion could increase the vulnerability of these communities due to the due to the reliance of rural communities on virtual primary health care. This vulnerability can be attributed to the potential unequal inaccessibility of primary health care in rural NL in comparison to areas not dependent on virtual primary health care. Consequently, expanding virtual care in rural NL could introduce the risk of unintended geographical barriers to accessible primary health care. Referring to chapter 2, geographical barriers impeding accessibility are problematic under an egalitarian theory of justice and oppose the government obligation to ensure access to primary health care.

### 4.3.1 Responding to Objection with Respect to Security and Data Protection

As discussed above, the *PHIA* articulates obligation for custodians to take reasonable action to ensure personal health information in their control is protected. The language of the *PHIA* conveys an obligation for custodians to employ reasonable safeguards to protect personal health information in their control, thereby mitigating risk. According to Section 15, custodians are obligated to take steps that are reasonable in the circumstances to ensure personal health information in their control is protected. This could include ensuring that there are policies and procedures in place to minimize the risk of unauthorized disclosure of personal health information, as articulated in Section 13. Should a breach occur the custodian is obligated to notify affected individuals, as well as the Information and Privacy Commissioner (Government of Newfoundland and Labrador, 2011). According to the *PHIA*, custodians must ensure that appropriate safeguards are employed to minimize the risk of unauthorized disclosure of information in their control.

Concern for the security of personal health information is a valid concern for all health information. I suggest that this potential objection is the least problematic introduced in this chapter, not because it is trivial, but because it will exist regardless of whether virtual care is expanding in rural NL. For example, the cyber breach of October 2021 occurred in the absence of expansion due to the use of

digital technology for communication and medical records. Evidently, risk is inherently present when using digital technology to any extent, demonstrating the importance of the *PHIA*.

The obligations of the *PHIA* do not imply that custodians are responsible for guaranteeing the information is never at risk. In general, the presence of risk does not indicate a violation of these security obligations. The provincial government had met its obligations under the *PHIA* before the 2021 cyber breach despite the risk that such an event could occur. The risks themselves do not indicate that the provincial government is acting contrary to obligations as long as steps are taken to minimize risk.

It is also relevant to consider whether the possibility of another cyber breach means that the provincial government should not expand virtual care. A cyber breach is an uncontrolled, and often unexpected, adverse incident. The occurrence of such an incident does not imply a violation of the obligations of the *PHIA*, provided safeguards are in place to mitigate the risk of such adverse incidents, and disclosure of the incident occurs.

Due to obligations of the *PHIA* articulated by Section 13 and Section 15 specifically, increased risk implies custodians are required to take additional measures to minimize risk (Government of Newfoundland and Labrador, 2011). Virtual care is an example of an advancement in health care that could increase security risks. As a result, the provincial government could be required to employ additional safeguards to ensure that personal and health information under their control is protected. However, ensuring there are additional safeguards in place is possible and is supported by the Health Accord final report. Action 11.9 calls for a data governance model that ensures all data is private and secure (The Health Accord for Newfoundland and Labrador, 2022, pp. 214-216). By ensuring safeguards are in place the provincial government is acting to minimize risk,

thereby promoting the obligations of the *PHIA*. Expansion of virtual care in rural NL would not be contrary to the provincial government's obligations as a custodian under the *PHIA*.

This potential opposition demonstrates a tension between government obligations towards citizens: the obligation to ensure health care accessibility and the obligation to protect personal and health information under its control. The provincial government does not need to give one obligation priority over the other. I maintain that the risk of another cyber-attack should not permit rural NL to continue experiencing inaccessibility due to geographical barriers. The provincial government has the capability to balance these obligations by improving accessibility through expansion while ensuring adequate safeguards are employed to address the increased risk. These additional, or strengthened, safeguards could further minimize the risk to personal and health information under the provincial government's control. Accordingly, increased safeguards due to increased risk can effectively improve compliance with the *PHIA* obligations, rather than violating them. As a result, expansion of virtual care has the potential to improve the provincial government's compliance with the *PHIA* obligations for custodians.

