Relational Continuity: A Concept Analysis

Andres, Cheryl E.

http://hdl.handle.net/11023/2813

master thesis

University of Calgary graduate students retain copyright ownership and moral rights for their thesis. You may use this material in any way that is permitted by the Copyright Act or through licensing that has been assigned to the document. For uses that are not allowable under copyright legislation or licensing, you are required to seek permission.

Downloaded from PRISM: https://prism.ucalgary.ca
Abstract

Purpose
This study explores the concept of relational continuity within the context of primary care.

Methods
Rodgers’ Evolutionary View of Concept Analysis was employed to identify attributes, antecedents, and consequences of relational continuity.

Results
The attributes of relational continuity include an individual longitudinal connection with a primary care provider and team that is therapeutic in nature; responsive, co-constructed, whole person focused, and has an undergirding that connects care over time. It builds trust through mutual investment and shared accountability between provider, patient and team.

Conclusions
A comprehensive understanding of relational continuity in the context of primary care is presented as an outcome of this concept analysis. It is recommended that further inquiry in this area focus on the development of theory and valid measures to accurately evaluate relational continuity in primary health care.

Key Words: continuity, relational, concept analysis
Acknowledgements

I would like to acknowledge and thank my supervisors Dr. J.C. Herbert Emery, PhD Economics and Dr. James Dickinson, MD, PhD as well as my supervisory committee members Dr. Shannon Spenceley, PhD Nursing and Dr. Doug Myhre, MD for their continued support and contributions to my thesis. I could not have completed it without them.

I would also like to thank the nine primary care sites and thirty providers and leaders across Alberta for volunteering their time, experience and expertise to this work.
Dedication

I would like to dedicate this thesis to my family; my husband Craig, and my three children Brett, Cameron and Madi. Thank you for your time, encouragement and support in the four years it’s taken me to complete this masters’. You have been so great about picking up what I have had to give up in work at home to complete this endeavor. To Janet Lapins for all the meals you cooked to help me through the weeks of classes. Also, for your ongoing willingness to review my work and encourage my direction - thank you. For all my friends, colleagues and extended family and your constant cheerleading!
# Table of Contents

Abstract .................................................................................................................................................. ii
Acknowledgements ............................................................................................................................. iii
Dedication ............................................................................................................................................... iv
Table of Contents ................................................................................................................................. v
List of Tables ........................................................................................................................................... vii
List of Figures and Illustrations ............................................................................................................. viii
Chapter One: Introduction and Purpose of the Study ................................................................. 1
  Introduction .......................................................................................................................................... 3
  Purpose of the Study ............................................................................................................................... 8
Chapter Two: Background to the Study ............................................................................................. 9
  Evolution of Relational Continuity ...................................................................................................... 9
      Evolution of Family Medicine and the Current Healthcare System ............................................... 9
      Deficiencies in the Current Healthcare System ............................................................................. 12
      Evolution to a Future Primary Health Care System ..................................................................... 15
  Evidence: Relational Continuity ......................................................................................................... 20
      Primary Studies on Relational Continuity and Improved Outcomes ........................................... 32
      Relational Continuity and Health Care Costs ............................................................................... 35
      Relational Continuity and Chronic Disease .................................................................................. 37
      Evidence of Potential Downsides of Relational Continuity ......................................................... 39
Chapter Three: Research Paradigm and Approach ....................................................................... 42
  Methodology ....................................................................................................................................... 42
  Questions ............................................................................................................................................. 44
  Methods ............................................................................................................................................. 44
  Concept of Interest and Associated Expressions .............................................................................. 46
  Data Collection ................................................................................................................................... 50
      Realm for Data Collection - Choosing the Setting and the Sample ............................................. 50
      Literature Search Parameters ......................................................................................................... 50
  Data Analysis ...................................................................................................................................... 52
      Data Extraction and Data Display ..................................................................................................... 52
      Rigour .............................................................................................................................................. 56
      Case Study Development ................................................................................................................ 57
Chapter Four: Results ............................................................................................................................ 58
  Attributes of Relational Continuity .................................................................................................... 58
  Antecedents of Relational Continuity ................................................................................................. 63
  Possible Consequences of Relational Continuity ............................................................................ 67
      Possible Positive Consequences of Relational Continuity .......................................................... 67
      Possible Negative Consequences of Relational Continuity ......................................................... 72
  Summary of Results ............................................................................................................................ 74
Chapter Five: Discussion of the Results ......................................................................................... 77
  Access to Continuity ............................................................................................................................. 77
  Whole Person Individual Care, Teamwork and Accountability ...................................................... 82
Mutual Investment, Time, Choice and Shared Accountability ......................... 84
Relational Continuity, Management Continuity and Informational Continuity ..... 86
Payment .............................................................................................................. 90
Measuring Relational Continuity ................................................................... 92
Conclusion ......................................................................................................... 95
Chapter Six: Limitations of the Study .......................................................... 98
Chapter Seven: Future Implications of the Study ......................................... 100
Works Cited ..................................................................................................... 108
Appendix One: Literature Reviewed .............................................................. 118
Appendix Two: Findings from Visits with Experienced Providers ............... 143
Appendix Three: Model Case Study ............................................................... 159
Appendix Four: Attributes of Relational Continuity .................................... 170
Appendix Five: Antecedents of Relational Continuity .................................. 172
List of Tables

Table 1: Longitudinal or Chronological Measures .......................................................... 22
Table 2: Associated Expressions of Relational Continuity.............................................. 48
Table 3: Database Searches for Literature Review: Conducted Between March - May 2014 ..... 53
List of Figures and Illustrations

Figure 1: Search Decision Tree .............................................................................. 54
Figure 2: Word Query .............................................................................................. 55
Figure 3: Relationship Continuity Visual ................................................................. 76
Chapter One: Introduction and Purpose of the Study

Healthcare providers, policy makers, and patients/families are concerned with the fragmentation of care in Alberta’s publicly funded Medicare system and the possible results of such fragmentation on patient outcomes at a time when the rising impact of chronic conditions is challenging an already resource constrained medical treatment system. In Alberta, and the other nine provincial health care systems, public payment for healthcare services has focused the systems on medical treatment provided by doctors and/or in hospitals organized to meet needs that are acute and episodic. While this system may have made sense for the needs of the Canadian population in the last century, the needs of Canadians with chronic conditions such as cardiovascular disease, diabetes, cancer and mental illness and addiction are not sufficiently addressed under the status quo of Medicare. Care organized on the basis of treating contacts with the system as one off and limited in duration are far from what has been identified as the ideal approach for chronic conditions. Whereas the center of healthcare in the past has been the hospital; the evidence today points to the need for high performing health care systems to focus on primary care (Atun, 2004; Macinko, Starfield, & Shi, 2003; Starfield, 1991).

Primary Care is “that level of a health service system that provides entry into the system for all new needs and problems, provides person-focused (not disease-oriented) care over time, provides care for all but very uncommon or unusual conditions, and coordinates or integrates care provided elsewhere by others” (Starfield, 1998, pp. 8-9).

For Greg Price, who died at age 31 in 2012 of testicular cancer and whose case is chronicled in a recent Health Quality Council of Alberta (HQCA) report “Continuity of Patient Care Study” (Health Quality Council of Alberta, 2013) the fragmentation of care in the Alberta
medical treatment system was fatal. His case is not unique. The HQCA described how Greg was young and not in need of much healthcare support prior to his signs and symptoms and resulting diagnosis of testicular cancer. Therefore, he did not have a regular primary care provider or team. Each time Greg visited a primary care clinic regarding his diagnosis of testicular cancer his care was treated as episodic. This included being seen by different providers at each visit. This occurred despite the fact that he had an identified condition that was going to require a series of treatments, including surgery before the outcome of curing his cancer would be achieved. But each provider behaved as if their responsibility started when Greg walked in their door and ended when he left. Information from one visit to the next was not even considered in the visit each provider supported.

Greg Price’s story is of an Albertan who fell through the cracks. It shows the high costs to patients when there is no continuity of care provided to ensure the best possible outcome is reached. Each of Greg’s providers assumed the next provider or service would be there to pick up any next steps required by Greg or assumed that Greg would know what to do if things were missed. They were wrong. There were no checks and balances in the system to ensure continuity of care occurred. No one took responsibility to ensure continuity of care occurred and that an outcome driven path was followed.

Although there is clear recognition that continuity of care is needed in the publicly funded health care system to reduce the high costs of fragmented care, implementation of a better way to deliver care is hampered by a lack of agreement on an appropriate and clear definition of continuity of care. This subsequently hampers efforts to implement and measure continuity, and guide reforms to the organization of primary care in Alberta and the other Canadian provinces. To address this critical shortcoming, my purpose in this study is to gain a conceptual
understanding of relational continuity in today’s context of primary care and how it has evolved within the context of continuity of care as a whole. I will accomplish this through a concept analysis of relational continuity. A concept is “a mental image of a phenomenon, an idea, or a construct in the mind about a thing or an action. It is not the thing or action, only the image of it” (Walker & Avant, 2011, p. 59). A concept analysis is an approach to clarifying a concept and understanding its attributes (Rodgers & Knafl, 2000). My intent is to then take that understanding and begin to outline future implications for such work.

In Chapter One I discuss the issues around continuity in healthcare and why a concept analysis of relational continuity is important. In Chapter Two I provide a background to the evolution of and evidence around relational continuity to help set the stage for the purpose of the study. In Chapter Three I will explain my methodological approach and outline the methods used in my concept analysis of relational continuity and speak to my data analysis. The results will be revealed in Chapter Four, and in Chapter Five I provide a discussion of the findings. In Chapter Six I will speak to the limitations of my study and finally in Chapter Seven, I will speak to future implications for my work.

Introduction

In this chapter I will introduce the issues around continuity in health care and why a concept analysis of relational continuity in primary care is important in addressing these issues and supporting patients such as Greg Price.

Barbara Starfield’s work in primary care has been significant over the years and identifies key characteristics of primary care delivery that contribute to better health results relative to costs. These include: the focus on the person and overall health rather than the management of a specific disease; the first contact or gate-keeping role of primary care; comprehensiveness of
care and the ability of the family physician to access a range of health services over a patient’s lifetime; care-coordination by linking or integrating primary and secondary care to improve quality; and continuity of care and the long-term relationship with the primary care provider or relational continuity (Kringos, Boerma, Hutchinson, van der Zee, & Groenewegen, 2010; Starfield, 1998). Starfield identified over forty years ago that the lack of a commonly accepted and operational definition for continuity, along with appropriate measures was hampering any way of conceptualizing, operationalizing, and measuring continuity. This lack of definition has also hampered efforts to measure its contribution to care (Reid, Haggerty, & McKendry, 2002).

In addition, many terms have been added and used interchangeably with continuity over the years including: ‘case management’, ‘coordination of care’, ‘continuum of care’, ‘continuing care’, and ‘seamless care’. The overlap between continuity of care and these terms is not exact and the terms, within themselves, are often vague. Although continuity has not been explicitly defined in the literature, its value has often been treated as self-evident. Unless and until there is a clearer understanding of the mechanisms through which care delivered over time improves or harms outcomes, continuity-focused interventions may be misdirected or inappropriately evaluated. Definitions of continuity are often assumed rather than stated and it is not possible to measure what is not clearly defined.

Since at least 1933, continuity of care has been discussed in the literature from varying perspectives. In 2002, a team of Canadian authors (Reid et al., 2002) explored the concept of continuity from a number of different viewpoints. They examined how continuity was conceived in primary care, nursing care, mental health, and care for specific conditions. Although they found that continuity of care was conceived differently in these four key areas of health care disciplines they did find common themes that extended across disciplines. They did so through
exploration of the literature and through a consultation workshop with researchers, content experts, and Canadian policy-makers. They defined three types of continuity: informational, relational, and management. Two central elements formed the base to understanding these three types. It was posited that continuity could only exist as an aspect of care that is: 1) experienced by an individual; and 2) received over time. The three types of continuity defined by Reid (2002) were:

1. **Informational continuity**: information on prior events is used to give care that is appropriate to the patient's current circumstance;

2. **Relational continuity**: based on the importance of knowledge of the patient as a person; an ongoing relationship between patients and providers is the undergirding that connects care over time and bridges discontinuous events;

3. **Management continuity**: coherently connecting the care received from different providers. Management continuity was understood to be focused on specific, often chronic, health problems.

Since Reid’s definition was developed it has been largely adopted internationally within the world of healthcare research (Freeman, Olesen, & Hjortdahl, 2003).

Reid (2002) discussed informational, relational, and management continuity as separate types of continuity with important attributes and measures but also saw them as intertwined in practice, formulating continuity of care as a whole. So although these terms were not seen as completely separate or distinct, Reid (2002) believed that specifying the type of continuity encouraged clearer understanding of the concept and more focused research and relevant measurement. Only a limited number of measures existed and these measures were indirect and built on untested assumptions about associations with the underlying concepts of continuity.
most commonly used tools tended to focus on chronological or longitudinal aspects of care (Reid et al., 2002). For example, chronological or longitudinal measures restrict measurement to physician care over time, do not account for care from others, and are an insufficient measure of continuity as a whole construct when used alone. Chronological or longitudinal measures definitely fall short in the measurement of relational continuity, which many believe is the heart of continuity in practice (Freeman et al., 2003; Guthrie, Sultz, Freeman, & Haggerty, 2008). Their use was based on the assumption that enduring or repeated contact with a single provider is linked with stronger relationships, better information transfer and uptake, and more consistent management but there has been little evidence for these assumptions (Reid et al., 2002). However, seeing the same provider over time does not necessarily produce a trusting and committed relationship (Freeman et al., 2007).

The measurement of the patient perspective on continuity has also been important but limited and inconsistent. Besides asking the patient what their perspective is and if ongoing relationships exist; researchers have inquired directly about the strength of the interpersonal relationships including levels of trust, communication, comfort, overall knowledge, and how well patients know their providers or vice versa using a variety of tools available. These have included the Primary Care Assessment Tool (PCAT), the Perception of Continuity Scale, the Primary Care Assessment Survey, and the Components of Primary Care index as a few examples (Reid et al., 2002). Measures of Management Plan Continuity have been used in some situations to measure if the plan of care is sequenced appropriately (Reid et al., 2002). Such measures have looked at prescribed follow up and consistency of care across providers for example.

Reid and the workshop participants were unable to clearly recommend particular measures of continuity of care as they had hoped (Reid et al., 2002). Instead there was strong
agreement that new measures are needed and the role of existing measures must be clarified in order for the concepts of continuity to be measured accurately (Reid et al., 2002). As a result, studying continuity of care as a whole construct has not been very successful to date. There is a need to study the linkages and relationships between the multiple constituent concepts and attributes that make up the construct as a whole (Reid et al., 2002).

Sparbel (Sparbel & Anderson, 2000a, 2000b) completed a qualitative, integrated literature review that found no consensus on a conceptual definition of continuity of care and identified continuity of care as a construct with many related concepts in need of more sophisticated review. According to Sparbel (Sparbel & Anderson, 2000b) priority should be given to the development of conceptual definitions and frameworks associated with the overall construct of ‘continuity of care’. This is understood to be essential for conceptual understanding and communication of findings (Sparbel & Anderson, 2000b). Relational continuity, as described by Reid et al, is one such concept within this construct (Reid et al., 2002). It is also, arguably, the most important and least understood concept within the construct (Freeman & Hughes, 2010; Kringos et al., 2010; Starfield, 1998).

As a researcher, analyst and leader in the area of chronic disease and primary health care reform in Alberta, I also have particular concerns about the limited progress to date around developing relational continuity in primary care. If relationship as a concept within the construct of continuity of care is believed to be crucial to understanding and building all other attributes of high performing primary care, then it is also crucial that we understand this concept more clearly. Despite its apparent contribution to high value primary care delivery (Kringos et al., 2010; Starfield, 1998), relational continuity is a term that is used and defined in inconsistent ways, and not generally well understood. Access to primary care remains the priority focus
within the province and where relational continuity has begun to be broached is simply around attachment of patients to physicians within the Primary Care Network-Evolution initiative (Alberta Medical Association Primary Care Alliance Board, 2013), where the terminology used is “attachment” and “panel” from a physician perspective, and is purely longitudinal in focus. There is little emphasis placed on the patient role, the team or the interpersonal aspects of relational continuity. As a matter of fact, the term relational continuity and/or its intersection with informational and management continuity is nonexistent in the work or discussion to date. Arguably, relational continuity is the most difficult of the three definitions within continuity of care to understand or to measure. Relational continuity includes the least concrete more personalized aspects or attributes of continuity of care, whereas management and informational continuity are more concrete concepts and therefore easier to understand and measure.

Although the concept of relational continuity has been described as an essential element in primary care (Freeman et al., 2003), it is poorly understood and consequently difficult to put into practice. Further, an understanding of how the thinking has evolved around relational continuity is needed to ensure currency, relevance and applicability to the dynamic primary health care context.

*Purpose of the Study*

My purpose in this study is to gain a conceptual understanding of relational continuity in today’s context of primary care and how it has evolved within the context of continuity of care as a whole.
Chapter Two: Background to the Study

In this chapter I will discuss the evolution of relational continuity and why it is important to conceptualize. This will include describing the background, history and evidence of relational continuity to support why it is worth enhancing the understanding of the concept.

In order to understand the evolution of relational continuity as a concept it is important to first understand the evolution of family medicine and the current healthcare system. The Canadian healthcare system has been physician centric; and hence, understanding the progression of family medicine as a discipline leads well into an understanding of the evolution of relational continuity within other disciplines, the present health care system and the system that we are globally trying to evolve to; a primary health care system.

Evolution of Relational Continuity

Evolution of Family Medicine and the Current Healthcare System

Not unlike the history in countries such as Britain, physicians established themselves in the early nineteenth century as the scientists of medicine in Canada setting the stage for “a solo fee for service model, focused on individual cure and practiced by an elite circle of men” (Coburn, Torrance, & Kaufert, 1983, p. 414). This dominance was augmented further with legislation in the mid1920s that reduced the power of pharmacists, chiropractors, and nurses (Coburn, 1988a; Coburn, 1988b; Coburn & Biggs, 1986; Coburn et al., 1983) when physicians were concerned about such things as the separation of diagnosis from dispensing and the impact of whole person care for the patient. Visions of the country physician, practicing solo and looking after all the needs of their patients in practices close to home are brought to mind. These visions were the reality of family physician practice and the predominant form of care into the
1960s (Coburn et al., 1983). Patients directly paid their physicians for their care if they could afford it. Most health needs were for injury, acute infection and illness. Economic necessity resulted in most physicians in family practice taking care of families and their members in their homes from birth to death. Even when technological change focused more on providing care in hospital settings family physicians were able to continue to be involved in care. The patient also privately paid for any hospitalization and many individual Canadians had difficulty affording care.

Through the 1940s to the 1960s medical dominance became institutionalized in Canada, leading to political, economic and clinical autonomy (Coburn et al., 1983). In February 1942 Dr. John J. Heagerty was named chair of a Federal Health Advisory Committee on Health Insurance. In the commission’s hearings the concept that family physicians should be focusing on health promotion and prevention, basically playing the role of the family and community’s officer of public health, was expressed by the Canadian Medical Association (Naylor, 1986). Heagerty was unsuccessful in achieving the goal of providing federal funding for preventative and curative services, largely because of opposition from farmers and labour groups who believed that too much power had been given to medical practitioners in the provincial health commissions (Canadian Museum of History, 2015).