Considering the potential increased vulnerability of rural NL in the event of another total system shutdown, I maintain that expanding virtual care does not increase geographical barriers despite increased reliance of virtual care in these areas. As experienced during the October 2021 cyber breach, disruption of services during an adverse event is a risk for everyone, not just rural areas dependent on virtual care. Furthermore, it is unlikely for a cyber breach entirely prevent contact with health care professionals virtually if telephone connectivity is maintained, for instance. Accordingly, rural NL would not be disproportionately disadvantaged during a cyber breach merely because of the increased use of virtual care.

# Chapter 5: Positive Implications of Expansion

In this chapter I maintain that there are inherently positive benefits of the expansion of virtual care that would promote the well-being of residents of NL.

Expanding virtual care to increase the accessibility of primary health care in rural NL increases health care accessibility and promotes the ethical obligations of the provincial government, as discussed in chapter 2. However, there are potential positive implications of expanding virtual care in rural NL beyond these benefits. This chapter will explore these positive implications of expanding virtual care in rural NL. These positive implications fall under two main categories: benefits to residents of NL and benefits to the health care system. There are also associated benefits for the provincial government which will be discussed.

## 5.1 Positive Implications for Residents of NL

I maintain that expanding virtual care in rural NL is associated with positive implications for residents. Specifically, expansion introduces the potential to benefit residents of the province through improved health literacy, as well as through opportunities for patient empowerment. Furthermore, expansion promotes patient-centered, team-based community care. I note that these positive implications are connected and impact each other. Although the expansion of virtual care would increase primary health care accessibility for residents of rural NL, these positive implications are applicable for residents throughout the province.

### 5.1.1 Health Literacy

The World Health Organization (WHO) suggests that health literacy can support good health outcomes at a personal and community level. According to the WHO, health literacy implies achieving knowledge, personal skills and confidence to take action to improve health (World

Health Organization, 2022). Achieving a certain level of knowledge to improve health literacy means that patients have the opportunity to access educational opportunities. Health education, for the purpose of my argument in this section, refers to a means of enabling patients to obtain knowledge and understanding with respect to their health.

As discussed in 1.2, primary health care accessibility generally provides an opportunity for patients to learn about their health. By engaging with preventative measures, patients can gain knowledge and understanding that enables them to maintain their own health. As suggested in 3.3.2, expanding virtual care is essentially a method of ensuring accessible primary health care in areas experiencing geographical barriers impeding accessibility. Expansion would provide residents of rural NL with an opportunity to avail of patient health education through accessible primary health care. Accordingly, expanding virtual care can improve health literacy.

Furthermore, accessible digital health information can provide educational opportunities, as demonstrated throughout the COVID-19 pandemic. In 2021 Anthony Jnr Bokolo conducted a study which explored the adoption of virtual care for outpatients (Bokolo, 2021). The study recognized that virtual care has been beneficial beyond protection from exposure to COVID-19. Accessible digital information has enabled the general public to remain informed through accessible up-to-date information on real-world data (Bokolo, 2021). For instance, the WHO developed a public COVID-19 dashboard containing information on case numbers and recommended safety measures (World Health Organization, 2022). This exemplifies a real-world application of the benefits of accessible digital health information during the pandemic that educated the public.

Bokolo's 2021 study recognized that virtual care has the potential to continue to benefit the general public through enabling accessible digital information (Bokolo, 2021). Beyond the pandemic, accessible health information can support patients' knowledge and understanding with respect to

their own health. As discussed above, promoting knowledge and understanding supports an improvement in health literacy in a population. Increasing the accessibility of health information can be achieved through digital technology, as is discussed in the Health Accord final report. An objective of Action 10.2 is to connect people to the health care system through accessible digital health information (The Health Accord for Newfoundland and Labrador, 2022, pp. 143-146). This Action does not specify limiting access to rural NL. The intended provincial accessibility of digital health information implies that the benefit of patient health education with respect to health literacy is applicable throughout the province. As discussed in 1.4, this Action means that the Health Accord final report would support the adoption of virtual care as a complimentary service in the health care system provincially.

### 5.1.2 Patient Empowerment

Improving patients' knowledge and understanding with respect to their own health can contribute to their confidence and ability to take action to improve their health. According to the WHO, the accessibility of information, and patients' capacity to effectively use that information, are critical to patient empowerment (World Health Organization, 2022).

The WHO defines empowerment as the process of patients gaining greater control over decisions and actions which affect their health (World Health Organization, 2009). Accordingly, empowerment implies that patients obtain control over their own health through engagement and improved health literacy. As mentioned, Action 10.2 of the Health Accord final report supports this notion through an objective to empower people through access to digital health information (The Health Accord for Newfoundland and Labrador, 2022, pp. 143-146).

Health literacy provides the capability to better understand information provided by health care providers. Empowerment implies that patients are better equipped to communicate their world view and health values. These factors contribute to patient engagement with their own health, and health care team. A 2020 systematic review conducted on patient experiences with virtual care concurs with this view of the benefits of virtual care (Leonardsen, Hardeland, Helgesen, & Grøndahl, 2020). The researchers conducting the review determined that virtual care supports patient involvement in their own care plan, increasing their understanding of their own health. Due to collaboration with their health care team, patients experienced increased empowerment associated with independence and self-management of their health (Leonardsen, Hardeland, Helgesen, & Grøndahl, 2020). Through the increase in knowledge and understanding, improved health literacy promoted by virtual care enables patients to control factors impacting their own health, thereby further increasing empowerment.

Researchers involved with the 2020 systematic review discussed above also determined that by supporting patient involvement in their own care plan, virtual care promoted collaborative improvements in health outcomes (Leonardsen, Hardeland, Helgesen, & Grøndahl, 2020). Another study conducted in 2018 on patient experience with mobile health applications found that patient involvement in the decision-making process, and effective communication, contributed to improved health outcomes (Lu, et al., 2018). These studies demonstrate that improved health literacy contributes to better health outcomes by increasing patient empowerment, thereby enabling patients to be an active member of their care team. Improved health literacy is beneficial with respect to improved health outcomes, which I have suggested in 5.1.1.

In the absence of good health literacy, patients can still be capable of adequately communicating with health care providers. However, empowering patients enables them to take an active role in

their health care and to actively participate in conversations with their health care providers. If the provincial government can expand virtual care in the province, this would help improve communication between patients and health care providers, which would help residents who benefit from this expansion to embrace their own health. As a result, the government would be taking action to encourage well-being and to meet the obligations of the *Canada Health Act*.

In addition to enabling active participation, empowerment can promote a patient's ability to act intentionally, in accordance with their own world view and health values. As suggested by the WHO, empowerment implies that patients have control over decisions and actions which affect their health (World Health Organization, 2009). This view is consistent with the 2020 systematic review, discussed above, which found that empowerment contributed to patient independence and self-management (Leonardsen, Hardeland, Helgesen, & Grøndahl, 2020). Empowerment is required for a patients' ability to act autonomously. Autonomous decision makers are free to act in accordance with their self-chosen plan. However, they must act intentionally, with understanding, and without influence. (Beauchamp & Childress, 2019, p. 99). For instance, if an autonomous patient signs a consent form without ensuring their understanding, they have not acted autonomously. While a perfect level of understanding is not required, decision makers must adequately understand the action they are taking. (Beauchamp & Childress, 2019, p. 102). That adequate understanding is a condition of autonomous choice demonstrates the importance of communication between patients and providers. Additionally, if the ability of patients to adequately understand is improved by their own health literacy, then health literacy also assists in the ability to act autonomously.