In 1944 Tommy Douglas was elected Premier of Saskatchewan and his socialist Cooperative Commonwealth Federation government set the course for the future of Medicare. Though Tommy Douglas attempted to have physicians in Saskatchewan work as salaried providers in community sponsored clinics, the end result of this conflict was an accommodation between Canada and organized medicine: the government assumed the role of financing medical care insurance, while physicians retained control over the payment model, content and delivery
of medical practice (Naylor, 1986; Taylor, 1987). By 1961, agreements were in place with all provinces so that Canadians had financial access to acute hospital care and laboratory and radiological diagnostic services.

The introduction of a provincial medical care plan in Saskatchewan in 1946 was a critical juncture that changed the financing of the system and reinforced the dominant model of solo physician practice and fee for service payments in medical care. The introduction of the provincial medical care plan in Saskatchewan ultimately led to a universally funded system at the federal level and a publicly administered system at the provincial level – a landscape that differentiates Canada around the world. The trade-offs made to achieve it also structured the institutions and power relationships between Canada and organized medicine in such a way that any future attempts to change financing and the delivery of care in primary care have been difficult to achieve (Aggarwal, 2009).

In 1954 the College of General Practice of Canada was founded. It was dedicated to the work of promoting general practice education and research. The College was renamed and redefined in 1967 as the College of Family Physicians of Canada; recognizing the new discipline of family medicine (Aggarwal, 2009). This was a political move to separate a “better model” from the old general practitioner trained mainly for in hospital medicine in a rotating internship. The introduction of other disciplines and medical specialties throughout the 1960s led to competing interests and pressures in healthcare.

In 1978 the International Conference on Primary Health Care in Alma-Ata produced the Declaration on Primary Health Care. The first section of the Declaration reaffirmed the World Health Organization’s (WHO) definition of health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (Huber et al., 2011). The
definition sought to include social and economic sectors within the scope of attaining health and reaffirms health as a human right. The Declaration expressed the need for urgent action by all governments, all health and development workers, and the world community to protect and promote the health of all people. It was the first international declaration underlining the importance of primary health care (World Health Organization, 1978).

In 1981 the Canadian Medical Association called for a national review of family practice training and in 1986 the College broadened the content and context of learning by implementing “The Four Principles of Family Medicine” (College of Family Physicians of Canada, 2015). These four principles are:

1. Doctor-patient relationship is central to the role of the family physician;
2. Family physician is a skilled clinician;
3. Family medicine is community based; and
4. Family physician is a resource to a defined practice.

These four principles are now included in the CanMed Family Medicine expected competencies (Ref).

**Deficiencies in the Current Healthcare System**

Changes to the healthcare system since the mid-1960s have created disincentives for family physicians to provide comprehensive care to their patients. These disincentives emerged as the new Medicare system controlled hospital care in the 1960s and grew as the healthcare system looked for ways to improve outcomes for patients in hospital care in order to reduce length of stay and improve efficiency of care—attempts to do these things led reformers to suggest more focused provision of care by specialists such as obstetricians and hospitalists instead of by generalists (Yousefi & Maslowski, 2013). This specialty focus also led to family
physicians choosing, or being forced, to forgo aspects of comprehensive care for their patients, like delivering babies, or following patients care while in hospital or in continuing care settings. Fees did not provide enough incentive for family physicians to provide these comprehensive services to their patients and often doing so also meant covering for other primary care physicians on weekends, after hours, or when they were on vacation. Giving up some of these aspects of care meant better life balance for the family physician and perhaps more likelihood that physicians would choose primary care practice (Yousefi & Maslowski, 2013). Patients, as a result, could no longer count on their physicians to provide comprehensive care in all situations or settings and hence they learned to seek help where they could best access it. Patients also assumed their encounters with the healthcare system and varying providers was being connected through communication and information sharing. Services also began to vanish in rural settings and more specialty care was made available in larger urban centers. Family physicians also gravitated to urban centers to provide care; leading to a number of financial incentive programs trying to attract family physicians to rural locations across Canada where the public required care and was having difficult accessing it (Alberta Rural Physician Action Plan, 1992; Canadian Association of Staff Physician Recruiters, 2015). Perhaps counter-intuitively, more continuity was maintained in rural locations where fewer options were available to providers and individuals accessing the system. This was true at least where rural communities were able to recruit and retain family physicians.

On September 11, 2000, the team of Canadian Provincial and Federal Health Care Ministers agreed that improvements to primary health care were crucial to the renewal of health services and highlighted the importance of multi-disciplinary teams. In response to this agreement, the Government of Canada established a Primary Health Care Transition Fund.
Over a six-year period (2000-2006), the PHCTF supported provinces and territories in their efforts to reform the primary health care system. Specifically, it provided support for the transitional costs associated with introducing new approaches to primary health care delivery (Government of Canada, 2007). The five common objectives of the PHCTF were:

1. to increase the proportion of the population with access to primary health care organizations which are accountable for the planned provision of comprehensive services to a defined population;
2. to increase the emphasis on health promotion, disease and injury prevention, and chronic disease management;
3. to expand 24/7 access to essential services;
4. to establish multi-disciplinary teams, so that the most appropriate care is provided by the most appropriate provider; and
5. to facilitate coordination with other health services (such as specialists and hospitals) (Government of Canada, 2007).

In 2003 the WHO recognized that while the global disease burden had been shifting towards chronic conditions, health systems had not evolved to meet this changing demand (World Health Organization, 2003). Healthcare remained fragmented, focused on acute and emergent symptoms, and was often provided without the benefit of complete medical information. The report recognized the Chronic Care Model (CCM) and work done by Wagner (Wagner, Austin, & Von Korff, 1996) in improving system care for the prevention and management of chronic conditions. By definition, chronic conditions are “conditions that require
a complex response over an extended time period that involves coordinated inputs from a wide range of health professionals and access to essential medicines and monitoring systems, all of which need to be optimally embedded within a system that promotes patient empowerment” (Nolte & McKee, 2008, p. 1).

Wagner et al (1996) developed the CCM to bridge the gap and translate knowledge between evidence-based chronic care and actual care practices. Deficiencies in chronic care that were occurring at the time included:

- Rushed practitioners not following established practice guidelines;
- Lack of care coordination;
- Lack of active follow-up to ensure the best outcomes;
- Patients inadequately educated and supported to manage their illnesses.

Wagner and his colleagues anchored the CCM in primary care, and conceptualized care as activities carried out by prepared, proactive practice teams in productive interactions with informed, activated patients and communities. They posited six interrelated elements that were key to high quality chronic disease care: self-management support; redesigning delivery systems; decision support that is system wide; clinical information technology; linkages to community resources; and health care system organization. The components were conceptualized as interrelated and supportive of organizational change at the systems’ level as well as evidence-based care in relationship with patients living with chronic conditions (Kadu & Stolee, 2015).

**Evolution to a Future Primary Health Care System**

In 2008, the WHO reconfirmed the Alma-Ata Declaration in its publication “Primary Health Care; Now More than Ever”. The WHO expressed support for:
• **Universal coverage reforms:** Reforms that ensure that health systems contribute to health equity, social justice and the end of exclusion, primarily by moving towards universal access and social health protection;

• **Service delivery reforms:** Reforms that reorganize health services as primary care, i.e. around people’s needs and expectations, so as to make them more socially relevant and more responsive to the changing world while producing better outcomes;

• **Public policy reforms:** Reforms that secure healthier communities, by integrating public health actions with primary care and by pursuing healthy public policies across sectors;

• **Leadership reforms:** Reforms that replace disproportionate reliance on command and control on one hand, and laissez-faire disengagement of the state on the other, by the inclusive, participatory, negotiation-based leadership required by the complexity of contemporary health systems (World Health Organization, 2008, p. xvi).

The WHO recognized that the global shift towards chronic health problems requiring ongoing care was occurring more rapidly than experts previously expected. In the report, it was also recognized that existing systems of care were unable to support the integrated and comprehensive service needs of those with chronic illness. The WHO called for service delivery reforms aimed at transforming conventional health-care delivery towards primary care, and optimizing the contribution of health services. The WHO called for local health systems, health-care networks and health districts to improve health and equity while responding to the growing expectations to put “people at the centre of health care, and harmonize mind and body, people and systems” (World Health Organization, 2008, p. xvii). The WHO further asserted that there was an increasingly urgent need to evolve from a ‘find it and fix it’ health care system towards one that provided proactive, comprehensive and coordinated care, especially to meet the long
term needs of people living with chronic conditions. This was seen as the essence of a shift to an improved primary health care system (World Health Organization, 2008).

According to the WHO, essential features of a health delivery system redesigned to fulfill the promise of primary health care and improve health and social outcomes include: person-centeredness, comprehensiveness, integration, and continuity of care with a regular point of entry into the health system—with a goal of building enduring relationships of trust between patients and their health-care providers (World Health Organization, 2008). Indeed, these same features have also been widely supported in the primary care reform literature (Kringos et al., 2010; Macinko et al., 2003; Starfield, 1998). Therefore, although primary health care is conceived as a frame for the entire health delivery system, if that ideal system is to be achieved, primary care must be reformed in ways that will allow it to take a pivotal role in improving the health of populations.

Primary care has typically focused on the provision of medical care by family physicians. Today the College of Family Physicians of Canada has recognized that “comprehensive and continuing care was the promise made to Canadians but that not every family physician could meet that expectation” (College of Family Physicians of Canada, 2015). As a result the college has created a national vision of the “Medical Home”, a model of practice more congruent with the WHO vision of primary health care (College of Family Physicians of Canada, 2011). However, the substantial history tying physician remuneration to acute and curative services is a significant obstacle to accomplishing this vision. To date insufficient political will has existed to move towards a practical ideal system and approach to support chronic care. Instead of making significant efforts to shift the status quo towards primary health care as envisioned by the WHO,
governments continue to try to work within the structure and systems we have in place and have retained a narrow and episodic focus in primary care in Canada.

In our province of Alberta, efforts to reform primary care in ways that more closely align with the goals of primary health care have found form in Alberta’s Primary Health Care Strategy (2014). Although it remains to be implemented, the strategy emphasizes prevention and wellness, and recognizes that success in improving people’s health is largely determined by factors in their daily lives, such as lifestyles, housing, relationships, spiritual beliefs, education, income, and workplaces (Alberta Health, 2014). The vision in the strategy calls for primary care to be the foundation of the health care system, a “health home”, offering a wide range of services (Home Care, Public Health, Healthy Living supports) delivered by teams of providers. The vision also calls for integration of team-based primary care services with social and community initiatives such as housing, employment, and income supports. The aim of these reforms is to better support people in achieving overall health and well-being, and in living well with chronic conditions (Alberta Health, 2014). However, the challenge of taking action on these reforms remains.

Put simply, primary care reforms intended to advance primary health care need to be more about the people served and their needs, and less about the providers. Person-centeredness is about understanding the community context and the individual situation within that context; and applying this understanding to the care of that individual and or community. William Osler, one of the founders of modern medicine recognized that biomedical science is and should be at the heart of modern medicine but very clearly pointed out that “it is much more important to know what sort of patient has a disease than what sort of disease a patient has” (Scherger, 2001, p. 1). Health is lived and experienced in ways that are uniquely meaningful, and it is important
that health services be tailored to the community and individual context and situation (Freeman & Hughes, 2010; Reeve, 2010; Sacristan, Costi, Valladares, & Dilla, 2010). If the expectation is that individuals with one or more chronic conditions need to be able to improve their health through behavior change, then they need to be individually supported to do so within the context of their life situation and meaningful determinants of health (Vallis, 2014). This understanding of context and situation is essential to a comprehensive, whole person approach to care (Peek, Baird, & Coleman, 2009).

Chronic conditions are complex and often require behaviour change/self-management support, specialized disease management support, hospitalization at times, and social/community/family support. Indeed, it has been observed that medical care provided by family physicians alone is no longer enough to meet the needs of those with chronic conditions (Nasmith et al., 2010). Care that meets all needs may not all be provided in one place, and may best be met by a number of providers working together—however it remains important that all care is coordinated and integrated, anchored at one point of care. Indeed, continuity of care has been defined as “the degree to which a series of discrete healthcare events is experienced as coherent and connected and consistent with the patient’s medical needs and personal context” (Health Quality Council of Alberta, 2013, p. 1).

Primary health care-oriented systems rely on primary care as a foundation—a foundation equipped to provide a comprehensive approach to support continuity of care, chronic disease management and the achievement of outcomes from a patient/system perspective (Kringos et al., 2010). Relationships between patients and regular and trusted providers as part of that foundation could well be the linchpin to improved overall continuity, comprehensiveness, and
patient centeredness. I suggest, however, that we need a much clearer understanding of the contribution of such relationships to achieving primary health care as envisioned. Pursuit of this understanding requires conceptual clarity. It is, therefore, crucial that we understand the concept of relational continuity more clearly as a whole and in reference to its counterparts of informational and management continuity.

**Evidence: Relational Continuity**

Studies of relational continuity have been fraught with methodological problems. There is a lack of consistent definitions, measures, and consensus regarding what constitutes relational continuity. Existing evidence has not been well grounded in theory, has featured primarily convenience sampling and non-experimental cross-sectional study designs and employed varied data collection methods and inadequate instrumentation (Adler, Vasiliadis, & Bickell, 2010; Cabana & Jee, 2004; Saultz, 2003; Sparbel & Anderson, 2000a, 2000b). As a result, it is very difficult to compare findings and reach clear consensus around the implicit or explicit value of relational continuity in primary care.

The existing measures of relational continuity utilized to study its association with patient/system outcomes have been built on an incompletely developed concept of relational continuity. Relational continuity has been conceptualized within the frame of physician - patient relationship with a narrow focus on the longitudinal or chronological attribute of relational continuity rather than on the interpersonal relationship (Saultz, 2003; Saultz & Albedaiwi, 2004; Saultz & Lochner, 2005). Different terminology also continues to be used to describe this aspect of continuity; including ‘provider continuity’, ‘interpersonal continuity’, and ‘patient-physician relationship’. Longitudinal or chronological continuity as defined by consistency of visits over time to the same physician has been measured using various objective measures such as duration
of patient/provider affiliation, intensity of patient provider affiliation, concentration of care, usual provider continuity (UPC), continuity of care index (COC), known provider continuity (K Index), likelihood of continuity (LICON), modified continuity index (MCI), modified modified continuity index (MMCI), and sequencing of care (SECON). See Table 1. Table 1 identifies the measures as they were originally developed. However, even these measures have not been consistently applied in the research. Many researchers have revised these measures in relation to their individual studies.
### Table 1: Longitudinal or Chronological Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Abbreviation</th>
<th>What It Measures</th>
</tr>
</thead>
</table>
| Usual Provider Continuity     | UPC          | Measures the proportion of visits with a usual provider over a given period of time. This index is applied to a patient’s self-identified regular or personal provider, or if that is not known, to the one seen most often.  
UPC= \( \frac{\text{number of visits to usual provider}}{\text{Total number of visits to all providers}} \)  
(Breslau & Reeb, 1975; Reid et al., 2002)                                                                                      |
| Continuity of Care Index      | COC          | Measures the number of different providers seen, and can be adapted to capture aspects of the coordination of care by attributing referral visits back to the referring provider.  
\[
\text{COC} = \frac{\sum_{j=1}^{s} n_j^2 - n}{n (n - 1)}
\]  
Where:  
n=total number of visits  
n\text{j}=number of visits to provider \text{j}  
s=number of unreferred providers  
(Bice & Boxerman, 1977; Reid et al., 2002)                                                                                     |
| Known Provider Continuity     | K Index      | Similar to the UPC except the usual provider is considered to be the provider seen by the patient at the particular visit rather than a provider identified by the patient as the regular source of care. Measured at the facility or clinic level.  
\[
I_K = (x_1 - 1 + x_2 - 1 + \ldots + x_i - 1) = \frac{(n - i)}{(n - 1)}
\]  
Where:  
N=total number of visits  
i=the number of different providers seen during the time period  
x_1=is the number of visits to the first provider  
x_2=is the number of providers to the second provider (etc)                                                                  |
<table>
<thead>
<tr>
<th>Measure</th>
<th>Abbreviation</th>
<th>What It Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Ejlertsson &amp; Berg, 1984)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Likelihood of Continuity      | LICON        | This measure corrects for the effect of number of sources available as well as the total number of visits. The greater the number of sources available the greater the likelihood that providers other than the regular source of care will be seen.  
\[
\text{LICON} = \frac{1 - \sum_{i=0}^{K} P_x^{(i)}}{M} \times \left( \frac{M - (i - 1)}{M} \right) \times \left( \frac{P_{x^{(i-1)}}}{M} \right) + \frac{i}{M} P_{x^{(i)}}. 
\]
|                               |              | Where:                                                                                                                                               |
|                               |              | \(N=\text{total number of visits}\)                                                                                                              |
|                               |              | \(n_i=\text{number of visits to the }i\text{th different provider} \quad (i=1,2,\ldots,M)                                                      |
|                               |              | \(M=\text{number of potentially available providers}\)                                                                                           |
|                               |              | \(K=\text{number of different providers seen in }N\text{ visits}\)                                                                               |
|                               |              | \(S_i=1, \text{if same provider is seen at sequential visits and }=0 \text{ otherwise}\)                                                           |
|                               |              | \(P_N(k)=\text{probability of seeing }K\text{ different providers in }N\text{ visits, assuming random assignment among }M\text{ available providers}\) |
|                               |              | Steinwachs, 1979                                                                                                                                     |
| Modified Continuity Index     | MCI          | Was devised to take into account the number of providers seen and the number of patient encounters.  
\[
\text{MCI} = 1 - \frac{\text{number of providers}}{\text{number of all visits} + 0.1} 
\]
|                               |              | Jee & Cabana, 2006                                                                                                                                  |
| Modified Modified Continuity Index | MMCI         | This measure relates a patient’s number of contacts with a health provider (e.g., physician practice) to the number of different professionals seen across those contacts (e.g., different physicians). In primary care, if all of a patient’s contacts were with the same family physician then MMCI = 1; if they were all with different family physicians then MMCI = 0.  
\[
\text{MMCI} = 1 - \frac{\text{(No. of Ambulatory Providers/No. of Ambulatory Visits + 0.1)}}{1 - (1/\text{No. of Ambulatory Visits + 0.1})} 
\]
<table>
<thead>
<tr>
<th>Measure</th>
<th>Abbreviation</th>
<th>What It Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sequencing of Care</td>
<td>SECON</td>
<td>Measures what proportion of consecutive visits are with the same provider. SECON = ( \sum_{i=1}^{N-1} s_i ) Note: N visits generate ( N - 1 ) sequential pairs of visits, upon which to assign values to ( s_i ). Where: N=total number of visits ( n_i )=number of visits to the ( i )th different provider ( (i=1,2,\ldots,M) ) M=number of potentially available providers K=number of different providers seen in N visits ( S_i = 1, ) if same provider is seen at sequential visits and =0 otherwise ( P_N(k) )=probability of seeing K different providers in N visits, assuming random assignment among M available providers (Reid et al., 2002; Steinwachs, 1979)</td>
</tr>
</tbody>
</table>

In many research studies such longitudinal or chronological continuity is associated with patient and system outcomes using administrative data. Other measures of relational continuity have been limited to patient survey and a patient’s affiliation with a physician provider over time as related to various outcomes including patient satisfaction. A number of the studies conducted to date are described below. The evidence presented is for the purpose of understanding the value of a concept analysis of relational continuity in the context of primary care and recognizing the limitations in the research given an unclear conceptualization of relational continuity.
Between 2004 and 2010 two literature reviews and seven systematic reviews were published that explored the impact of continuity of care on patient satisfaction, patient health and system outcomes. In each of these reviews the researchers primarily used longitudinal continuity objective measures as defined above to measure the relational aspect of continuity of care. Some did, however, use objective non-standard and subjective continuity measures such as duration of care with the same physician; number of different providers delivering care; patient has a regular care provider; and provider was previously known to the patient. Many of these publications reviewed the same literature, although there were some differences based on the timeline and inclusion criteria for each review. Seven of these reviews (Adler et al., 2010; Cabana & Jee, 2004; Saultz & Albedaiwi, 2004; Saultz & Lochner, 2005; van Servellen, Fongwa, & Mockus D'Errico, 2006; van Walraven, Oake, Jennings, & Forster, 2010; Worrall & Knight, 2006) were systematic reviews of the literature and two of these focused on the impact of relational continuity on patient satisfaction (Adler et al., 2010; Saultz & Albedaiwi, 2004). The other five systematic reviews along with two literature reviews (Cabana & Jee, 2004; O'Malley, 2004; Pereira Gray et al., 2003; Saultz & Lochner, 2005; van Servellen et al., 2006; van Walraven et al., 2010; Worrall & Knight, 2006) explored the impact of continuity of care on various health and system outcomes in addition to patient satisfaction. Three of these systematic reviews had intended to complete a meta-analysis rather than a systematic review of the literature but were unable to do so given the substantial differences in study methods and the manner in which continuity, patient satisfaction, care outcomes and costs were examined (Saultz & Albedaiwi, 2004; Saultz & Lochner, 2005; van Walraven et al., 2010).