In a collaborative environment, the patient is recognized as an active member of their own care team. This is inherently beneficial as it promotes patient-centered care. A 2021 literature review

assessing the application of various virtual care methods to support patient-centered care during the pandemic found that patient-centered care allows providers to treat patients based on their personal values (Tebeje & Klein, 2021). The researchers involved in the study determined that this focus on patient values is particularly relevant during synchronous appointments, such as phone calls or videoconferencing (Tebeje & Klein, 2021). Patient-centered care is a model that enables patients to communicate their world view and values to their health care providers. As an active member of the care team, patients are informed of their options, including associated benefits and risks. Patient-centered care requires and fosters a patient's autonomy and informed consent.

To summarize, increased health literacy effectively improves a patient's ability to consent by enabling a patient to better understand potential risks and benefits associated with an intervention. Health literacy also supports patient empowerment, enabling them to communicate decisions to health care providers and to ask questions, which further supports their ability to consent. Since the expansion of virtual care would contribute to health literacy and patient empowerment, this would be beneficial due to the inherent value of enabling patients to act autonomously (Beauchamp & Childress, 2019, pp. 104-105).

## 5.2 Benefits to the Health Care System

### 5.2.1 Professional Health Education

Expansion of virtual care offers the opportunity to further develop education for health professionals, in addition to health education for residents as discussed in 5.1.1. Bokolo's 2021 study which explored the adoption of virtual care for outpatients also demonstrated the benefit with respect to professional health education. The study found that adoption of virtual care during the COVID-19 pandemic has aided in training health care providers, particularly those who are newly

graduated (Bokolo, 2021). Although this study considered literature and data from the COVID-19 pandemic, Bokolo suggests that benefits of virtual care could continue after the pandemic.

Generally, virtual care encourages collaborative care teams which are beneficial for patient care, as discussed in 5.1.2. In addition, professional collaboration can contribute to professional health education for health care providers. The authors of a systematic review of virtual care use during the pandemic, published in 2021, describe a collaborative strategy combining medical education and virtual care employed in response to the pandemic. During supervised, free, virtual consultations with patients, medical students engaged in real life cases that allowed them to gain valuable knowledge and experience (Garfan, et al., 2021). In general, team-based care enables health care providers and medical learners to experience collaboration, which facilitates professional learning opportunities. The results of the collaboration described in this study by Garfan, et al. (2021) show the benefits of virtual care for professional health education.

Furthermore, expansion of virtual care helps ensure that learning opportunities are accessible. Consider the geographical barriers to accessible primary health care discussed in 2.2. Health care providers practicing in rural communities also experience the impact of geographical barriers on their professional educational development. Professional educational development opportunities typically occur where training facilities exist. In NL, they are generally held in St. John's. Providers in rural communities may not have the capability to travel to St. John's for education and training, due to time commitments or the burden of travel. Accordingly, expansion of virtual care can enable health care providers and medical learners to access learning opportunities, mitigating the impact of geographical barriers.

Expanding virtual care in rural NL is effective due to the encouragement of professional health education through collaborative, team-based care, and the potential to mitigate geographical

barriers to educational opportunities. Encouraging professional health education is beneficial for the health care system due to the capability to enable providers to experience learning opportunities that they otherwise would not. In 2021, the Health Accord task force conducted a Diversity and Inclusion Symposium Series. Multiple groups in attendance highlighted the lack of cultural and ethnic knowledge, as well as training in intersectionality, in the health care system (The Health Accord for Newfoundland and Labrador, 2022, p. 169). As I have argued in chapter 4, expanding virtual care in rural NL promotes attentiveness to the social determinants of health (SDH), including race and culture. Accordingly, virtual care can contribute to the knowledge and skills development of health care professionals and medical learners beyond the pandemic.