All of the reviews found mixed results regarding the impact of relational continuity on outcomes. Most of the primary studies included in the reviews analyzed longitudinal continuity
as the independent variable and its effect on dependent variables of emergency room use, hospitalization, health care costs, medication or treatment compliance, prevention, and/or disease specific outcomes. Few studies have explored any other attributes of relational continuity from the relationship or interpersonal perspective; the focus remained on longitudinality. It is important to examine how these measures of longitudinal continuity relate to the duration and quality of the longitudinal relationship (Saultz, 2003). Visit patterns showing longitudinal continuity are often reported, but it remains unknown how these visit patterns may foster interpersonal or relational continuity over time.

Some qualitative studies have looked at how longitudinal continuity fosters or is connected to such things as trust, recognition, comfort, security, and patient satisfaction or experience (Baker, Mainous III, Pereira Gray, & Love, 2003; Frederiksen, Kragstrup, & Dehlholm-Lambertsen, 2010; Frederiksen, Kragstrup, & Dehlholm-Lambertsen, 2009; King et al., 2008; Pandhi, Bowers, & Chen, 2007; von Bultzingslowen, Eliasson, Sarvimaki, Mattsson, & Hjortdahl, 2006). These studies are methodologically limited in their ability to link relational continuity with specific outcomes. One of these studies focused on the influence of longitudinal continuity and trust in patients’ regular family physician on patient satisfaction with consultations (Baker et al., 2003) using a pre and post consultation questionnaire with 1068 primary care patients in the United Kingdom and United States. The researchers used a valid and reliable questionnaire but the assumption cannot be made that the population studied was representative of the populations of those countries. The results were also based on self-report immediately before and after a consultation with a physician. They did conclude that there was association between trust, a regular physician and satisfaction with consultations. 78.8 percent of
those who completed the questionnaire rated seeing the same physician every time they had a health problem as important.

In a second of these studies (Frederiksen et al., 2009) the researchers interviewed 22 primary care patients in two practices in Denmark to look at the impact of continuity on satisfaction. They concluded that it was not valuable to have a sustained relationship unless the physician recognized and respected the patient. This was a purposive small sample but provides interesting insights on the perspectives of patients in regards to relational continuity. Through qualitative interviews Frederiksen and colleagues also completed another study (Frederiksen et al., 2010) with what appears to be the same or a similar sample. The data from that purposive small 22 person sample led to the conclusion that vulnerability and the ability to develop a personal relationship contributed to the importance of attachment to a provider.

Two other studies also contribute to understanding what is important to the patient in a relationship with a provider (Pandhi et al., 2007; von Bultzingslowen et al., 2006). The researchers in these studies interviewed 14 patients from various primary care practices. Both were purposive small samples with little generalizability but their findings align with other study findings of what adds value from the patient perspective (Parchman & Burge, 2003) and its association to outcomes such as trust and compliance. Pandhi and colleagues identified comfort as an important dimension of the relationship (Pandhi et al., 2007). Von Bultzingslowen and colleagues identified the sense of security as a core value of having a personal physician in a continuous relationship (von Bultzingslowen et al., 2006). This was based on four categories of values identified through the 14 interviews; including feelings of coherence, confidence in care, trusting relationship and accessibility(von Bultzingslowen et al., 2006). Both of these studies require further validation in larger study populations. King and colleagues (2008) conducted
qualitative interviews with 199 cancer patients using a valid and reliable 18 item measure of experienced continuity as well as other measures, including surveys such as the EQ-5D to measure quality of life, to ascertain whether continuity of care was associated with health needs, psychological status, quality of life, and satisfaction with care. This was a prospective cohort study with a purposive sampling of those with cancer. King and colleagues concluded that higher experienced continuity was associated with a lower need for care. A number of issues with death and illness of patients and change in research staff contribute to limitations in this study (King et al., 2008). There are some aspects to this study that are worth further study and consideration with similar populations in other countries or possibly even other populations in understanding the linkage between relational continuity and other outcomes. The above studies demonstrate the possible value of relational continuity from the interpersonal perspective for the patient though they have not directly attributed the findings to specific outcomes. Patient experience and patient satisfaction are recognized today as valuable outcomes (Haggerty et al., 2011; Saultz & Albedaiwi, 2004) so these aspects are certainly worth exploring further even from that perspective. Linkage with other outcomes would also be important to explore further.

Relational continuity, using longitudinal objective measures, was found to be most strongly associated with increased uptake of preventive services, and reduced hospitalization (Cabana & Jee, 2004; Saultz & Lochner, 2005; van Walraven et al., 2010). Association also has been demonstrated between relational continuity, decreased emergency room use, and reduced health system costs (Cabana & Jee, 2004; O’Malley, 2004; Pereira Gray et al., 2003; Saultz & Lochner, 2005; van Servellen et al., 2006; van Walraven et al., 2010). It was not clear in these studies whether relational continuity was associated with improved measures of chronic illness care as these were not clearly examined or measured (Saultz & Lochner, 2005).
Pereira Gray (Pereira Gray et al., 2003), reviewed the English literature on continuity of care and benefits to patients or physicians, and found evidence that continuity of care supported better interpersonal communication, preventive care and is associated with more accurate diagnosis. They concluded that the literature they reviewed supports that better continuity reduced later use of health care such as emergency room and hospitalization for adults and children. They also found the literature supports better adherence to advice where higher continuity was in place. Specifically this included compliance in taking medications, improved adherence to asthma and diabetes care (Pereira Gray et al., 2003). Consistent with this finding, it has been shown that patients who have been forced to change primary care physicians receive poorer quality of care, and are much less willing to accept advice from a provider with whom they have not built trust over time (Flocke, Stange, & Zyzanski, 1997). Relational continuity was also found to be helpful for physicians in the management of disease and the understanding of psychosocial problems in patients. Pereira Gray reported that if physicians knew their patients better they could understand the patient’s disease and problems more completely, and within the context of that patient’s everyday life (Pereira Gray et al., 2003). The authors in this review, however, did not evaluate the quality of the evidence in the various studies and only address the mixed results found in the literature around continuity and its association with outcomes to date.

Patient satisfaction was also associated with higher relational continuity (Adler et al., 2010; O'Malley, 2004; Saultz & Albedaiwi, 2004; Saultz & Lochner, 2005; van Walraven et al., 2010). In the randomized controlled trial studies reviewed, researchers found significant improvement in patient satisfaction when intervention and control groups were compared (Saultz & Albedaiwi, 2004; van Walraven et al., 2010). Adler and colleagues (2010) found that only one study using an index to measure continuity showed a significant but weak relationship between
continuity and satisfaction. Longitudinality measured without an objective continuity index in 5 of the studies reviewed (Adler et al., 2010) showed a relationship between longitudinal continuity and satisfaction. Two of these showed a moderately strong relationship; two showed weak but statistically significant relationships, and one showed no relationship. Adler and colleagues (2010) found only 12 studies in total that met their inclusion criteria of reported measures of continuity, patient satisfaction and the relationship between continuity and satisfaction or provided sufficient evidence to derive these measures. Numerous definitions and measures were found in those 12 studies; 12 different continuity measures among the 12 studies reviewed (Adler et al., 2010).

Overall, in the evidence reviews mentioned here, it was concluded that there is insufficient evidence to assert that relational continuity uniformly improves care (Adler et al., 2010; Pereira Gray et al., 2003; Saultz & Albedaiwi, 2004; Saultz & Lochner, 2005; van Servellen et al., 2006; van Walraven et al., 2010; Worrall & Knight, 2006). The authors of the reviews identified that the vast majority of the published studies did not meet basic methodological criteria that are essential to avoid biased conclusions. The majority of the studies included in the reviews were retrospective cohort studies or cross-sectional patient surveys. In most cases administrative data was utilized to calculate longitudinal continuity as a measure of relational continuity. The timing of continuity and outcome measures were ambiguous or were measured concurrently. Hence the reviewers could only describe possible associations between relational continuity and outcomes, with no ability to assess causation. In addition, it is extremely difficult to know whether quality outcomes or patient satisfaction led to continuity or if continuity led to quality outcomes and patient satisfaction.
One of the systematic reviews used criteria to assess the quality of the studies they reviewed (van Walraven et al., 2010). It is also the most recent systematic and critical review completed on the association between continuity of care and outcomes. The studies included in this review (van Walraven et al., 2010) determined the association of continuity with patient outcomes, and properly accounted for the relative timing of continuity and outcome measures. Only 18 studies met these criteria (van Walraven et al., 2010) from 139 English language studies found in the literature 1950-2008. 16 of these studies were related to personal or relational continuity based on the definition by Reid and colleagues (Reid et al., 2002). The most commonly measured outcomes were related to resource utilization (nine studies) and patient satisfaction (seven studies). The utilization studies included measures of hospitalization, emergency department use or a combination of the two. Each of the studies using patient satisfaction as an outcome measured satisfaction using previously published scales. All of the studies measuring resource utilization as the outcome found a significant association between increased continuity and improved outcomes. Patient satisfaction seemed to improve with increased continuity with five of the seven studies showing a significant association. The studies measuring patient compliance and clinical outcomes did not show improved results with increased continuity. Analyses in these studies adjusted for important potential confounders including patient demographics, co-morbidity, utilization history, and socioeconomic factors. (van Walraven et al., 2010). The 16 studies identified in this systematic review also addressed the temporal relationship between continuity and the outcomes being measured. As a result van Walraven and colleagues (2010) concluded that the 16 studies validate the hypothesis that increased provider continuity is associated with improved patient outcomes and satisfaction.
Only two studies mentioned in the reviews above used the methodology of the randomized controlled trial. One of these trials was included by all of the reviews (Wasson et al., 1984) and one by only two of the reviews (Becker, Drachman, & Kirscht, 1974). Only one of these trials actually measured relational continuity and did not confound the results (Wasson et al., 1984). Wasson studied elderly male veterans and found that patients who received discontinuous care had a two fold increase in the amount of emergency admissions and hospital days. This study was clearly able to establish some cause and effect between longitudinal continuity and the outcomes of hospitalization and emergency room use. Unfortunately it is only one study and focused on a very specific population. It does clearly, however, highlight that relational continuity may indeed lead to improved resource utilization. This also highlights the value of more study.

After a review of ninety publications across eight reviews over a period of several years (1950-2007) there are almost as many measures as there are studies and the work cannot be easily synthesized or compared. Forty articles were reviewed across more than one publication. “Despite calls to develop uniform terminology and measurement techniques for three decades neither has been accomplished” (Adler et al., 2010, p. 171).

Primary Studies on Relational Continuity and Improved Outcomes

There are additional single studies that are important to the discussion and findings around relational continuity and improved outcomes. In three studies (Ionescu-Ittu et al., 2007; Menec, Sirski, Attawar, & Katz, 2006; Nyweide et al., 2013) researchers explored the impact of longitudinal continuity on the elderly and their utilization of emergency room and hospital admission. In all three studies investigators used an administrative objective tool to measure longitudinal continuity between patient and physician.
Ionescu-Ittu and team used the UPC Index that measures the highest concentration of a patient’s total visits to a single provider (Ionescu-Ittu et al., 2007). Nyweide also used the UPC index but used a second measure, the COC index which measures the concentration of a patient’s visit pattern by ascribing a higher score to visit patterns in which a larger share of the patient’s total visits are with fewer providers (Nyweide et al., 2013). Menec used a majority of care definition in which they identified those with at least seventy-five percent of their total family physician visits to the same family physician over a two year period as having high continuity (Menec et al., 2006).

These studies all found strong association between longitudinal continuity and reduced emergency room use, preventable hospitalization, and hospitalization for ambulatory care sensitive conditions for patients aged 65 years plus. Ionescu-Ittu and colleagues (Ionescu-Ittu et al., 2007), after adjusting for measures of medical need, demographic characteristics and other covariates, found that increased emergency department use was associated with lack of a primary physician 1.46 (95% CI 1.43-1.41), lower continuity of care with the primary physician 1.46 (95% CI 1.44-1.48) and low overall use of primary care services 1.24 (95% CI 1.21-1.27). This was a cross-sectional study so cause and effect is unable to be determined. The study can only show association between longitudinal continuity and the outcomes. Nyweide and colleagues (2013) found, after adjusting for patient baseline characteristics and market level values, that a 0.1 increase in continuity of care according to either continuity metric (COC or UPC) was associated with a 2% lower rate of preventable hospitalization. And Menec and colleagues (Menec et al., 2006) found that high continuity of care was associated with reduced odds of ambulatory care-sensitive hospitalizations (adjusted odds ratio was 0.67 (95%CI 0.51-0.90)) controlling for demographic and self-reported health-related measures.
A study completed by the Canadian Institute for Health Information (Canadian Institute of Health Information, 2015) explored continuity of care with family medicine physicians in Alberta and Saskatchewan. They found that patients aged 18 years and over with low continuity scores, using the longitudinal measure of UPC, were 29% (odds ratio 1.29(95%CI 1.22-1.365)) more likely to be hospitalized for an ambulatory care sensitive condition and 43% (odds ratio 1.428(95%CI 1.41-1.448)) more likely to visit an emergency department for a family practice sensitive condition in Alberta than those with high continuity scores. In Saskatchewan patients aged 18 years and over with low continuity scores, utilizing the longitudinal measure of UPC were 73% (odds ratio 1.731 (95%CI 1.604-1.869)) more likely to be hospitalized for an ambulatory care sensitive condition. Emergency department measures were not completed for Saskatchewan (Canadian Institute of Health Information, 2015). This study was based on administrative data using fee-for-service billing data to measure relational continuity. The studies suggest that there is an association between higher continuity, resource utilization, and possibly cost of care (Canadian Institute of Health Information, 2015). Further study on how continuity plays a role in comprehensive, high quality care will be important to provide additional insight as to the use of health care resources and improved outcomes for patients.

Dreiher et al (2012) used several measures of longitudinal provider continuity including UPC, MMCI, COC, and SECON to evaluate associations between continuity and quality measures related to preventive medicine, costs and utilization outcomes. They found some correlation between longitudinal continuity and quality measures related to preventive medicine, such as increased screening for smoking and measuring weight and height, but no association with cancer screening and an inverse association with screening for hypertension. Dreiher (2012) also found that several of the indices used to measure longitudinal continuity were
associated with a decreased number and costs of emergency department visits but with a higher cost related to an increase in consultations with specialists. The associations found were consistent with the other studies and reviews referred to above. In addition, the authors of this study clearly recognized the limitations of their findings and identified the need to look at continuity of care as a multifaceted construct. They further noted the need for more research, and underlined the importance of being able to measure and improve all the attributes of continuity beyond just the longitudinal.

Relational Continuity and Health Care Costs

Another three studies found looked specifically at the association between longitudinal continuity and healthcare costs in Alberta, Belgium, and British Columbia. The Alberta cohort study (Mitton, Adair, McDougall, & Marcoux, 2005) was conducted using administrative data and a specific Alberta scale for continuity of services for mental health patients and found that poor continuity was associated with higher hospital and community costs. The study utilized an Alberta scale not commonly used and therefore loses its ability to be compared with other studies. One of its strengths, however, is that it considered continuity from a broader perspective than physician-patient longitudinal relationship.

Some of the measures in the Alberta scale used may be worth exploring in the future as measurement of relational continuity from a broader perspective. This study concludes similar results as the Belgian and British Columbia studies. The Belgian study compares two cohorts prospectively; cohorts differ by level of continuity prior to review of the outcomes (De Maeseneer, 2003). The study is controlled for differences in the cohort populations and the findings support lower total cost of medical care with higher continuity. The British Columbia study (Hollander, Kadlec, Hamdi, & Tessaro, 2009) also found similar results; decreased costs
with increased attachment to a practice but not to a physician. They found that the more higher-care-needs patients were attached to a primary care practice, the lower the costs were for the overall health care system (for all medical services, hospital services, and drugs).

Mainous and Gill (1998) examined the effect of continuity with clinicians and health care sites on the likelihood of hospitalization. They concluded that continuity with a practice may not be sufficient to ensure cost effective care and that continuity with a provider is key. They found that patients in the high clinician continuity group had lower odds of hospitalization than those patients in the high site/low clinician continuity group (odds ratio 0.75 (95%CI 0.66-0.87) (Mainous III & Gill, 1998). The patients in the high site/low clinician continuity group were not significantly different than those patients in the low site/low clinician continuity group (odds ratio 0.93(95%CI 0.80-1.08) (Mainous III & Gill, 1998). Understanding the value of relational continuity with a provider versus a practice or team will require further study to delineate differences related to continuity and cost effectiveness in future research.

An American study (Romano, Segal, & Pollack, 2015) adds to the healthcare cost discussion by testing the association between relational continuity and the overuse of medical procedures in a Medicare population age 65 and over. This observational retrospective cohort study utilized the Bice-Boxerman Continuity of Care Index (Bice & Boxerman, 1977) to determine high versus low continuity and then compared the use of procedures that are often overused with the level of longitudinal continuity. They found that continuity was lower on average among patients with any overused procedure than among patients who did not have an overused procedure. The findings, however, based on procedure, were mixed. For nine procedures the overuse was lower but for three procedures higher continuity was associated with increased overuse. The results lead to the need to further explore and critically monitor the
possible links between continuity and overuse of procedures despite the fact that this observational retrospective cohort study is unable to determine any causal mechanisms from the data. The study is methodologically strong given the large size of the population sample, the use of sensitivity analyses, and the strength of the statistical analysis to examine a temporal relationship between continuity and procedure overuse. It was, however, limited by the fact that it did not measure actual overuse of procedures and that it used retrospective data. Further study would need to strengthen these aspects and would need to understand more about the other attributes possibly contributing to the mixed results. The study should be considered important in Canada as well though the findings may not be directly transferable to our health care setting. The association of the linkage between continuity and procedure overuse will also be an important aspect to consider and monitor in primary care reform in Canada and Alberta.

**Relational Continuity and Chronic Disease**

Uijen et al (2012) studied continuity of care and its relation to medication adherence in patients with heart failure in the Netherlands. These patients were mostly seen in specialty care. A self-report questionnaire was used to measure the experienced continuity of care from a personal continuity, team continuity and cross boundary continuity perspective. Personal continuity was focused on the number of care providers (general practitioners and/or nurses) that patients saw in primary care for their heart disease in the past year. They also reviewed patient records to identify the number of contacts with the primary care practice in the past year. They had the patients self-report on their medication adherence utilizing a validated measure of self-reported intentional and unintentional non-adherence to medications and found that the more care providers the patient saw (three or more) the less likely they were to be fully adherent than patients who saw less care providers. Higher scores on personal continuity were significantly
related to better medication adherence (p<0.01) as compared to team continuity (p=0.04) and cross boundary continuity (p=0.19). Unfortunately the number of patients involved in the study was limited (327 patients) and 119 of these did not see a general practitioner at all during the time frame studies. Also, this is a retrospective cross sectional study so can demonstrate association between continuity of care and medication adherence but cannot prove a cause/effect relationship between the two or which direction the association occurs. Their results, however, compare with previous studies (Kerse, 2004; Shortt, 2004). Findings may have limited application to Canada though there are similarities in the two healthcare systems in which findings could definitely be considered and worth more exploration in terms of implications for heart failure and other chronic disease populations here.

Hueston (2010) found that having a personal physician did not improve quality of care in diabetes. He completed a retrospective review of records collected from an ongoing diabetes quality improvement project that had been in place since 2005 and looked at patients aged 18-75 years with a diagnosis of type II diabetes seen in a particular family medicine center between 2005-2008. Only patients who had a minimum number of two visits for diabetes and who had a diagnosis of diabetes for more than six months were included in the analysis. Continuity was defined by at least two visits to a provider for diabetes; the provider was asked to confirm if they were the regular provider for the patient or not. The outcomes explored were HgbA1C values, blood pressure and lipid values. Hueston states that he found few differences in the characteristics of the population and the findings between the two groups he compared; those with a regular provider and those without. However, the data in his publication shows significant difference in the age, mean years between the two groups (.0002) and in the glycated hemoglobin (.01). Those with a regular provider were also identified to be more likely to be at
goal for diastolic blood pressure and to have received an influenza immunization within the previous year. Also, the number of patients Hueston identified as not having a regular provider was small (59 compared to 649 with a regular provider). In addition two visits is a relatively small number to consider as defining continuity of care.

Evidence of Potential Downsides of Relational Continuity

In some studies there was no association found between outcomes and relational continuity. Concern was raised in some studies about the possible contribution of relational continuity to over- or missed diagnoses (Adler et al., 2010; Cabana & Jee, 2004; Pereira Gray et al., 2003). For example, Pereira Gray (2003) suggest that relational continuity may lead to over- or missed diagnoses when a provider knows a patient too well. This appears founded on a belief that it is beneficial for a patient to have a fresh set of eyes on their care, in order to ensure diagnostic accuracy, and care that is of high technical quality. It has further been reported in some studies that when there is too strong a relationship it can be difficult to adhere to strict clinical practice guidelines (Pereira Gray et al., 2003). It has, however, also been argued that this might lead to better patient care, as a provider might be more willing to step away from the care algorithm in appropriate ways when the context, patient and care required are better understood (Freeman & Hughes, 2010; Pereira Gray et al., 2003). Finally, it has also been observed that relational continuity may possibly bind a patient or doctor to a relationship that they do not value or find supportive (Adler et al., 2010; Cabana & Jee, 2004; Pereira Gray et al., 2003). It is difficult at times to separate out these concerns and issues when the differences in the care provided and the outcomes that occur are not clearly measured or aligned (Adler et al., 2010).

Some concerns were noted in non-empirical literature with regards to relational continuity and the loss of autonomy and anonymity and are identified below (Hill & Freeman,
These concerns come from both patient and provider perspectives but these perspectives have not yet been studied. It could be hypothesized that in smaller communities, relationship continuity may create a situation in which the patient and provider run into each other everywhere and feel they are watching each other—and may lead to stress and the feeling that each can’t do what they need to without being “judged” by the other. Spending too much time with one provider could possible lead the provider to feel unsatisfied and overwhelmed by a difficult relationship that they are unable to escape inside or outside of work, which could lead to dysfunctional relationships and the possibility of overlooking or missing new health problems (Kerr et al., 2012). A relationship can become too close or intimate and this can lead to negative consequences as a result as well(Kerr et al., 2012). Patients or providers may feel trapped in a relationship that is not meeting their needs. Paternalism may develop, and it is reasonable to wonder whether adherence to treatment may suffer (Hjortdahl, 2005; Pereira Gray et al., 2003).

The evidence to date, despite its flaws and gaps, does generally lend support to the notion that relational continuity can be beneficial in terms of patient satisfaction, patient health and system outcomes; there is no clear evidence but some opinion that relational continuity can cause harm. The value of relational continuity, however, remains difficult to discern given the limitations in the current evidence base related to definition and measurement. Even the patient and provider satisfaction studies to date have focused on the affiliation of patient with a physician provider over time rather than on patient experience and what relational continuity looks like to them or the value it adds. This one-dimensional understanding of relational continuity as longitudinality leads logically to a completely untenable implication: the need for the patient’s physician to be available 24 hours, seven days per week, in order to avoid
interruptions to care. Therefore, the value of deeply and more completely understanding this concept is not simply academic—how a concept is understood has consequences for how it is put into practice, how it is measured, and ultimately how it brings value to the health care enterprise.
In this chapter I will discuss my research paradigm and my methodological approach to this conceptual study of relational continuity. I will also outline the questions and methods utilized in this concept analysis. I will end the chapter with a detailing of my specific approaches to data collection and analysis.

Methodology

It is important for researchers to be aware of the paradigm, or worldview that influences and frames their work. Post-positivism as a world view arose in response to the argument that the pillars of logical positivism could no longer support modern science (Phillips, 1990). The post positivist searches for “warranted” truth (Phillips, 1990, p. 32) as opposed to absolute truth and recognizes that new points of view or new evidence may emerge at any time to challenge an assertion that may be warrantable today (Phillips, 1990). An ontology of “critical realism” guides the post positivistic inquirer to maintain the belief that a reality exists independent of our thinking about it. As human beings, however, our own presence as researchers influences what we are trying to measure (Guba, 1990). As a post-positivist I believe that reality is external to the observer and governed by universal laws, but that humans will each have a different perspective on that reality and each of us is imperfect in our ability to totally comprehend that reality. The truth exists but can change in light of new knowledge and experience. The closest we can come to understanding the truth, then, is to pursue a deep understanding from as many perspectives as possible and recognize that truth may change with time (Weaver & Olson, 2006).
Within this I acknowledge my own bias and perceptions based on my past leadership in and deep passion for Quality Improvement, Chronic Disease Prevention & Management, and the evolution of primary care and primary health care in Alberta. I am aware of these biases and have taken a critical perspective on those biases and my own perceptions and experiences throughout the research process. I have committed to studying as many other perspectives as possible through my exploration of the literature in this concept analysis. Indeed, I have gone well beyond my own discipline of nursing and the existing primary care literature and ventured into the medical, business and social sciences published literature and grey literature as well. This included not just published studies and reviews but other perspectives voiced through commentaries, opinion pieces, editorials, letters and other approaches; both published and available through other avenues including discussions with others who have their own experiences and perspectives. I have also chosen a method that is consistent with the post-positive view that knowledge is not static. I have taken an evolutionary view of the thinking around the concept of relational continuity, and I see the need for it to continue to evolve in the future. It is my hope that what I have to offer through this research approach will add to a more complete and deeper understanding of relational continuity in primary care and how to build on it moving forward with the reform of primary health care.
Questions

The research questions guiding my work are: What is relational continuity in primary care? What does it mean? What are the key characteristics and key attributes of this concept? How do we know when the concept exists in practice or not?

Methods

The Evolutionary View of Concept Analysis is an inductive qualitative research approach, which I have applied from within the post-positivist paradigm. The goal of my research into the concept of relational continuity is to provide a comprehensive, multi-dimensional and useful explanation of this concept. Clear concepts are necessary to characterize phenomena, to describe situations appropriately, and to communicate effectively. When the attributes that comprise the concept are not clear, the ability to communicate, categorize and measure phenomena is severely limited. Analyzing the concept of relational continuity by examining the common use or common knowledge of the concept and how it is expressed across many disciplinary perspectives makes it possible to identify the cluster of attributes that constitute the concept and thereby understand the concept more clearly, and use it more effectively. It is then possible to classify or characterize this phenomenon, and ultimately evaluate the strengths and limitations of the concept.

I chose the evolutionary approach to concept analysis as outlined by Rodgers. It allowed me to clarify the critical attributes of relational continuity, identify elements needed to be present for the concept to occur, distinguish the concept from a multitude of related terms, and assist in the development of a comprehensive definition to facilitate the application, evaluation and measurement of the concept in practice.
A concept is not merely a word or expression but rather the ‘mental cluster’ that lies behind the word. Words are manifestations of concepts and not the concepts themselves (Rodgers & Knafl, 2000). A concept analysis is a strategy for exploring and synthesizing knowledge. Examination of the common use of a concept, through the way it’s expressed, provides a means to explore the underlying concept and to identify its attributes. A concept can be more clearly articulated; and the idea behind the words more clearly understood by examining the ways in which it is used. A concept can have explanatory and descriptive powers.

This work is about creating a better definition of relational continuity that is internally valid, logical and clear in its meaning. It is also a search for clarity within the context of primary care attributes that produce better outcomes. The process of concept analysis as undertaken here has been defined as a series of steps, although it is important to realize that concept analysis is not a linear but rather an iterative process; i.e. the steps identified will occur but not necessarily in the order identified.

1. Identify the concept of interest and associated expressions

2. Identify and select an appropriate realm (setting and sample) for data collection

3. Collect data relevant to identify:
   a) The attributes of the concept; and
   b) The contextual basis of the concept, including interdisciplinary, sociocultural, and temporal (antecedent and consequential occurrences) variations;

4. Analyze the data regarding the above characteristics of the concept. This is a deductive analysis requiring thematic analysis in relation to the attributes/ characteristics, antecedents,
and consequences of the concept (relational continuity) as well as the context/references, related and surrogate terms;

5. Identify an exemplar of the concept;

6. Identify implications, hypotheses, and implications for further development of the concept (Rodgers, 2000).

This approach to a concept analysis of relational continuity fits with the evolutionary nature of primary care and the continued need for it to evolve and consider other perspectives in the context of primary health care reform. My approach to this work also draws from the work of Walker & Avant (Walker & Avant, 2011).

I employed Walker and Avant’s strategy of the ‘model case’ of the concept in order to clearly illustrate the concept and its attributes, since an exemplary real world case that modeled all the essential attributes of the concept could not be found. I should note that this strategy is a purposeful deviation from the evolutionary method, as Rodgers’ view is that exemplars should be real examples of how the concept is practiced, as opposed to aspirational or ideal in nature. My purpose in taking this approach is to bridge the gap between the present reality of relational continuity as it exists and the concept as defined in this analysis.

Concept of Interest and Associated Expressions

The concept of interest is ‘relational continuity’ in primary care. In exploring this concept I reviewed the definitions of the terms relational and continuity and explored the different terms used in the literature to refer to each of these two words in the concept. I then explored those terms that are related to the term ‘relational continuity’ as a whole term or concept and those terms considered to be antonyms and synonyms or surrogate terms. I found two like terms for relational and seven like terms for continuity using a dictionary and a
The literature review led me to thirty-two related terms for relational continuity; two surrogate terms and two antonyms. The details of my findings are included in Table 2.
Table 2: Associated Expressions of Relational Continuity

<table>
<thead>
<tr>
<th>TYPE OF TERM</th>
<th>ASSOCIATED EXPRESSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dictionary Terms</strong></td>
<td><em>Continuity</em> is defined as an uninterrupted connection or union; the unbroken and consistent existence or operation of something over a period of time; something that is the same or similar in two or more things and provides a connection between them (Merriam-Webster dictionary and it is about a relationship within that context).</td>
</tr>
<tr>
<td></td>
<td><em>Relational</em> means characterized or constituted by <em>relations</em>.</td>
</tr>
<tr>
<td></td>
<td><em>Relations</em> is defined as the way in which two or more people or things are connected; a state of affairs existing between those having <em>relations</em> or dealings (relationship)</td>
</tr>
<tr>
<td></td>
<td><em>Relationship</em> is the attitude or stance which two or more persons or groups assume toward one another; the state of being mutually or reciprocally interested (relations) online <a href="http://www.merriam-webster.com/dictionary/">http://www.merriam-webster.com/dictionary/</a> accessed October 17, 2014</td>
</tr>
<tr>
<td><strong>Like Terms</strong></td>
<td><em>Relational</em>: no responses</td>
</tr>
<tr>
<td></td>
<td><em>Relation</em>: family member, relative, next of kin</td>
</tr>
<tr>
<td></td>
<td><em>Relationship</em>: association, connection, connexion, affiliation, rapport, bond, liaison, link, correlation</td>
</tr>
<tr>
<td></td>
<td><em>Continuity</em>: permanence, stability, link, connection, <em>Permanence</em>: durability, durableness, solidity, immovability, eternalness, intransience</td>
</tr>
<tr>
<td></td>
<td><em>Stability</em>: constancy, steadiness, firmness, solidity, strength, instability</td>
</tr>
<tr>
<td></td>
<td><em>Link</em>: connection, relation, association, relationship, linkage, tie (connect, relate, associate, bring together, link up, network)</td>
</tr>
<tr>
<td></td>
<td><em>Connection</em>: link, association, relationship correlation relation, bond, tie, union,</td>
</tr>
<tr>
<td></td>
<td><em>Durability</em>: toughness, sturdiness, strength, robustness, resilience, stability, permanence, hardiness</td>
</tr>
<tr>
<td></td>
<td><em>Constancy</em>: faithfulness, loyalty, fidelity, dependability, reliability, steadiness, firmness, consistency, steadfastness, endurance, single-mindedness,</td>
</tr>
<tr>
<td>TYPE OF TERM</td>
<td>ASSOCIATED EXPRESSIONS</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Antonyms</strong></td>
<td>Lack of continuity: interruption, discontinuity</td>
</tr>
<tr>
<td>Terms that are opposite to relational continuity</td>
<td><strong>Interrupt</strong>ion: break, pause, disruption, stoppage, \</td>
</tr>
<tr>
<td></td>
<td>disturbance, intrusion, intermission, interlude, interval</td>
</tr>
<tr>
<td>Words or terms that are used to</td>
<td>‘coordination of care’; ‘continuum of care’; ‘continuing care’; ‘seamless care’;</td>
</tr>
<tr>
<td>express ideas that are closely</td>
<td>‘integrated care’; ‘attachment’; ‘continuity’;</td>
</tr>
<tr>
<td>related to the idea of relational</td>
<td>‘longitudinal continuity’; ‘management continuity’; ‘informational continuity’;</td>
</tr>
<tr>
<td>continuity but are not exactly the</td>
<td>‘provider continuity’; ‘patient-doctor relationship’; ‘discontinuity of care’;</td>
</tr>
<tr>
<td>same idea. May actually represent</td>
<td>‘comprehensive care’; ‘primary care practice coordination’; ‘physician continuity’;</td>
</tr>
<tr>
<td>related concepts; antecedents;</td>
<td>‘relational coordination’; ‘personal doctoring’; ‘panel’; ‘affiliation’; and ‘physician- patient relationship’.</td>
</tr>
<tr>
<td>attributes; characteristics; or</td>
<td></td>
</tr>
<tr>
<td>consequences of relational</td>
<td></td>
</tr>
<tr>
<td>continuity in many cases.</td>
<td></td>
</tr>
<tr>
<td><strong>Surrogate Terms</strong></td>
<td>interpersonal continuity; personal continuity;</td>
</tr>
<tr>
<td>Synonyms or terms used interchangeably to express the same idea; relational continuity.</td>
<td></td>
</tr>
</tbody>
</table>

49
Data Collection

Realm for Data Collection - Choosing the Setting and the Sample

The primary source of data for this study was the existing published and grey literature. Much of the data directly related to relational continuity in healthcare was situated in the literature around primary medical care, focused on the physician-patient relationship. Consistent with my methodological approach, I expanded the search to the social sciences as well as the business, management and educational sciences in order to collect data relevant to the attributes of the concept, its contextual basis, as well as its antecedents, consequences and variations.

Literature Search Parameters

I explored the concept of relational continuity in the health, business, education and Social Sciences literature in a variety of databases including: CINAHL (Cumulative Index to Nursing and Allied Health Literature), Medline, Embase, SocIndex, PsyhInfo, Social Work Abstracts, Business Source Complete, Academic Search Complete, and ERIC (EBSCO). (See Table 3). I chose key words for the search using a seminal article (Saultz, 2003) on the subject of relational continuity in primary care and explored the search terms used to locate that particular article in Medline. I then continued to expand on my literature search utilizing those terms as outlined in the table below. A University of Calgary health sciences librarian assisted me in defining and clarifying my search parameters. I searched the databases for papers using the following key words separately, and in combination: continuity, relational, relationship, management, care, patient-centered care, continuity of care, primary care, consumer, and customer. These key words were further combined to focus the search, and appropriately restrict the number of articles retrieved.
Terms identified in Table 2 were explored iteratively as the literature review progressed and other related and/or surrogate terms were identified as an aspect of the concept analysis process. The body of search terms evolved and grew as I moved back and forth between different bodies of literature. For example, limited articles were found in the business literature so other terms were combined to explore the literature in the ERIC database including: customer relationship management and customer retention. There were no search limits by date or type of study as the goal was to cast a broad net into the existing literature. Grey literature and commentaries/editorials were included. Literature had to be written in English to be included. I also examined articles found in the reference lists of collected articles (hand searching) to complement the search.

Because continuity and continuity of care were terms broadly referred to in the healthcare literature—namely nursing and medicine, numerous references came up when I used these terms to explore the literature within CINAHL and Medline. Therefore, to focus the results, I was required to narrow the search by adding terms such as ‘relational’, ‘longitudinal’, and ‘interpersonal’ and combining these terms with the broader terms of continuity and continuity of care. In addition, the words concept, construct, and conceptualization were appended to the above search terms to further my search in relation to concept development or analysis work that may have been done to date. Using this approach, I found a number of seminal articles in the health care literature where the authors had more accurately and critically defined the constructs of continuity. As a result, I started with the articles that paid more attention to critically defining different aspects of continuity within the primary care domain, and built on that base as I explored the broader literature.
Outcome and measurement literature was not included if the term ‘relational continuity’ or one of its related terms/expressions was not clearly discussed or defined. These articles were, however, found to be valuable in informing the conclusion of the thesis work and in consideration of future development and measurement of the concept.