The benefit to the health care system is an increase in knowledge and development of skills for health care providers. There is an inherent good of increased knowledge, which is invaluable in health care. Increased knowledge promotes beneficence for patients. This knowledge contributes to a health care system which is better suited to promote good health outcomes for residents. Health care providers with educational opportunities that expand their understanding and skills are generally better equipped to provide quality care to their patients.

Professional health education opportunities enabled by virtual care have positive implications specific to medical learners. The CanMEDS framework, promoted by the Royal College of Physicians and Surgeons of Canada, identifies and describes abilities that physicians require to effectively meet patient needs. These abilities are grouped thematically under seven roles: Communicator, Collaborator, Leader, Health Advocate, Scholar, Professional, and Medical Expert (Royal College of Physicians and Surgeons of Canada, 2015). The CanMEDS roles articulate standards for medical learner education. The standards articulated by the CanMEDS roles provide a foundation for improving patient care. Increased professional health educational opportunities

can help medical learners to meet the standards described by the CanMEDS framework. In some situations, these standards can be easier met through expansion of virtual care, particularly because of the geographical challenges of rural health care.

Additionally, the professional health education opportunities promoted by an expansion of virtual care would support practicing physicians in meeting professional ethical obligations. The Canadian Medical Association (CMA) Code of Ethics and Professionalism articulates ethical obligations for medical professionals. In addition to demonstrating compassion through alleviating patient suffering, Canadian physicians have a commitment to the well-being of the patient (CMA Board of Directors, 2018). Through increased educational opportunities, an expansion of virtual care would contribute to beneficence for patients, which is a benefit for health care providers as well in that it enables them to meet their ethical and professional obligations.

### 5.2.2 Addressing the Doctor Shortage

Approximately 20% of residents of the province are without access to a GP, rising to 25% in rural communities, as discussed in 1.2 (Newfoundland and Labrador Medical Association, 2022). The doctor shortage contributes to inaccessible primary health care. As I have argued, the barriers to access are unjust and contrary to ethical obligations of the provincial government. Primary health care is necessary for good health outcomes. Additionally, the "supply" of GPs in a health care system correlates with the comprehensiveness of primary health care available, and consequently with the ability to improve health outcomes. Adequate delivery of primary health care is associated with sufficient government support (Starfield, Shi, & Macinko, 2005).

As acknowledged by Garfan, et al. (2021), during the pandemic virtual care has improved triaging capabilities which has increased efficiency and outreach while normal services were interrupted

(Garfan, et al., 2021). Beyond the pandemic, virtual care can continue to decrease wait times through virtual triage and improved accessibility (Bokolo, 2021). Increased accessibility of primary health care has the potential to relieve stress in other areas of the health care system, thereby benefiting the health care system as a whole.

The Health Accord final report supports this, recognizing that that virtual care can be an opportunity to extend the reach of practicing health care providers (The Health Accord for Newfoundland and Labrador, 2022, pp. 74-75). Enabling residents to access primary health care virtually means that the health care providers they interact with do not have to be located in their community. Accordingly, the increased primary health care accessibility associated with expansion of virtual care in rural NL could help address the provincial doctor shortage.

However, simply enabling residents to access primary health care virtually does not comprehensively address the provincial doctor shortage. Breaking down geographical barriers could have the potential to place significant responsibility on already overworked GPs in the province. As discussed in 1.2, the province experiences significantly high GP turnover ranging from 26%-56% in urban areas and upwards of 113% in rural areas (The Health Accord for Newfoundland and Labrador, 2022, p. 17). This exemplifies poor physician retention that could challenge the integration of virtual care into normal practice. As I have also suggested in 1.2, poor recruitment and high turnover contribute to the doctor shortage in the province. There are not enough physicians recruited to keep up with demand in the province (Newfoundland and Labrador Medical Association, 2019). Generally, recruitment and retention of new graduates is important to ensure continuity of care which is part of current best practices. Improved recruitment and retention would directly address the doctor shortage by increasing the number of physicians providing care in the province. Furthermore, this recruitment could assist the integration of virtual care into normal

practice, ensuring that there are physicians with the capacity to offer virtual primary health care to rural NL.