Data Analysis

Data Extraction and Data Display

As a result of the database search outlined in Table 3, I reviewed 2358 abstracts (bolded in Table 3). I subsequently removed duplicate articles and then reviewed the remaining abstracts using the inclusion criteria identified in Figure 1. As a result of this abstract review I identified 181 full articles to be reviewed in detail for the concept analysis.
<table>
<thead>
<tr>
<th>Database</th>
<th>Search Terms</th>
<th>Results (hits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CINAHL</td>
<td>Continuity</td>
<td>13,458</td>
</tr>
<tr>
<td></td>
<td>Continuity AND of care</td>
<td>11,027</td>
</tr>
<tr>
<td></td>
<td>Continuity AND longitudinal</td>
<td>307</td>
</tr>
<tr>
<td></td>
<td>Continuity AND interpersonal</td>
<td>216</td>
</tr>
<tr>
<td></td>
<td>Continuity AND relational</td>
<td>94</td>
</tr>
<tr>
<td>Medline</td>
<td>Continuity</td>
<td>35,426</td>
</tr>
<tr>
<td></td>
<td>Continuity of Patient Care</td>
<td>14,856</td>
</tr>
<tr>
<td></td>
<td>*Care continuity</td>
<td>7324</td>
</tr>
<tr>
<td></td>
<td>Continuity of Care</td>
<td>4,120</td>
</tr>
<tr>
<td></td>
<td>Relationship AND continuity</td>
<td>2035</td>
</tr>
<tr>
<td></td>
<td>Continuity of Patient Care AND Relational/Primary Health Care</td>
<td>578</td>
</tr>
<tr>
<td></td>
<td>Continuity AND relational</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>*care continuity AND relational continuity</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Care continuity AND define and measure</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>*care continuity interpersonal</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>*interpersonal continuity</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>*relational continuity</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>*continuity of patient care AND concept</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td>Relational AND continuity AND concept</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>*continuity of patient care AND construct</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Relational AND continuity AND construct</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Relational AND continuity AND conceptualization</td>
<td>3</td>
</tr>
<tr>
<td>Academic Search Complete</td>
<td>Continuity AND relational</td>
<td>173</td>
</tr>
<tr>
<td>ERIC (EBSCO)</td>
<td>Consumer OR customer AND loyalty</td>
<td>128,722</td>
</tr>
<tr>
<td></td>
<td>Customer relationship management</td>
<td>6,168</td>
</tr>
<tr>
<td></td>
<td>Customer relationship management AND customer retention</td>
<td>167</td>
</tr>
<tr>
<td></td>
<td>Continuity AND relational</td>
<td>18</td>
</tr>
<tr>
<td>Business Source Complete</td>
<td>Continuity</td>
<td>12,242</td>
</tr>
<tr>
<td></td>
<td>Continuity AND relational</td>
<td>56</td>
</tr>
<tr>
<td>Soc Index</td>
<td>Continuity AND relational</td>
<td>77</td>
</tr>
<tr>
<td>Psych Info</td>
<td>Continuity AND relational</td>
<td>25</td>
</tr>
<tr>
<td>Social Work Abstracts</td>
<td>Continuity AND relational</td>
<td>9</td>
</tr>
<tr>
<td>Embase</td>
<td>Relational Continuity</td>
<td>62</td>
</tr>
</tbody>
</table>

*denotes the terms (where more than one) were used in combination as one search term
**Inclusion Criteria:**

1) Do the authors “define” or use words to express the concept of relational continuity (using the term “relational continuity” or any other appropriate expressions/surrogate terms)? These are the words used to express the concept but are not the concept itself. (see Table 1 Search Terms)

2) Does the article speak to/identify attributes and characteristics of the concept?

3) If so – consider the article for inclusion in the literature review for the concept analysis.

---

Figure 1: Search Decision Tree

Total combined: 2358

Discarded: 2177

Off topic by title/abstract review or duplicate

Full article read to determine match with inclusion criteria: 181

Discarded: 45

Not meeting **Inclusion Criteria**

Final total included in review: 160

**Ancestry Search:** 24

**CINAHL** 617

**MEDLINE** 1154

**ACADEMIC SEARCH COMPLETE** 173

**ERIC (EBSCO)** 185

**BUSINESS SOURCE COMPLETE** 56

**SOC INDEX** 77

**PSYCH INFO** 25

**SOCIAL WORK ABSTRACTS** 9

**EMBASE** 62
I reviewed the 181 articles in detail against the inclusion criteria, and also conducted an ancestry search of the reference lists in these articles. Forty-five of the 181 articles were discarded and 24 articles that added to the conceptual picture from the ancestry search were drawn into the analysis. This resulted in 160 articles being included in the concept analysis. **Appendix One** provides more detailed information on the 160 articles included in the final review.

**Figure 2** identified the various terms searched and found in the literature around relational continuity. It was devised as a word frequency cloud utilizing NVIVO and the findings from my literature review. The figure depicts the most utilized terms using font size; those most commonly used are depicted in larger font than those less prevalent in the literature.

![Word Query](image)

**Figure 2: Word Query**
Consistent with Rodgers’ Evolutionary View of Concept Analysis, I completed thematic data extraction on the 160 articles as relevant to each of the following categories:

1. Attributes/Characteristics;
2. Antecedents;
3. Consequences;
4. Context/References;
5. Related Concepts; and

I completed thematic data extraction and a series of descriptors was developed for each category. I examined the data for areas of agreement and disagreement between context and disciplines. I also looked at the change of the concept over time and for insights into emerging trends concerning the concept as per the method applied. I looked for agreement and consensus on attributes/characteristics of the concept across context and disciplines but also took into consideration any outliers found and their possible contribution to the concept as it exists and/or continues to evolve.

Rigour

Manual analysis of the literature was completed and attributes were identified in each piece of literature related to the concept of relational continuity or its surrogate terms. These attributes were pulled and then grouped into like terms and categories. Outlying terms were also identified and considered in the analysis. After completing analysis of the data manually, I subsequently analyzed the content of all 160 articles using NVIVO software to validate the manual findings by completing queries of the various terms and concepts identified through the manual review process. For example, I took each attribute defined by the manual analysis and
ran a query for that attribute through NVIVO to see how many of the articles utilized contained that attribute or term. Not all articles contributed data to every category listed above. I also kept detailed notes of thoughts and findings as I reviewed each article. These were recorded manually and in NVIVO alongside each article. I utilized these detailed notes in my analysis of the context/reference differences; discussion of the evolution of the concept of relational continuity; and in determining the implications for inquiry based on the status of the concept.

Finally, after reviewing the literature I visited nine locations across the province and had thirty conversations with primary care providers across Alberta to get a sense of the state and understanding of ‘relational continuity’ within existing primary care contexts. Keeping the thematic categories in mind, I spoke with individuals who had expertise and experience in operationalizing relational continuity in their practices for the purpose of validating my findings from the literature and gaining clarity on the concept in practice in Alberta. See Appendix Two: Thoughts from the Field.

Case Study Development

To complement the findings from my data analysis, I constructed an ideal case study for the concept of relational continuity. In the case study I present my interpretation of how relationship continuity in a primary care setting could ideally look utilizing the attributes, antecedents, and consequences determined through the analysis. This case study can be found in Appendix Three: Model Case Study.
Chapter Four: Results

As a result of the analysis of the concept of relational continuity a number of attributes and antecedents were identified. Possible consequences of relational continuity as defined through the analysis are identified and discussed. Understanding and considering relational continuity as the concept presented here may be important to improved continuity of care in primary health care in the future.

Attributes of Relational Continuity

Attributes are characteristics or components of a concept; aspects that make up that concept. Identification of the core attributes of relational continuity as a concept is the key purpose and value in doing a concept analysis. Each attribute is not mutually exclusive. It is in combination that the attributes add value to the understanding of the concept. The approach to reviewing and analyzing the literature as described previously helped me identify the common attributes for the concept of relational continuity, as well as the antecedents for the concept. In the paragraphs that follow, I outline the discovered attributes of relational continuity, supported by exemplars from the data. See Appendix Four for a more detailed overview of the attributes and the relevant associated references.

Relational continuity as captured in this broad literature base consists of the following ten attributes within the context of an individual patient, a provider and a visible core team in primary care:

1. Individ{al:} Relational continuity must be experienced by an individual.

“Continuity pertains to the interaction between a single patient and one or more providers. While patients' individual experiences with care can be aggregated
to the group level — such as doctors’ practices, hospital wards or healthcare organizations — continuity is not, fundamentally, a characteristic of providers or organizations” (Reid et al., 2002, p. 3).

2. **Therapeutic:** The patient seeks expert care, judgement, advice, guidance related to their health and the professional provider offers competent, effective, satisfying, helpful, safe, secure, quality advice and care in return.

   “Diseases do not come for treatment, people do. Although industrialized healthcare systems think management, people want healing. Healing requires healing relationships” (Scherger, 2001, p. 1).

   “More time together means that there is time to listen to the patient; to arrive at a better understanding of the patient’s concerns and come to a more accurate and thorough diagnosis; to focus more on the patient and less on the disease; and to have more time to work together to arrive at an acceptable treatment plan” (Hill & Freeman, 2011, p. 27).

3. **Longitudinal:** The patient and provider have a continuous, lasting, ongoing, commitment to one another over time that transcends multiple illness episodes. The patient knows who to contact in the event of a new health problem.

   “When patients concentrate or sequence their care with the same provider over time, they perceive better communication, better accumulated knowledge of them, and better integration of their care over time” (Wagner & Reid, 2007, p. 6).
4. **Responsive:** The commitment between a provider and patient is accommodating, flexible, supportive, available, and accessible. There is opportunity to access one another through other modes than just face to face appointments and both patient and provider support the ability to connect based on need. Care is responsive to the needs of the patient and will change over time as required. Service is customized and tailored to meet the needs of each individual patient; this recognizes cultural diversity as well as vulnerabilities and the social determinants of health.

“Levels of access depend on the circumstances and unique relationship between each patient and provider. In general, the more trust and rapport we establish with a patient, the greater access we can comfortably provide. Giving direct cell phone access to patients who seem particularly scared or vulnerable and who are unlikely to abuse the privilege sends the following very powerful messages: “(1) “I sincerely care about you”; (2) “I trust you”; (3) “I am here to help you.” Ironically, offering direct access reduces frivolous pages and calls since availability is a powerful clinical intervention itself” (Epner, Ravi, & Baile, 2011, p. 1715).

5. **Co-constructed:** The patient and provider work together in the provision of health care for that individual patient. There is recognition by both provider and patient in the value and importance of engaging patient expertise. Both patient and provider contribute to the creation and maintenance of that patient’s health. The plan of care is co-produced. The patient’s condition(s) or health is managed in partnership. There are mutually held expectations and jointly developed guidelines for how the care and relationship will
work. The patient and family are enabled and seen as partners in care. Supports self-care; self-responsibility and a unique individual approach. Person centered care.

“Care is tailored for each patient through collaboration and active involvement. The patient’s realities are sought, respected, and integrated into care” (Digel Vandyk, Graham, VanDenKerkhof, Ross-White, & Harrison, 2013, p. 103).

6. **Mutual Investment:** There is commitment by both provider and patient to be open with and understand one another. There is effort made to share and understand social, contextual, and cultural knowledge of one another. Tacit knowledge of one another. The provider is willing to share things about themselves that add value to the relationship. A relationship is built that is reciprocal. There is recognition and support for one another and the relationship. Communication is unhurried; there is time to spend with each other to grow the relationship and understand the whole person. There is compassion, empathy and the ability to express concerns. Both parties will take time to reach out to one another as required; it’s not only about the patient booking an appointment but about proactive outreach too by the provider.

“Primary care provider showing concern; eye contact; asking questions to get to the bottom of things; leaning forward; asking the patient to follow up; ability to explain what was happening with the patient’s body and to put together a whole picture using past and current medical information. Express appreciation of positive choices the patient has made to improve their health; chit chat; getting to know each other as people. Patients not having to repeat their stories; trust; looking at the whole picture - creates comfort with the provider and the relationship” (Pandhi et al., 2007, p. 271).
7. **Trust:** The patient and the provider trust and are loyal to one another. There is empathy, regard, respect for and confidence in one another. There is caring and concern for one another. The relationship is non-judgemental and accepting.

   “Clinical interaction is a complex dialogue held over time and in an atmosphere of trust – empathy, congruence and unconditional positive regard – relationship conditions offered by the practitioner matter” (Freeman & Hughes, 2010, p. 26).

8. **Whole Person:** The provider addresses the patient from a comprehensive whole person perspective not as a disease or a body part. Care includes proactive prevention and coordination of care. The focus is on the person and not the illness with a goal of providing seamless service and care to the patient as a whole. The provider works to connect and integrate services and care from a biopsychosocial perspective. The care includes addressing and understanding the mental and physical aspects of care as well as the social determinants of health.

   “They regarded visits to their [primary care provider] as part of their lives, in which their diseases were integrated. The patients felt it was important for their health care that the [primary care provider] be informed of their life situation, to create a sense of coherence” (Haggerty, Roberge, Freeman, & Beaulieu, 2013, p. 265).

9. **Shared Accountability:** There is a sense of accountability to one another in support of whole person primary care for the patient; as agreed to by the patient. Often times this is spoken of as attachment to one another. The provider often has a list of patients he or she considers to be on their caseload; sometimes this is also referred to as a panel of patients. A sustained sense of responsibility to one another; openly discussed and agreed to.
“Regular contact with specific services and providers occurs such that a supportive, caring, and therapeutic relationship is developed and sustained over time and across settings. There is a sense of reciprocal familiarity, closeness, affiliation, and responsibility between patient and provider(s), and a consistent point of contact exists from which patients seek most care (or referral for specialized care)” (Digel Vandyk et al., 2013, p. 103).

10. Undergirding that connects care over time: The provider and patient commitment to one another bridges past and current care and provides a link to future care for that patient. The relationship helps to bridge discontinuous events and ill-defined problems are able to evolve and be resolved over time. There is effective and timely communication of health information back to the patient or between healthcare providers because a particular provider is connected to and responsible with a particular patient for that patient’s whole person care. Both provider and patient understand this; informational and management continuity can be linked to this relationship or commitment.

“In particular, people valued seeing their own [primary care provider] whom they knew and trusted, and who knew about them and their medical history. They felt that their own [primary care provider] could assess urgent acute episodes in the context of their medical history” (Freeman & Hughes, 2010, p. 23).

Antecedents of Relational Continuity

Antecedents are those conditions that must precede the concept or must be in place in order for the concept to occur as conceptualized in the attributes above. The following six antecedents are those things identified through the literature and validated in conversations with
experienced providers in Alberta. These antecedents are outlined below, and supported by exemplars from the data collected. See Appendix Five for an overview of the antecedents and the references for each antecedent.

1. **Access (to continuity):** In order for relationship continuity to develop the patient has to have access to the provider and team that they have chosen a relationship with, and must be able to access that provider and team when they have a need to. The importance of access and relational continuity needs to be understood and supported by the booking/reception staff as well as the providers.

   “Establishing and maintaining a relationship with a clinician depends on having access to them – the issues of relationship continuity and access are inextricably intertwined” (Freeman & Hughes, 2010, p. 23).

   “Sufficient capacity for same-day and advance appointments” (Freeman & Hughes, 2010, p. 23).

   “Adaptability and flexibility in access is also important. What happens at the front desk is crucial to securing relationship continuity” (Freeman & Hughes, 2010, p. 23).

   “Importance of attending to the disadvantaged – need to minimize the complexity of service design; operate flexible appointment systems; option of booking in advance; better training for receptionists in sensitivity to the needs of individuals who have difficulty in negotiating their preferences for [relational] continuity” (Baker et al., 2007, p. 288).

2. **Patient Choice:** The patient needs to be able to choose the provider and team in which they plan to develop a relationship with. Relationship continuity is undermined by lack of choice - patient’s need to be able to choose to see someone they know and trust.
“Patients value seeing someone they know and trust. They need information on which to base their choice, experience of consulting with a number of clinicians before exercising their preference, and the chance to build trust in a caregiver over time. Need to be able to choose provider but then need to be able to access them once they’ve made that choice and be supported to see them” (Hill & Freeman, 2011, p. 29).

3. **Valued:** The patient and the provider must both value and understand the need for the relationship in order for relationship continuity to develop.

   “Service on the customer’s terms pays handsomely; staff feel good about themselves when they deliver great service; and about their work and about their company. DON’T FORGET SERVICE!!!! Don’t leave service to chance; train those who deal with the customer; prevent complaints – let staff help. The customer defines service; gear your service to retaining existing customers – retention marketing – work to keep them by keeping them happy. Be proactive. Reward service. Build relationships” (Williams, 1990, p. 755).

4. **Time:** The provider and team need to ensure there is the ability to provide services to the patient that are regular, timely, and provide sufficient time in the consultation to deal with the patient’s problems and for interaction that will promote the formation of a relationship. They need to have the appropriate information needed about the patient and be able to provide clear and relevant information in return.

   “[Primary care providers] who run longer consultation times prescribe less and offer more advice on lifestyle and other health-promoting activities. Longer consultations
are clearly associated with better recognition and handling of psycho-social problems and with better patient enablement. One way of managing the ever increasing demands on the consultation time is to allow the relationship to become established through seeing the same practitioner so that better use is made of the time together” (Hill & Freeman, 2011, p. 28).

“It follows that there are certain structural preconditions which will make such relationships more likely to occur (and conversely, that in the absence of these preconditions, good therapeutic relationships are unlikely to develop or be sustained). These preconditions include an organizational structure which allocates sufficient time to the consultation and which allows patients to ask for their preferred doctor or nurse by name. Regular contact is a prerequisite” (Greenhalgh & Heath, 2010, p. 481).

5. **Team:** Relational continuity needs to be with a visible inter-professional collaborative practice team in order to provide the best quality care to the patient. Team needs to be present to support all the other antecedents and attributes of relational continuity. One provider cannot manage the expectations or requirements of chronic care and support to the individual that is required for best evidence care (Lewanczuk, 2007).

   “The visibility and relationship orientation of teams can have a positive effect on patients’ overall primary care experience” (Rodriguez, Rogers, Marshall, & Safran, 2007, p. 25).

6. **Payment:** Payment reform is required in order for relational continuity to be consistently applied and supported if physician providers are going to be a key provider seen in this concept. Fee-for-service payment in its present form cannot support the attributes and
other antecedents for relational continuity and becomes a barrier for providers, namely physicians, to provide any of these aspects of relational continuity outside of longitudinal continuity. This includes the provision of the time required to establish and build a relationship; the ability to provide access to continuity; the ability to function as part of a team; the time to connect with others and coordinate care; the ability to support patient choice of provider; and the ability to support a co-constructed approach to care.

“Fee-for-service reimbursement has undermined good primary care. At a time when advances in understanding systems of care point to new models in which physicians’ roles might be redefined to contribute more value to patients and to the delivery system, financing models have not yet caught up. Many of the most important aspects of primary care services, including care coordination and intervisit care remain unsupported” (Baron & Cassel, 2008, p. 1595).

Possible Consequences of Relational Continuity

The consequences are those events that occur after or as a result of the concept (Rodgers, 2000). The consequences identified for relational continuity are largely positive in nature, with beneficial outcomes associated or anticipated in most of the literature reviewed. Negative consequences, however, were also raised and will be discussed here. These consequences are found to possibly impact the patient, the organization or system, and the healthcare professional.

Possible Positive Consequences of Relational Continuity

1. Improved Patient Outcomes: The consequences that may positively impact the patient include improved compliance and adherence to medication regimens or treatment (Hjortdahl & Borchgrevink, 1991; Kerse, 2004; Reid et al., 2003); better recognition of patient problems, improved diagnostic accuracy and fewer referrals (Woodward,
Abelson, Tedford, & Hutchison, 2004) ; better patient engagement and involvement in achieving improved outcomes in chronic conditions or prevention of same (Becker et al., 1974; Cabana & Jee, 2004; Dreijer et al., 2012; Frederiksen et al., 2010; King et al., 2008; Uijen et al., 2012; van Servellen et al., 2006; van Walraven et al., 2010); and improved immunization rates, better screening for disease, and improved prevention (Hjortdahl, 2005; Pereira Gray et al., 2003; Shortt, 2004).

It has been asked: who derives the greatest value from relational continuity? Many of the studies reviewed identify that it provides the most value for the elderly and for those with chronic conditions. This is especially notable in terms of its association with reduced utilization of healthcare services and improved cost effectiveness to date (Hollander et al., 2009; Ionescu-Ittu et al., 2007; Nutting, 2003) but few have studied the impact on other populations directly and there is anticipation that others, too, could value from relational continuity. (Health Quality Council of Alberta, 2013)

2. **Improved Patient Experience:** Patient experience has been identified as an important aspect to measure with regards to relational continuity. To date this has been measured mostly as patient satisfaction. Relational continuity has been strongly associated with improved patient satisfaction. Some specific possible consequences include the patient experiencing: a sense of predictability and coherence in their care; satisfaction with their provider’s communication skills and consultation duration; feeling heard, valued, and a part of their care; a sense of security and safety in the care they are receiving (Freeman & Hughes, 2010); better coordination of care between their provider and team and other aspects of the system; more complete advice on preventing illness and maximizing
health; support through a change relationship to change behaviors that will lead to better outcomes for their own health; higher confidence that their provider(s) know their medical history and personal context and will manage their comprehensive needs; more individualized care that supports the patient’s priorities; a more “visible” and cohesive team; access to a continuous relationship with a provider and team; choice of their own provider; enough time with the provider or team to address their concerns; being seen and supported as leaders in their own care, and confidence that their provider and team care about them and their outcomes (Gulliford, Naithani, & Morgan, 2006; Pereira Gray et al., 2003; Shortt, 2004; Woodward et al., 2004).

The literature, however, also shows that often patients do not always experience relational continuity as they themselves would define it and that they are least satisfied with communication skills and consultation duration (Adler et al., 2010; Baker et al., 2007; Bjorkelund et al., 2013; Freeman & Hughes, 2010; Haggerty et al., 2013; Mainous III, Baker, Love, Pereira Gray, & Gill, 2001; Miller et al., 2009; Morgan, Pasquarella, & Holman, 2004; Nutting, 2003; Parker, Corden, & Heaton, 2011; Preston, Cheater, Baker, & Hearnshaw, 1999; Saultz & Albedaiwi, 2004; von Bultzingslowen et al., 2006; Waibel, Henao, Aller, Vargas, & Vazquez, 2012).

Patients with good ongoing relationships as defined by themselves with their physician experience benefits from that ‘continuity of care’—better co-ordination of care between primary care physicians and specialists and more complete advice on preventing illness and maximizing health. Patients with a regular physician expressed a high level of confidence that their doctor knew their medical history and personal context and would manage their comprehensive care needs (Haggerty et al., 2004).
Relational continuity also gives patients a sense of predictability and coherence in their care (Reid et al., 2002).

3. **Improved Quality of Care:** Where relationship is strong and trust is developed it has been said that relational continuity has been associated with the patient being willing to disclose more embarrassing information to their provider(s) (Pereira Gray et al., 2003). The patient feels their values and choices are also better incorporated into their care (Pereira Gray et al., 2003). There is documentation by patients of the development of a sense of belonging, increased trust and a bond (Worrall & Knight, 2006; Young & Demize, 1995). As a result, there is enhanced recognition of the value of the relationship and as a result better whole person comprehensive care is provided. The patient and provider see the need for and are motivated to preserve the relationship. It is anticipated that this also leads to better management and information continuity, (Haggerty, 2009) better application of evidence informed practice, better technical quality of care, and an enhanced sense of knowing the patient and wanting the best for them (Haggerty, 2009).

The social determinants are also taken into consideration and support is provided to address same. There is a change relationship; behavior change is supported by the provider and team.

Relational continuity also facilitates effective gate keeping, promotes rational referral decisions, and reduces the potential for over investigation and iatrogenic harm. It minimizes *collusion of anonymity* (Greenhalgh & Heath, 2010; Hill & Freeman, 2011). Improved access options are usually more likely to be offered; other than face to face when the provider has a panel of patients he knows and cares for. This also leads to
improved efficiency and quality of care (Bjorkelund et al., 2013; Freeman & Hughes, 2010; Hjortdahl & Borchgrevink, 1991; Starfield, 1998).

Having a regular primary care provider with whom a patient concentrates his or her care has been associated with better recognition of unidentified health problems, better rates of recommended immunizations, improved management of specific clinical conditions such as diabetes, with enhanced preventive care, and with an increased likelihood of patients complying with prescribed treatments (Hjortdahl, 2005; Reid et al., 2003; Shortt, 2004).

4. **Improved System Utilization/Cost Effectiveness:** Relational continuity has been associated with better utilization of health care resources and services; and more cost effective care (Hollander et al., 2009; Mitton et al., 2005). It has been associated with reduced hospitalization and emergency room utilization (Adair et al., 2003; Alazri, Heywood, Neal, & Leese, 2007; De Maeseneer, 2003; Ionescu-Ittu et al., 2007; Menec et al., 2006; O'Malley, 2004; Pandhi et al., 2011; Pereira Gray et al., 2003; Shortt, 2004). It has been positively associated with an ability to improve access options for the patient including telephone and email (Bjorkelund et al., 2013; Freeman & Hughes, 2010). It has also been anticipated that relational continuity allows for the ability to better address language and cultural differences once providers know and understand more about the patient’s they are caring for.

5. **Improved Provider Experience:** As mutual trust develops between the provider, team and patient the provider(s) have identified in some of the literature that they feel more valued and more committed to their patient. Relational continuity has also been associated, as described by providers, with improved competency and technological care being
provided by the provider because of stronger connections between them and their patient. Consultation time has also been said to be reduced since the provider can build on their past knowledge and interactions with the patient (Gulliford et al., 2006; Hjortdahl, 2005; Pereira Gray et al., 2003).

Possible Negative Consequences of Relational Continuity

1. Overlooked/Missed Diagnosis: Some of the articles reviewed speak to some of the negative consequences that are anticipated with relational continuity in regards to overlooked or missed diagnosis (Cabana & Jee, 2004). There is a belief by some that more eyes on a patient means more opportunity to “catch” anything unusual that may be going on in relation to that patient’s health (Adler et al., 2010). The concern is that if the patient sees only one care provider that care provider may know the patient and their present diagnoses too well and overlook the fact that something more or something new may be contributing to health problems for the individual. Objectivity is thought to be lessened; and perhaps the provider is less willing to engage in a sensitive topic to avoid confrontation because of the relationship and wanting to keep it positive (Pereira Gray et al., 2003). Multiple perspectives can serve as a check for avoiding incorrect and/or delayed diagnoses and providers with different skills and expertise can complement one another and provide better services overall. Sometimes a provider might blame all ailments on present ailments and chronic diseases and a new diagnosis might be missed (Hjortdahl, 2005).

A provider who has not seen a patient before will likely investigate earlier to make up for his or her lack of knowledge of the patient. It is sometimes the case that a serious
diagnosis only comes to light when there is a discontinuity in care, as when a patient has to see a different provider in an emergency. One of the challenges of general practice, where important conditions occur relatively infrequently, is to remain alert to the possibility of the unusual and significant. It is the nature of general practice that it has to deal with early presentations and undifferentiated presentations of illness. It is part of the GP’s armory of skills that tells him or her when to take action. On balance the good of general practice, described above, outweighs this potential weakness. This is provided that patients are able to return when they want to discuss their concerns again, that doctors remain aware of possible diagnostic traps in the early stages of investigation, and that doctors review and share the learning from such cases (Hill & Freeman, 2011, p. 16).

2. *Loss of Anonymity:* It has also been anticipated or identified that relational continuity may be associated with a loss of anonymity for the provider and the patient. The concern is that the patient and provider get to know each other too well and that there is no escape from work (for the provider or the watchful eyes of the provider (for the patient). From the provider perspective, they need enough inputs to keep intellectual and emotional batteries charged – to avoid fatigue and burnout (Pereira Gray et al., 2003). The patient, on the other hand needs to be able to live daily without undue pressure of feeling judged and watched constantly by the provider; leading to stress and heart sink likely for them both (Kerr et al., 2012). In small communities in particular providers and patients may find themselves in dual relationships.

3. *Loss of Autonomy:* There is concern that a consequence of relational continuity may be a development of paternalism and subsequent loss of autonomy for the patient; they can’t do anything without the input of their provider or they may feel stuck in a relationship.
that they have no confidence in and so their adherence to treatment or medication suffers (Pereira Gray et al., 2003). If the relationship becomes too close or intimate professional boundaries may be crossed and the subsequent benefits that relationship continuity may positively contribute to might then be lost (Hjortdahl, 2005). In a small community, for example, a patient and even the provider may feel trapped in a relationship that is unsatisfying.

Summary of Results

Relational continuity, as understood through this concept analysis, consists of a connection with a primary care provider and team that is therapeutic in nature; responsive, co-constructed, whole person focused, and has an undergirding that connects care over time. It builds trust through mutual investment and shared accountability between provider, patient, and team.

Relational continuity is more likely to be achieved if certain things are in place to support it. These may also be described as determinants for success in achieving the concept. Patients should be able to choose the primary care provider they want to enter into relationship with, and this relationship should be valued by both patients and providers. This then needs to be supported through access to the relationship of choice and adequate time for the relationship to develop and for value to be realized. If value is not realized then there should be opportunity to change providers. Payment structures and team processes need to be in place in such a way as to support the ability to achieve the other attributes and antecedents of relational continuity.

There is evidence to support the associations between relational continuity and positive consequences including improved outcomes for individuals, improved health care utilization, cost effectiveness and improved patient satisfaction. Though there is potential negative
consequences that have been explored as well, it would appear that the preponderance of existing evidence supports that the role of relational continuity is important. It is important to note, however, that this is based mostly upon measurement of only one aspect of relational continuity-longitudinality. The evidence strongly suggests that relational continuity is important to the individual receiving care. My work in this concept analysis suggests that there is a need to consider the possible consequences as a result of the whole concept; the interpersonal as well as longitudinal attributes of relational continuity. Better understanding of the linkage between relational continuity and outcomes is key to determining the value or harm of relational continuity and the evolution of relational continuity as a concept that is connected to primary health care. (See Figure 3.)
Antecedents

Access  Patient Choice  Valued  Time  Team  Payment

Undergirding that connects care over time
Therapeutic
Responsive

Co-constructed
Mutual Investment

Shared Accountability

Longitudinal

Relational Continuity

Trust

Whole Person

Positive
Improved patient outcomes; system utilization;
Cost effectiveness; patient/provider satisfaction

Consequences

Negative
overlooked or missed diagnosis; loss of autonomy;
loss of anonymity;

Figure 3: Relationship Continuity Visual
Chapter Five: Discussion of the Results

In this chapter I will discuss the results of this concept analysis and what the implications of the attributes and antecedents are in the current context of primary care and continuity of care as a whole. I will also speak to measurement of the concept, how it could be enacted, and what the implications of its enactment could be for primary health care.

Access to Continuity

Establishing and maintaining a relationship with a provider and team depends on ready access to them. Relational continuity and access have been described as being ‘inextricably intertwined’ (Guthrie & Wyke, 2006). National and provincial policy initiatives in Canada to meet demand for ‘urgent’ primary care, however, have polarized relational continuity and access by presenting them as incompatible ideals. Research into patients’ experiences with booking appointments has identified that sometimes patients are prepared to ‘trade-off’ waiting to see a provider or team in which they have a relationship in favor of quick access (Boulton, Tarrant, Windridge, Baker, & Freeman, 2006; Cowie, Morgan, White, & Gulliford, 2009; Guthrie & Wyke, 2006) as typically, they are unable to get both quick access and access to their own provider.

Despite investment of millions of dollars in national and provincial initiatives, wait times for health care remain high in Canada. Based on an analysis of OECD countries (Davis, Schoen, & Stremikis, 2010) Canada ranks last with regard to access and the timeliness of care; however, per capita health expenditures are second highest. Alberta has allocated more than $43 billion of Canadian Government and Alberta Health dollars to improve access to priority areas. Indeed, the access-over-continuity trade-off in Alberta has played out in the addition of numerous
episodic services to meet acute need. Since 2010 there has been a proliferation of urgent care centers in the two large cities in the province (Alberta Health Services, 2010b). Further, between September 2010 and March 2011, 360 acute care beds have been added to the system in Edmonton and Calgary, and acute care and emergency room capacity has been added with the 2013 opening of the South Health Campus in the Calgary Zone and the Kaye Edmonton Clinic in the Edmonton Zone. There has also been the addition of “Medical Assessment Units” alongside emergency rooms in tertiary care hospitals (Alberta Health Services, 2010a)—units whose purpose is to allow for longer stays in emergency departments for those with more complex needs who do not necessarily require admission.

These initiatives can be seen as efforts to increase the capacity of hospitals and emergency departments to meet demand by “doubling down” on the acute, episodic model of care, with unsatisfactory results. In spite of these and other investments, there remains a need to improve access to health services (Alberta Health, 2010). Other efforts on the primary care front by Alberta Health have included heavy investment in the Primary Care Network (PCN) model of primary care, and more recently the Family Care Clinic model. The main impetus behind these efforts continues to be access—and a reduction in demand on the acute care system (Tholl & Grimes, 2012). Though one of the objectives within the Primary Care Network (PCN) initiative in Alberta has been to improve integration and coordination with other aspects of the system Alberta has continued to create silos as options to access primary care. Alberta Health has introduced the Family Care Clinic model (Tholl & Grimes, 2012). In total we now have three Family Care Clinics in the province; seven urgent care clinics; and 42 Primary Care Networks to give Albertans more direct access to health care services (Alberta Health, 2013; Alberta Health Services, 2010b). Yet despite this we now have an increase of four percent of patients attending
our Emergency Room and Urgent Care Centers. We continue to meet our target of admitting individuals to the hospital within eight hours only forty-five percent of the time and discharging patients from the Emergency room to home within four hours only sixty-five percent of the time (Alberta Health, 2013). In light of this analysis, I wonder if what we see is the result of sacrificing continuity in the name of access. With increased dollars to primary care and the development of FCC’s, came no additional accountabilities regarding continuity of care. Investment in access without investing in continuity may be a mistake. Continuity does not need to be lost through the rush to improve or get access to service; any service.

Discrete choice experiments are a method of eliciting preferences that allows estimation of the relative importance of different aspects of care, the trade-offs between these aspects and the total satisfaction or utility that responders derive from health care services (Rubin, Bate, George, Shackley, & Hall, 2006). These types of experiments have enabled assessments to be made of the relative importance of access and continuity in different circumstances (Cheraghi-Sohi et al., 2008; Rubin et al., 2006; Turner et al., 2007). All these studies found that individuals do not always just seek or prefer fast access but that in certain circumstances they have a clear preference for seeing a provider and or team they know; especially when the problem is ongoing. A more recent study of patients’ experiences of emergency and urgent care found that even when urgency was paramount, patients were alert to the importance of continuity and its contribution to quality care:

"In particular, people valued seeing their own GP whom they knew and trusted, and who knew about them and their medical history. They felt that their own GP could assess urgent acute episodes in the context of their medical history” (Freeman & Hughes, 2010, p. 23).
It would seem important to reflect on perpetuating an approach that requires people to choose between access and continuity. In most cases individuals want both timely access to a provider and the opportunity to see the provider and/or team they know and trust (Baker et al., 2007) rather than one or the other. According to the findings of this concept analysis access to continuity is an important antecedent to relational continuity. The individual should be able to access the provider and team with whom they have chosen a relationship when they have a need to. If there is a relationship established between the patient and a primary care provider and team (relational continuity) then follow up care can be addressed in relation to the other care needs that an individual patient may have; whole person care. This becomes especially important in relation to chronic care. It would appear that there are implications to allowing access to trump continuity such as fragmentation of care and services especially to individuals with chronic conditions. “Concern for outcomes mandates a consistent and coherent approach to the management of the patient’s problem, until the problem is resolved or the risk that justified follow-up has disappeared” (World Health Organization, 2008, p. 49).

The ability for the individual to access consistent and coherent care when they need it and the care supporting the management of exacerbation of symptoms and ultimately prevent these exacerbations from happening appears important to consider in ongoing patient care. There appears to be value in constant, ongoing follow up around disease and risk factor management. Relational continuity can support self-management and a plan of care for the individual and support them to address the other aspects contributing to illness (social determinants of health; disease prevention). There are also some short term illness aspects that can be addressed better by having access to continuity where the building of that relationship can contribute to overall health in the long run. In Alberta one of the highest uses of the emergency room is visits for
respiratory issues, for example. Access to continuity can support long term preventive management of exacerbation of asthma and chronic obstructive pulmonary disease. Relational continuity can also possibly help with infectious disease management and improvement in the use of oral antibiotics based on actual need given increased knowledge of the individual being treated. What is not yet known is the degree to which providing acute illness care through a personal provider/team fosters the trust and interpersonal relationships that are needed to fully perform higher order health care functions (Stange, 2009b). “Personalized care that is prioritized based on the knowledge of the individual, family and community rather than crude system-level rationing is most likely to enhance benefit to the person and the population” (Stange, 2009b, p. 390). If we look to improve access through urgent and emergent care streams we encourage episodic care which will likely not support reducing risks for chronic conditions and will not address reducing exacerbations of disease or reducing fragmentation in care. This leaves individuals struggling to know where and how to access services.

Access to continuity begins with connecting the individual with a provider and team. In Alberta, at present, that means attaching the individual to a physician panel in a primary care clinic, through a Primary Care Network or to a team in a Community Health Center or Family Care Clinic. Though this approach remains focused greatly on the physician -patient relationship within the context of a clinician-centred definition of longitudinality, it is the first step to being able to link the individual to relationship and provides opportunity to build on relational continuity from there. For relational continuity to be realized in a way that honours the attributes revealed here, this connection needs to be with a provider and team of choice that the individual values and who values them. This provider and team need to have the time to give to regular, timely interactions and sufficient time in those interactions to deal with the individual needs and
form relationship. This connection will also contribute to future ability for other modes of access once a relationship is established and built; including email and phone versus all face to face encounters. It will also hopefully lead to resolve in the individual having to choose between access and continuity except in cases of true emergency.

**Whole Person Individual Care, Teamwork and Accountability**

One of the most significant outcomes of this analysis is the observation that relational continuity cannot be identified or measured on the basis of its longitudinal element alone; it is more than the chain of care given by one health care provider over time. Indeed, it is not reasonable to expect that any single physician or primary care provider could provide all needed care, especially if the goal is to expand primary care to embrace the philosophy of primary health care.