The provincial government has launched a new program designed to support, attract and retain GPs in the province by providing funding to alleviate associated financial burdens (Department of Health and Community Services, 2022). However, this program does not address all factors inhibiting recruitment and retention in the province. According to the Health Accord final report, there are serval factors responsible for recruitment and retention issues in NL. These include, but are not limited to, the geographical location of the province which contributes to challenges when practicing, training issues, and work life balance issues (The Health Accord for Newfoundland and Labrador, 2022, pp. 157-158). Among these, training issues can be addressed by virtual care. Through expansion of virtual care, the province can advance professional health education through collaborative, team-based care, and the potential to reduce geographical barriers impeding access to educational opportunities. The capability to provide care for patients not in a provider's community can introduce an opportunity to further a new physician's initial patient intake. As a result, new graduates can gain more initial experience, which is beneficial for their careers and empowering with respect to their competency as a health care provider. Additionally, this extended reach can reduce the challenges and burdens associated with practicing in rural and remote communities, particularly for new graduates.

Improvements to the health care system, such as the expansion of virtual care, can provide incentives for recruiting new graduates because improvements demonstrate that the provincial government is dedicated to meeting its obligations to citizens. By striving to improve the health care system, the provincial government could effectively establish an environment which is appealing to new graduates.

Furthermore, by addressing the doctor shortage through expansion of virtual care, the provincial government can help address physician burnout. As discussed in 1.2, the 2019 Vital Signs Report states that 36% of NL's physicians are dissatisfied with their work-life balance with 14% seeking work elsewhere in Canada (The Harris Centre Memorial University, 2019, p. 11). Burnout can further contribute to the doctor shortage while also discouraging new graduate recruitment, creating a cycle of poor work-life balance and inaccessible primary health care. Action 10.7 from the Health Accord final report recommends that the provincial government ensure that adequate numbers of health care providers are in place to provide stable care and provide work-life balance for health care employees (The Health Accord for Newfoundland and Labrador, 2022, pp. 157-159). Essentially, this Action implies that the doctor shortage must be addressed to reduce burnout. As a result, the cycle mentioned above can be broken, encouraging recruitment of new graduates in addition to retention of practicing physicians. The capability to reduce the burnout experienced by health care providers in the province would be beneficial due to the positive implications for the health care system. However, this also exemplifies a direct benefit for health care providers. Reducing burnout that results from the doctor shortage would be part of improving the well-being of health care providers.

### 5.2.3 Modernized Health Care Delivery

Virtual care has been vital during the COVID-19 pandemic, as discussed in 1.3. The acceptance, and capability, of virtual care technology has rapidly increased in health care systems. As recognized in 3.4, the use of virtual care has potential implications for future cost savings. Additionally, there are benefits for the health care system specifically.

Expanding virtual care in rural NL can leverage advancements that occurred due to the COVID-19 pandemic. Expansion can ensure that the province maintains a health care system which employs

modernized delivery methods. There are positive implications of modernization that benefit the health care system in NL. These benefits support the provincial government's obligation to expand virtual care in rural NL.

Primarily, it is positive to ensure that NL's health care system is relevant in terms of technology. Keeping NL's system relevant reduces the potential for residents to experience further disadvantages due to limitations in available services in the province, as discussed in 3.2.1.

Expansion of virtual care can ensure that health care in the province aligns with best practices in health care delivery. Promoting modernized health care is important because of the ever-evolving nature of technology that impacts delivery as well as the standard of care. Expansion of virtual care allows the province to enable health care providers to provide care through modernized delivery methods that meets the current standard of care, as discussed in 4.2.