Numerous study findings demonstrated a clear association between seeing the same provider over time and positive outcomes. But evidence is also clear that interdisciplinary team member involvement in primary care delivery has led to the largest improvements in control of chronic diseases such as hypertension and diabetes (Lewanczuk, 2007; Østbye et al., 2005; Wagner & Reid, 2007).

Other disciplines such as nursing, for example, have been found to be more effective in the provision of preventive procedures, chronic disease self-management support, coordination of care and ongoing assessment of symptoms and behaviors. It seems clear that the failure to effectively use a practice team contributes to the less than optimal quality of chronic disease and preventive care (Østbye et al., 2005; Wagner & Reid, 2007).

This current analysis has revealed is that it is important to patients for interdisciplinary teams to be visible and function as “coherent wholes” that enhance the primary care patient-
provider relationship (Nasmith et al., 2010; Safran, 2003; Wagner et al., 1996; Wagner & Reid, 2007). Team and relational continuity can function together and do not need to be at odds with one another. Relational continuity can be with a team, and this teamwork is actually required in order to provide the best care and not overburden one provider in terms of expectations and provision of evidence based quality care.

It appears that the effective use of teams enables primary care systems to deliver all the attributes of relational continuity. Indeed, others have noted that one provider cannot manage the expectations or meet the requirements of chronic care and support required for delivering best evidence-based care (Lewanczuk, 2007; Østbye et al., 2005). This literature is developing from all disciplines within healthcare in the past few years but much of the focus is from literature related to the social sciences, healthcare system, and primary health care/medical home.

There is a growing impetus within healthcare to look at designing care to address the complexity of comorbidities versus just one illness. Such complexity can only be addressed by an appropriate combination of generalist and specialist care of whole persons; versus the narrow disease-specific focus that has dominated the 2000’s especially in the USA (Nasmith et al., 2010; Østbye et al., 2005; Wagner & Reid, 2007). Quality whole person care is a key aspect of relational continuity as is accountability for the quality of care provided. Using evidence informed decision making in the plan of care with the individual and team is going to be key and important to keeping value in a therapeutic, healing approach to care (Reis et al., 2008).

As a result of this concept analysis, I also observe an important balance between relationship, team and accountability. In enacting relational continuity, being accountable as the primary provider does not (cannot) mean being personally available to patients at all times. The attributes revealed here, I suggest, call instead for a provider to be an anchor to continuity, and to
support and trust in others to provide the best care for the patient as required-- as an extension to the relationship with the patient (Bergeson & Dean, 2006; Yarnall et al., 2009). This also means supporting and trusting patients themselves to be co-producers or co-providers of the care in the relationship.

In 2004 Buetow challenged provider continuity and by logical extension, the very foundation of family medicine in terms of the clinician-centered values and language by which family medicine continued to define itself. He addressed the value of the patient and informal caregivers who accompany patients to their physician visits as co-producers or co-providers of family medicine (Buetow, 2004).

*Mutual Investment, Time, Choice and Shared Accountability*

Over the past number of years healthcare has looked more to business practices and business literature to improve the quality of services and satisfaction of its users. Most adaptations taken from business have centered on quality improvement and customer service. As a result, I thought it important to consider the evolution of the concept of customer service within the marketing and business literature in developing this concept analysis. Healthcare has not kept pace with the business world in understanding customer service and relations; as a result business experiences can be invaluable to healthcare despite the fact that our relationship with the patient may differ from the business relationship with the customer.

One of the aspects that the business literature brought to this concept analysis is the focus on value in a relationship being two sided (Arslan, 2008; Han & Kim, 2009; Maniscalco, Daniloski, & Brinberg, 2010; Saparito, Chen, & Sapienza, 2004; Sim, Mak, & Jones, 2006; Young & Demize, 1995). This means the relationship can be valuable to both customer and business owner. This two sided value in a relationship makes me curious as to how we in health
care can work to support the individual patient in a way that does not expect them to be the
instigator of interactions at all steps; we the providers could reach out to the individuals as well
in valuing and ensuring interactions occur. Providers should show interest in the relationship and
the individual as well. Some of the healthcare literature also supports this to date (Gulliford et
al., 2006; Haggerty et al., 2013; Pandhi et al., 2007; Parker et al., 2011). It is an important aspect
of relational continuity as described in this analysis for the provider and/or team the patient and
informal care provider(s) has the relationship with to proactively reach out (Gulliford et al.,
2006; Parker et al., 2011) and initiate contact for preventative care, regular monitoring, and in
times when the individual is most vulnerable (Haggerty et al., 2013; Pandhi et al., 2007). This
type of mutual investment in the relationship also supports trust and trust is key to relationship
(Baker et al., 2003; Leavey, Rothi, & Paul, 2011; Mainous III et al., 2001). The business
literature also brings to light the importance of the value of the service; its quality, its ability to
capture the heart of the individual and the will for them to want to come back (Arslan, 2008; Han
& Kim, 2009; Maniscalco et al., 2010; Saparito et al., 2004; Sim et al., 2006; Young & Demize,
1995). There is a need to foster this desire and put things in place that make the individual want
to come back and stay connected.

Most striking was evidence and learnings from business in the literature around Total
Relationship Management (Arslan, 2008). There is recognized value in relationship development
and customer driven value chains. "Total relationship marketing is marketing based on
relationships, networks and interaction, recognizing that marketing is embedded in the total
management of the networks of the selling organization, the market and society. It is directed to
long term win-win relationships with individual customers and other stakeholders, and value is
jointly created between the parties involved. It transcends the boundaries between specialist
functions and disciplines” (Arslan, 2008, p. 152). Healthcare in 2015 still needs to learn from these lessons.

Insufficient recognition of the value of relationships in health and of the need to tailor health services to each community and individual situation represent, in my view, major shortcomings in contemporary health care, resulting not only in inequity and poor social outcomes, but also diminishing the health outcome returns on the investment in health services. Putting people first is not a trivial principle. It can require significant departures from business as usual (World Health Organization, 2008).

Relational Continuity, Management Continuity and Informational Continuity

Since the 1950s Canadian health care reformers have attempted to integrate physician practice with the rest of healthcare through integrated models and approaches but have failed (Aggarwal, 2009). The policy response to fragmentation in healthcare, i.e. the absence of continuity of care, has been to improve access and emphasize management and informational continuity through processes and tools (Freeman, 2012; Haggerty et al., 2013). Whenever a patient crosses an organizational boundary, care is vulnerable to discontinuity. As a health care system and as providers/teams we look for ways to improve this situation but we seldom consider the importance or value of relational continuity and the accumulated knowledge from such relationship as being critical to adapting and supporting care (Haggerty et al., 2013). This has led to the creation of solutions through strategies such as case management, care pathways, discharge planning, and disease management by specialist teams, nurses, mental health therapists and other disciplines. Little emphasis has been placed on relational continuity, and even less is done to support or improve it. The underlying assumption globally seems to be that relationship continuity is increasingly irrelevant to most patients and increasingly difficult to achieve
Models that strive for seamless service delivery have been the goal. Unfortunately these have largely failed; the greatest gaps in continuity of care remain at the points of transition (Tarrant, Windridge, Baker, Freeman, & Boulton, 2015). Authors focusing on medically specialized disease-focused care have tended to emphasize the need for and content of care pathways and informational continuity across settings and between primary care and specialty based on individual diseases versus whole person care (Nolte & McKee, 2008). There has been an increased focus over the past years on the process and management of continuity of care. This is much of the focus described in the HQCA report (Health Quality Council of Alberta, 2013) on the “Continuity of Patient Care Study”. Since the family physician aspect of care remains nonintegrated and outside the purview or the ability of the rest of the providers and system to impact, solutions focus on working around the family physician. If relational continuity as defined in this concept analysis is to be successful there is a need to redefine and refocus the existing provider-centric system and create a more patient centric system; one in which the system is designed to support the individual and family, support that needs to come from the physician and other providers in the system.

Despite the fact that the College of Family Physicians of Canada has included relationship as central to the role of the family physician (College of Family Physicians of Canada, 2015) and that trust, interpersonal treatment, knowledge of the patient, and communication is what patients want from that relationship, these elements appear to have not been fully realized over the past number of years (Scherger, 2001). Gatekeeping has kept family physicians in the frontlines of care but when researchers ask patients what they want and expect from their relationship with their family physician, it is clear that for the most part they are
unable to get it (Buetow, 2004; Cowie et al., 2009; Safran, 2003; Safran, Montgomery, Chang, Murphy, & Rogers, 2001; Tarrant et al., 2015).

There appears to be a persistent focus on the needs of the provider, and a deep belief that physicians are too omniscient, powerful, scarce and precious to challenge. There is a focus on clinician centeredness and autonomy; belief that the provider knows best and that the patient is lucky to be able to see them and therefore needs to value the provider’s time more than their own (Simpson, 2012). There is also a focus on work/life balance rather than integration (Yousefi & Maslowski, 2013). And, there is a continued focus on fee for service, access, and the biomedical technologies of medicine; addressing the disease not the person and losing the valuable emphasis originally intended in family medicine practice - relational and whole person care (Stange, 2009a).

Where several clinicians or agencies provide care, good management continuity is often taken for granted by patients to be an invisible quality of the system. It therefore comes as a shock to patients when lack of management continuity becomes apparent—i.e. when it fails (in the form of gaps and deficiencies in services) (Freeman & Hughes, 2010, p. 23). Failures of continuity happen frequently, and at a time when continuity of care for patients is more crucial than ever; when there is a need to support chronic care and shift from a ‘find it and fix it’ health care system towards one designed to meet the long term needs of individuals. What this continues to lead to is fragmented care; a “focusing and acting on the parts without appreciating their relation to the evolving whole” (Stange, 2009a, p. 100). After all, the individual always has other places they can go for care such as urgent care, emergency departments, or walk in clinics. As providers we have no need to be concerned; we can just selfishly work our unionized hours, maintain our fee-for-service, and make additional money being a hospitalist or working shifts in
the urgent care center, or providing a locum elsewhere versus carrying our own caseload despite the cost to our patients or our system (Simpson, 2012).

If family physicians are going to be an important partner in primary health care reform and realize their vision of the Patient Centered Medical Home (College of Family Physicians of Canada, 2011) then it is no longer acceptable to rely on a fee for service, acute problem-focused approach to care—an approach that no longer delivers what individuals need from our health care system. Certainly the approach taken to date has not helped us to achieve the implementation of primary health care. In Canada, despite improvements, we still have a D rating in Primary Health Care according to the Conference Board of Canada in relation to other international countries. This rating is lower than the US, Australia, the United Kingdom, the Netherlands, New Zealand and many other countries (Prada, 2015).

Chronic conditions “require a complex response over an extended time period that involves coordinated inputs from a wide range of health professionals and access to essential medicines and monitoring systems, all of which need to be optimally embedded within a system that promotes patient empowerment” (Nolte & McKee, 2008, p. 1). This complex response requires the attention not only of health professionals but also of caregivers and family members (Nasmith et al., 2010). The biomedical approach to care, based on competent diagnosis and effective treatment, is no longer enough. In chronic conditions, outcomes are mostly dependent on the individual’s ability to change behavior (Vallis, 2014). Much of what is required to support chronic disease prevention and management in today’s environment is about behavior change and the need for healthcare providers to establish relationship with their patients in order to support patients’ in changing behaviors to achieve their outcomes (Vallis, 2014). In addition, it is what patients want (Safran, 2003; Scherger, 2001; Uijen, Schers, & van Weel, 2010; Waibel et
al., 2012). We know from the evidence discussed earlier that relational continuity is not irrelevant to patients (Baker et al., 2007; Cheraghi-Sohi et al., 2008; Rubin et al., 2006; Turner et al., 2007). To many, especially those with chronic conditions and the elderly, it matters. It could also have benefit to other populations; of that we are not yet clear. For the most part, patients are not yet experiencing relational continuity as expected.

**Payment**

According to my findings, it is important that family physicians and other providers accept a payment model that provides incentives for them to take the time they need with their patients to build and sustain relationship, and to work in teams. Fee for service payment approaches reward physicians for personally addressing every patient issue, within a very few minutes; this does not support relational continuity nor does it incent teamwork (Leger, 2011). Blended payment models for physicians and teams may be one approach to payment that supports the care of individuals through a mix of capitation, risk adjustment to the capitation and fee for service. Capitation could encourage and support ongoing care to individual patients by teams, risk adjustment could ensure incentives to care for the most sick and vulnerable, and fee for service could still be used to provide incentives to address the needs of unattached or transient patients (Andres, 2011; Leger, 2011). Blended payment approaches often also include incentive pay for doing certain aspects of care for individuals consistently such as the provision of continuity, advanced access, or preventive care; payment that could be shared with the whole team (Baron & Cassel, 2008). Blended payment is an approach that continues to recognize physician autonomy but also incents the right care for the patient.

Another possible payment approach is to salary physicians as is done with other providers within healthcare (Simpson, 2012). This, however, can lead to similar issues
experienced with other health providers. Issues have arisen around already existing salaried healthcare providers in terms of unionization and unreasonable rise in cost and decrease in hours of availability (Simpson, 2012). The solution is likely best found in payment that supports the team to meet the needs of a population of patients across the continuum of care.

The way our system is funded primarily through block transfers to acute care hospitals and fee-for-service payments to physicians encourages volume and the status quo. It does not reward value and quality of care or responsible stewardship (Health Canada, 2015). In fact, when individuals or programs go out of their way to be innovative and make changes to improve efficiency or cost effectiveness or patient-centered care they often do not accrue the benefits. Consequently others are not willing to follow suit. Only a handful of early adopters are willing to take the chances and make the changes but those are often not spreadable or sustainable given perverse disincentives (Picard, 2015). Primary care physician clinics in Alberta such as Taber and Crowfoot Clinic in Calgary are examples of early adopters and innovative practices that have been willing and able to make change and support the right incentives. They still remain the only two primary care physician clinics in Alberta who have been supported in an alternate payment plan though others have put forward proposals to move to this approach to payment.

Another example of an innovative idea that was not spread or sustained given perverse disincentive is the Nurse Practitioner (NP) research completed by Canadian researchers in the 1970’s. Researchers found that a specially-trained nurse practitioner collaborating with a family doctor could do seventy percent of the doctor’s work, with no differences in patient satisfaction or health outcomes. This teamwork was hampered by fee-for-service payment to the physicians and the NP being salaried (Health Canada, 2015).
Payment and team need to be considered in order to realize relational continuity as conceived in this concept analysis. Physicians and other team members need to see the value in relational continuity and team based care and need to know it is going to lead to best outcomes for individuals and improve quality, satisfaction, and work life balance for the provider. Both of which are not only possible but plausible. Change in public policy creating a system approach and provider, especially physician, payment reform will be crucial to enable this work. Innovation and improvement cannot occur without it.

“There’s a lot of people who go and see their doctor every couple of weeks and they provide little in the way of care, but it is continuous, so that doesn’t mean anything. There has to be something about what kind of outcomes there are as well, and for me continuity of care has to look at outcomes. It can’t just look at whether I’m still seeing them or not because I can do that, I can get my patients to come back once a month” (Sturmberg, 2000, p. 17).

Measuring Relational Continuity

Measuring relational continuity as conceptualized in this thesis is going to require a broader approach than those methods of measurement used to date to truly determine its value, harm or inconsequence.

When considering the attributes of relational continuity in addition to longitudinality, such as interpersonal factors, what possible outcomes may occur as a result of relational continuity and how would you measure the possible cause/effect linkage between those variables? The concept of relational continuity is a robust one and not one that can be measured by a single measure around longitudinality of the patient-provider or patient-provider-team relationship.
Measurement of the concept defined here must also consist of understanding the relationship that exists, the approach to team care and the patient’s involvement as a member of that team, the structure of the practice and organization in supporting whole person comprehensive care, the access and modes of availability that patient has to their provider and team, the trust that patient has in their provider and team, the linkage that provider and team has with other services and providers, the shared accountabilities that are defined and measured, time, value, choice, and the experience each individual has related to continuity of care.

Continuity as a whole is the result of a combination of adequate access to care for patients, good interpersonal skills, good information flow and uptake between providers and organizations, and good care coordination between providers to maintain consistency. Continuity is the product of stable provider-patient relationships, the use of relevant information on previous care, and an application of consistent strategies to manage health problems. Continuity consists of bridging separate and discrete elements of care (e.g., care from different providers or different episodes of illness) as well as maintaining and supporting elements that endure over time, such as disease management plans and stable provider-patient relationships. Doing so is increasingly challenging as the elements are provided by more people or organizations and as they relate to different health concerns. For patients and their families, the experience of continuity relates to their perception that providers know what happened before, that different providers agree on a management plan and that a provider who knows them will care for them in the future. For providers, the experience of continuity is their perception that they have sufficient information and knowledge about a patient to best apply their professional competence and that their care inputs are recognized and pursued by other providers. To date, many of the measures concentrate on chronological aspects of care, while little is known about how they relate to information,
relational and management continuity. It is also time for patients’ perspectives to become a priority for measurement.

A Canadian team of researchers (Haggerty et al., 2011) compared Primary Health Care evaluation instruments available for the measurement of relational continuity from the patient perspective. Their objective was to evaluate how relational continuity and other primary health care priority attributes were measured in validated instruments. They had 645 adults with at least one health care contact in the past 12 months respond to six instruments as part of a larger study around the evaluation of primary health care attributes. They found that five subscales mapped to their definition of relational continuity. Haggerty and colleagues defined relational continuity as “a therapeutic relationship between a patient and one or more providers that spans various health care events and results in accumulated knowledge of the patient and care consistent with the patient’s needs” (Haggerty et al., 2011, p. 127). These subscales were found in the Primary Care Assessment Survey (PCAS, two subscales), the Primary Care Assessment Tool short form (PCAT-S), and the Components of Primary Care Index (CPCI, two subscales). Haggerty and colleagues examined the distributional statistics and subscale correlations followed by common factor and confirmatory factor analysis (structural equation modelling) to identify dimensions common to the entire set of items. They then examined the performance of individual items and response scales using item response theory analysis. Overall they found that validated subscales measure accumulated knowledge very well. But other aspects of the definition were not measured quite so clearly.

The tools looked at by Haggerty and colleagues may be worth exploring further around other attributes of relational continuity as described in this thesis. There are a number of attributes that weren’t explored as part of Haggerty and colleague’s above definition. Other aspects explored in
the evaluation of primary health care by Haggerty and colleagues, however, did include access, respectfulness, and interpersonal communication (Haggerty et al., 2011). They did find that there was alignment between some of the subscale items and first-contact accessibility as well as accommodation. Interpersonal continuity defined as “the ability of the provider to elicit and understand patient concerns, to explain health care issues and to engage in shared decision making if desired” (Haggerty et al., 2011, p. 109) was well reflected in the available measures. Shared decision making, however, was poorly represented. Respectfulness, considered to be one measureable and core element of responsiveness, was poorly captured as was responsiveness as a whole by any of the validated instruments explored (Haggerty et al., 2011). These are some of the other aspects of the work of Haggerty and team that are worth considering when developing measures for the concept analyzed as developed here. In addition Wong and Haggerty (2013) built on this work and have identified tools and indicators for measuring patient experience in primary health care. Some of these indicators and tools also align with attributes of relational continuity as described in this concept analysis. For example, continuity, coordination, trust, team functioning, and whole person care (Wong & Haggerty, 2013). This work has informed tool development for patient experience in primary health care with the Canadian Institute of Health Information as well. This concept analysis however, has not explored all the tools and possible measures already available that could be considered in unison for the measurement of the concept of relational continuity discussed in this thesis. An in depth approach to that work is still required.