Technological advancements in health care and digital technology are expected to continue to evolve. Consequently, the capabilities of virtual care will continue to evolve. Expansion of virtual care sets a foundation for future applications and advancements in the province. This foundation could promote sustainable development and improvements for virtual care in the future. This is beneficial with respect to avoiding transitional periods. The result would be continuous progression of technological development rather than requiring the health care system, and providers, to adjust to rapid changes in policy and technology.

Continuity and sustainability are beneficial for health care providers in that they reduce stress associated with rapid integration of technology and uncertainty with respect to policy and best practices. The provincial government would thus enable a sustainable means of promoting the well-being of their citizens, including health care providers.

## 5.3 Associated Benefits for the Provincial Government

The provincial government can be expected to also experience benefits from the expansion of virtual care. These benefits generally help enable the provincial government to effectively meet its own goals, in addition to its obligations to residents.

Although not directly issued by the provincial government, the Health Accord task force was created by the provincial government to make recommendations for an improved health care system, as discussed in 1.4. In general, maintaining a modernized health care system through expansion of virtual care in rural NL enables the provincial government to meet some of its goals from the Health Accord final report. The positive implications of the expansion of virtual care discussed throughout 5.1 and 5.2 align with several Actions from the Health Accord final report.

Expanding virtual care promotes the objectives of Action 9.2 of the Health Accord final report. In particular, an objective of this Action suggests that community care teams should be created to serve residents on a population basis. Specifically, these care teams are meant to be allocated to communities with 7,000 - 8,000 and upwards, while isolated communities require special arrangements (The Health Accord for Newfoundland and Labrador, 2022, p. 102). Expansion of virtual care directly addresses this by contributing to such special arrangements for remote communities. Through expansion, residents of these areas can have access to beneficial community care teams from within their communities. As a result, residents of rural NL would experience the benefits of team-based, patient-centered community care teams at a level that is comparable to residents of urban NL.

Chapter 10 of the Health Accord final report recognizes digital technology as a pathway to improving health. Action 10.1 specifically aims to modernize foundational digital technology systems. This report also acknowledges the associated benefit for provider retention and health

outcomes through patient empowerment that could be furthered through improved virtual access (The Health Accord for Newfoundland and Labrador, 2022, pp. 141-143). Although virtual care is not specifically referenced in Action 10.1, the goal of modernizing the technology of NL's health care system is applicable to expansion.

Action 10.11 of the Health Accord final repor addresses educational development and delivery initiatives for health care providers. An objective of this Action is to enable health care providers to work collaboratively in interdisciplinary teams (The Health Accord for Newfoundland and Labrador, 2022, pp. 169-171). Additionally, Action 9.1 articulates that every resident in the province should have access to a community care team (The Health Accord for Newfoundland and Labrador, 2022, pp. 101-104). Expansion of virtual care promotes the objectives of these Actions by enabling collaboration across the health care system, as I have discussed in 5.2.1.

The provincial Department of Health and Community Services (DHCS) framework also aims to attach individuals and families to a collaborative primary health care team through Goal 2 of the framework (Department of Health and Community Services, 2018, pp. 25-29). Goal 2.2 addresses the benefits of collaboration in health care. This goal acknowledges that a variety of health care providers working collaboratively maximizes efficiency, and thus the framework aims to expand access to primary health care teams. An objective of the DHCS framework is to improve the use of technology for virtual access for such teams (Department of Health and Community Services, 2018, p. 27). Additionally, Goal 3.2 aims to involve patients and their families as partners in decisions which impact their health and well-being (Department of Health and Community Services, 2018, p. 31). Encouraging patient-centered care through an expansion of virtual care promotes the involvement of patients in their care team.

In summary, expansion of virtual care could help enable the provincial government reduce burnout and increase work-life balance for health care providers. By leveraging expansion of virtual care to directly address the doctor shortage the provincial government could partially address Action 10.7 of the Health Accord final report. The expansion of virtual care and its implications could help the provincial government realize its own goals articulated by the Health Accord final report and the provincial DHCS 2018 framework. These goals are with respect to integrating patient-centered, collaborative primary health care teams into the health care system. Expansion of virtual care also enables attaching residents of rural NL to collaborative primary health care teams.

# Chapter 6: Conclusion

I will now return to the central focus of this research: whether the government of NL has an ethical obligation to expand virtual care in rural NL. I have maintained that there is an ethical obligation for the provincial government to expand virtual care in rural NL. Primarily, my argument has been in favour of expansion due to the capability to increase primary health care accessibility in rural NL by mitigating unjust geographical barriers.

Currently, the province is experiencing a doctor shortage which has impeded many residents throughout the province from seeking appropriate levels of care. Rural areas are particularly underserved, with an unequal distribution of services creating geographical barriers to accessible primary health care. Based on evidence and ethical theory, expanding virtual care is preferable to the current level of available services. The COVID-19 pandemic has necessitated the use of virtual care for primary health care, extending the use of virtual care. Prior to the pandemic, virtual care was typically only used for specialist services. My argument in favour of an ethical obligation to expand virtual care in rural NL has intended for expansion to complement existing services through employment of videoconferencing, for instance, for primary health care appointments.

I have presented two arguments supporting the ethical obligation of the provincial government to expand virtual care in rural NL. These are an argument that draws upon the idea that there is a right to health care, and an argument that invokes the bioethical principle of justice. Geographical barriers experienced in rural NL are contrary to the ethical obligation of the provincial government to ensure access to primary health care and are unjust. Expansion of virtual care could assist the provincial government in reducing unjust geographical barriers, thereby promoting access to primary health care in rural NL.

The provincial government has an obligation to reduce health care spending, encouraging consistency with other Canadian averages. However, I have argued against the notion that economic constraints outweigh the obligation to expand virtual care in rural NL. Expansion of virtual care is an investment in primary health care, which is effective in improving health outcomes as a preventative measure, thereby encouraging consistency that aligns with the *Canada Health Act*. Expansion of virtual care in rural NL has the potential to contribute to long term economic sustainability in NL through promotion of cost-effective preventative measures, improving health outcomes and consequentially reducing strain elsewhere in the system.

Although there are potential negative implications that may contribute to objections to my position, I have argued that these potential negative implications do not outweigh the obligation to expand virtual care in rural NL. Disproportionate implementation could lead to unequal accessibility of virtual primary health care for areas with need but who are not given priority. However I argue that disproportionate implementation promotes justice due to the prioritization of locations with the greatest need. This is particularly relevant when considering that the many rural communities with the greatest need are Indigenous communities. There is an issue if individuals who receive virtual primary health care receive substandard care. However, substandard virtual care would not be defensible to employ anywhere. Virtual specialist care in NL, as well as global use during the COVID-19 pandemic, provides evidence that the quality of virtual care is comparable to traditional care delivery. Concerning data security and protection, expansion implies an increase in digital technology use, that could result in an increase in security vulnerability and geographical barriers for rural NL in the event of another cyber breach. Security risks do not outweigh the benefit of expanding virtual care in rural NL to improve primary health care accessibility because the *Personal Health Information Act* (*PHIA*) obligates the management of risk rather than elimination.

Furthermore, the rural NL would not be disproportionately impacted by service disruption during a total system shutdown.

I have described several positive implications of the expansion of virtual care in rural NL for residents and the health care system. These benefits demonstrate the extended value of expansion and are part of the argument in favour of the obligation to expand virtual care in rural NL. Benefits to residents introduced by expansion includes improvement of health literacy for patients, as well as an opportunity for empowerment. The result is promotion of patient-centred care that encourages improved health outcomes. Benefits to the health care system include the opportunity to further develop education for health professionals, an opportunity to address the provincial doctor shortage, and a modernized health care system. The expansion of virtual primary care could also benefit the provincial government, primarily through support for meeting the goals of the provincial Department of Health and Community Services (DHCS) 2018 framework and the Health Accord final report.

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