Conclusion

In this concept analysis I have pursued and presented an understanding of relational continuity in the context of primary care and, ultimately, primary health care. I have linked the
concept with the current state in healthcare as work continues toward finding ways to improve and shift our system to a more primary health based approach from the current acute care focused environment. The major contribution of this work to primary health care is a clear understanding that relational continuity and longitudinal continuity are not one and the same but that relational continuity is about a much broader concept. The antecedents to relational continuity identified in this concept analysis are those aspects that can enhance the achievement of relational continuity as a concept in primary health care delivery. The attributes build on the attribute of longitudinal continuity by describing the more interpersonal attributes that are core to the broader concept of relational continuity.

To date we have largely operated on an incomplete understanding of relational continuity. Relational continuity has also not been evaluated and/or measured in a way that substantiates or repudiates its value. Perhaps if the findings of this concept analysis are used to develop a more robust treatment of relational continuity and attempt is made to understand its value to informational and management continuity; there could be a more robust understanding around improving continuity of care for individuals in our healthcare system. Most certainly the attributes have been recognized by patients to be important and valuable to their care and the evidence to date certainly points to the possibility of positive and improved outcomes as a result. The approaches in primary care to date that have misunderstood or ignored implementation of relational continuity as a whole concept have not appeared to be successful in improving the outcomes the system has hoped for around decreased cost, decreased acute care and emergency room utilization, and improved quality of care. Though work has begun to be supported in Alberta and other jurisdictions across Canada around “attachment” to a
physician and longitudinal continuity; a broader understanding of relational continuity in the context of primary healthcare has been unclear.

My purpose in completing this concept analysis was to broaden and clarify the understanding of the concept of relational continuity, a concept that been used and defined in inconsistent ways, and not generally well understood. Further, I found it necessary to pursue an understanding of how the thinking has evolved around relational continuity in order to ensure currency, relevance and applicability to the dynamic primary health care context. Finally, it was also my goal to spark and inform discussion around better measurement of relational continuity, based on a clearer understanding of the concept. I believe this concept analysis has met these purposes.

Next I will discuss the limitations of this study and the future implications this study could have on the progression of primary health care.
Chapter Six: Limitations of the Study

Some of the limitations of this study are publication bias, the inductive iterative approach to the review of the literature, and the evolution of the concept. Many of these are common to the qualitative concept analysis approach.

First, there may have been publication bias in my analysis. I could only analyze and include those articles that were published or well known in the grey literature and there is an inherent bias in what gets published. In an attempt to address this I explored broad perspectives from the literature in medicine, nursing, social science, and business, moving well beyond my own discipline. I also reviewed the results with my thesis committee and held conversations with experts and those with experience to validate, challenge and extend my findings from the literature.

Second, there is the possibility that relevant articles discussing the concept of relational continuity were missed in the review of the literature. Indeed, some articles by known experts were not initially retrieved based on the searches; however, these articles were added on ancestry search. I also explored what grey literature I could find from national, international, provincial and local documents posted on websites or identified through other avenues such as my exposure through my employment in the area. I reviewed a variety of publications such as literature reviews, research studies, systematic reviews, editorials, reports, commentaries, and grey literature. I did not place a timeline around the publications I was willing to explore. Continuity of care as a broader construct is widely discussed in the published literature so I had to substantially narrow my initial searches in order for the search process to remain manageable. Therefore, some pertinent pieces of work may well have still been missed. Also, because of the
inductive and iterative approach to this concept analysis the study would be difficult to replicate. However, I did endeavor to thoroughly document the process utilized and the articles reviewed to arrive at my results and conclusions, enhancing transparency and auditability.

Third, concepts always evolve over time. This is consistent with a post-positivist world view. Nothing is static; no truth, no fact, no knowledge. This concept analysis for relational continuity will need to be revised in the future as others study this phenomenon.
Chapter Seven: Future Implications of the Study

This concept analysis of relational continuity leads to a clearer understanding of the concept, what it consists of, and what is needed in order for it to exist. As a result, I see that there are a number of potential implications for the use of this concept analysis in relation to enhancing primary care in the direction of primary health care.

The evidence to date suggests that there is something about a longitudinal connection over time with a provider that enhances outcomes. This is enough to raise concern about its possible loss. The evidence, however, also shows that patients rarely get what they understand as relational continuity from their provider in our present systems and approaches to care. In the world of chronic disease prevention and management--today’s pressing healthcare challenge--there is a need for patients to be intimately involved in and jointly responsible for their care. Indeed, they are ultimately the only ones who can achieve improvement in their outcomes.

What if relationship continuity is the only concept that can get us to better outcomes? Would a system that values and prioritizes relational continuity have made a difference for Greg Price? Understanding and discussion of the concept, followed by agreement on its main attributes by all health care disciplines and areas of health care provision is important to its implementation, measurement and evaluation. The patient perspective is also more important than ever given that successful outcomes are going to stem from the work of the individual patient with a chronic condition—the work of self-care. Providing what the patient wants and needs will be crucial to the ongoing discussion, understanding, and agreement of the concept of relational continuity.

Identification of the concept allows for the ability to develop theory, models, and measures to support the concept. Concepts are the basic building blocks in theory construction
and a theory can be graphically represented by a model (Walker & Avant, 2011). Sparbel (Sparbel & Anderson, 2000b) speaks to the need for concept analysis, theory and model development in better understanding continuity of care and the concepts that make up this construct. Theory, models and measures are important outcomes that can arise from good concept analysis and development (Baldwin, 2008).

I suggest a need for concerted effort to develop measures that include all of the attributes of the concept of relational continuity. Based on this concept analysis it is clear that there is a need to also measure the context of the delivery of the concept; hence on the ground measurement in sites of care is crucial to understanding it from both a qualitative and quantitative perspective. This concept analysis allows for discussion and consideration of consistent tools to measure the various attributes of the concept. There have been a number of tools or measures developed that can possibly be utilized or retooled. As discussed in the discussion section of this thesis, there is likely not a need to completely develop new measures (Sparbel & Anderson, 2000a). There is, however, a need to have tools and measures used more precisely, consistently, and comparably. New tools may, in fact, be necessary to address the concept of relational continuity in its entirety but these could use measures, indicators or questions already available in other existing tools.

The analysis also suggests that it may be important to measure relational continuity for all patient populations. There have been studies done and assumptions made about who values or benefits most from relational continuity. However, not all individuals’ perspectives or outcomes have been considered in these assumptions and without measuring relational continuity more broadly it has been difficult to be clear on who truly benefits from relational continuity in their care. For example, it has mostly been assumed that young adolescent and adult men do not see
value in or benefit from relational continuity, and that assumption generally goes unchallenged. This assumption is challenged by the experiences of young men like Greg Price. Would Greg have seen or derived value from what has been conceptualized here (Health Quality Council of Alberta, 2013)?

Relational continuity as explored in this work consists of a connection over time with a primary care provider and team that are therapeutic in nature; responsive, co-constructed, whole person focused, and has an undergirding that connects care over time. Relational continuity as conceptualized here builds trust through mutual investment and shared accountability between provider, patient, and team. Could relational continuity, conceived and enacted in this way have meant Greg’s care would have been continuous and managed versus episodic and fragmented?

Further, I suggest that although this concept analysis has provided a better understanding of relational continuity, it is clear that this understanding needs to continue to evolve, and be informed by stronger evidence out of better research. In addition, although individual satisfaction is seen to be important and there is evidence of an association between relational continuity and satisfaction, it is important to understand individual experience and if individuals receiving care are truly experiencing relational continuity or not. Patient experience is about much more than asking if the individual is happy; though individual satisfaction is important. Patient Reported Experience Measures (PREMs) and Patient Reported Outcome Measures (PROMs) are two ways of measuring the patient perspective on their health and their health care (Hodson, Andrew, & Michael Roberts, 2013). These concepts have been introduced to healthcare as policy and legislation increasingly emphasizes the role of patients’ direct judgement about the services they receive in influencing future policy (Canadian Institute of Health Information, 2014). PREMs help measure whether or not the individual received safe, high quality care that added value and
was efficient from their perspective i.e. what they think of the process of care e.g. dignity, information, trust in staff, cleanliness, timeliness. PROMs can also be helpful in providing information on safety and effectiveness of care i.e. does care reduce symptoms, improve function, improve quality of life, does it cause harm such as complications. PROMs are used by the individual experiencing the health care intervention to assess their own outcomes through the use of quality of life measures such as the EQ-5D (which can also measure economic outcomes) and questionnaires. PROMs can be used across time, such as before and after treatment, so that it is possible to gauge what improvement (or other change) has occurred that might be attributable to treatment. PROMs are probably not the right approach within the current fee-for-service volume based health care environment but will become more critical as transition is made to more value-based healthcare that focuses more on the management of population health. Patients are not only the source of PROMs data, but also a key potential user of the information they generate. Patients suffering from health problems and being considered for treatment will be able to refer to the PROMs data provided by similar sorts of patients to help them:

- Decide where and from whom to receive treatment;
- Judge the likely benefits of treatment in their own case.

Thus far PROMs have been utilized mostly around surgery where pre and post care measures can be gathered. Their value in primary care and around relational continuity is something, however, to be explored and considered moving forward. Trials of their use are being done around specific long term conditions such as COPD in the United Kingdom at present (Hodson et al., 2013). Such measures as PREMs and PROMs would need a great deal of further investigation to understand their value in measuring patient experience and outcomes related to relational continuity. Understanding the perspectives of patients on the concept of relational
continuity is, however, going to be key to maintaining and improving delivery of it and on the evolution of the concept itself in terms of clarity and value.

Provider perspectives are also keenly important given that this is a co-produced concept; input from both on an ongoing individual basis is what will contribute best to improvement. Focus groups or interviews with providers and with patients may be of value in further shaping and validating the concept analysis presented here as well. This is likely a next step to the concept analysis provided here.

Conceptual clarity will also make it possible to put policies, processes and incentives in place to support all aspects of the concept, and create the opportunity to measure and evaluate its effects across the system. We can’t do this unless the concept can be practically defined. Relational continuity has been hard to define and measure. This has made it easier to ignore in favor of those things we can see and measure. And, as it has been said by many, it seems what gets measured gets managed. To date there is an absence of trials of interventions to improve continuity. There is enough evidence of association to support the need to study causal links between relationship continuity and better outcomes. This needs evidence from carefully defined trials (Gulliford et al., 2006). There is a need for prospective long term experimental studies to be designed and implemented around a common definition/concept of relational continuity. This analysis provides opportunity for the development of such studies in more consistent; comparable fashion. There is a need to understand relational continuity and measure it as a process to see if it leads to improved patient and system outcomes. Research that brings together the qualitative dimensions of the relationship with quantitative measures of healthcare patterns may provide insight as to whether there is a critical zone of concentration of care at which the therapeutic benefits of continuity are compromised (Haggerty, 2009). Randomized controlled
trials would be very difficult to conduct in the present environment of primary care delivery in health care; here in Alberta at least given the ability for patient’s to choose their primary care provider and given the autonomy of primary care services development and delivery. Longitudinal studies within specific primary care clinics would likely be more plausible. A longitudinal concept requires longitudinal study. Temporal bias will also need to be managed in order to clearly link relational continuity as a direct cause, or not, of improved experience and outcomes (van Walraven et al., 2010).

There is also a need to consider relational continuity in the context of informational and management continuity in order to better contribute to and understand the construct of continuity of care. Understanding how the concept of relational continuity overlaps, aligns with and contributes to the other types and consequently the broader concept of continuity of care will be important to attaining it and ensuring the right process, tools, and strategies are developed to best support the patient through the system and improve outcomes (Waibel et al., 2012). At present there is a tendency to believe that relational continuity can be replaced by informational continuity, for example. However, information transfer alone is not enough to link components of care; it must be taken up and interpreted. In primary care, the notion of information transfer is often embedded in emphasis on seeing the same provider over time as one way to facilitate the availability of relevant documented information from one visit to the next and to allow for the accumulation of relevant contextual knowledge (Reid et al., 2002). Future concept analysis on informational and management continuity would also be helpful. Research and economic analysis built around the concept defined would add important perspective to the literature on relational continuity and continuity of care as a whole over time as it was better operationalized and evaluated.
This concept analysis helps to clarify the current status of relational continuity in the literature and throughout locations in the province of Alberta in relation to primary care. As a result it serves to promote the more effective use and application of relational continuity moving forward in the identification, application, measurement, and evaluation of it in primary health care from a system perspective. It is the hope that the analysis will be considered and used as a starting point by government, administrators, providers, and researchers in additional productive inquiry around relational continuity in healthcare. It is, however, just a starting point. Its value is in extending its use to those aspects discussed above.

In 2002 Berwick stated that “health care tends to regard human interactions more as a toll or price than as a goal or product” and proceeds as though interactions between providers and patients are the “burden it must bear so that it can deliver the care”, when in reality it is these interactions themselves that are the care. “To perfect care, we must perfect interactions” (Green et al., 2008, p. 10). Relational continuity as conceptualized in this thesis I think will contribute to the work that is focused on perfecting the interactions that produce the outcomes we have been unable to consistently achieve in primary health care improvement.

Imagine if relational continuity was clearly understood and made a priority by the WHOLE healthcare system (see Appendix 3 for a Model Case Study). It would mean that in primary care we would keep the number of handoffs to a minimum because we valued relationship and whole person care. We would support the patient to achieve their best health outcomes through behavior change. It would mean that we would provide communication links and structures across healthcare settings, staff, acute care, specialty care and primary health care differently in regards to care planning and case management, and make sure to connect the patient back to the relationship. There would be different conversations between patients and
their primary health care provider teams that would transcend healthcare settings, and there would be a focus on closing the loop with communication and helping the patient to understand the best evidence-based care in light of that individual patient’s context. Inter-professional collaborative practice and teamwork in primary health care would be supported, and payment or incentives would be patient-centered and team-based. Relational continuity would be understood as the foundation to achieving continuity of care that includes informational and management continuity. And, if we understand this, then it may also guide who is admitted to our post-secondary education streams for healthcare provider training. Relational continuity as a core concept of primary care may help us get to a primary health care system where patients are known, supported, and upon which performance and outcomes are measured.


Atun, R. (2004). What are the advantages and disadvantages of restructuring a health care system to be more focused on primary care services? : WHO Regional Office for Europe’s Health Evidence Network


Canadian Institute of Health Information. (2014). PROMs and PREMs at CIHI. Paper presented at the Measuring Patient Centred Care, Calgary, Alberta
Canadian Institute of Health Information. (2015). Continuity of Care with Family Medicine Physicians Why it Matters (pp. 1-35). Canada: Canadian Institute of Health Information.

109


## Appendix One: Literature Reviewed

<table>
<thead>
<tr>
<th>Article</th>
<th>Discipline</th>
<th>Type of Literature</th>
<th>Perspective</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-----------------------------------------------</td>
<td>-----------------</td>
<td>-------------</td>
</tr>
<tr>
<td>“Continuity of Care and Approaches to Case Management for Long-Term Mentally Ill Patients”... Hospital and Community Psychiatry, May 1993. Vol 44. No.5. Leona L. Bachrach.</td>
<td>Medicine</td>
<td>Concept of Case Management</td>
<td>Patient/Provider</td>
<td>USA</td>
</tr>
<tr>
<td>“Will the future GP remain a personal doctor?” British Journal of General Practice, 1997, 47, 831-834. Richard Baker.</td>
<td>Primary Care Medicine</td>
<td>Perspective</td>
<td>Provider</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------------------</td>
<td>-------------------------------------------</td>
<td>------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>“An Ethnographic Study of the Meaning of Continuity of Care in Mental Health Services”. Norma C. Ware et al. March 1999. Psychiatric Services. Vol. 50 No.3.</td>
<td>Psychology/Medicine</td>
<td>Qualitative Study</td>
<td>Patient/Provider</td>
<td>USA</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>------------------------------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>”Defusing the Confusion: Concepts and Measures of Continuity of Healthcare”; CHSRF; March 2002; Final Report (grey paper) Robert Reid; Jeannie Haggerty; and Rachel McKendry. [<a href="http://dev.cfhi-fcass.ca/Migrated/PDF/ResearchReports/CommissionedResearch/crcontcare_e.pdf">http://dev.cfhi-fcass.ca/Migrated/PDF/ResearchReports/CommissionedResearch/crcontcare_e.pdf</a>]</td>
<td>Nursing/Medicine</td>
<td>Literature Review</td>
<td>Provider/Patient</td>
<td>Canada</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>-----------------------------</td>
<td>-------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>“Continuity of Primary Care: To Whom Does It Matter and When?” September/October 2003; Annals of Family Medicine; Vol 1 No.1; Paul A Nutting et al.</td>
<td>Primary Care Medicine</td>
<td>Mixed Method Study</td>
<td>Patient/Provider</td>
<td>USA</td>
</tr>
</tbody>
</table>

122
<table>
<thead>
<tr>
<th>Article</th>
<th>Discipline</th>
<th>Type of Literature</th>
<th>Perspective</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The Patient-Physician Relationship, Primary Care Attributes, and Preventive Services.” Family Medicine 2003; 36(1); 22-27. Michael L. Parchman and Sandra K. Burge.</td>
<td>Psychology/ Primary Care Medicine</td>
<td>Mixed Methods Study - retrospective cohort; survey data; outcome measures</td>
<td>Patient/Provider/Practice</td>
<td>USA</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>-------------------------------------</td>
<td>---------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Primary Care Practice Coordination Versus Physician Continuity. Family Medicine 2004; 3 6(1):15-21. Patricia H. Parkerton et al.</td>
<td>Primary Care Medicine</td>
<td>Quantitative Study- cross sectional</td>
<td>Patient/Provider/Practice</td>
<td>USA</td>
</tr>
<tr>
<td>“Continuity of Care and Patient Satisfaction in a Family Practice Clinic”. Journal of the American Board of Family Practice. 2004; 17; 341-6. Eric D. Morgan et al.</td>
<td>Primary Care Medicine</td>
<td>Qualitative - cross sectional survey</td>
<td>Patient</td>
<td>USA</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>“Reflections on Continuity in Contemporary Canadian Primary Care.” CJNR 2004, Vol. 36 No. 2, 7-10. Sam Shortt.</td>
<td>Medicine</td>
<td>Perspective</td>
<td>Provider</td>
<td>USA</td>
</tr>
<tr>
<td>“What is important to continuity in home care? Perspectives of key stakeholders.” Social Science &amp; Medicine 58 (2004) 177-192. Christel A. Woodward et al.</td>
<td>Nursing/Social Sciences/Medicine</td>
<td>Qualitative Study - cross sectional survey</td>
<td>Patient/Provider</td>
<td>Canada</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------</td>
<td>-------------------------</td>
<td>------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>“Patient’s views on interpersonal continuity in primary care: a sense of security based on four core foundations”. Inger von Bultzingslowen et al. December 2005. Family Practice.</td>
<td>Primary Care Medicine</td>
<td>Qualitative Study</td>
<td>Patient</td>
<td>Netherlands</td>
</tr>
<tr>
<td>“Continuity of care for older patients in family practice; how important is it”. Canadian Family Physician. June 2006. Vol 52 Graham Worrall and John Knight.</td>
<td>Primary Care Medicine/Nursing</td>
<td>Literature Review</td>
<td>Patient</td>
<td>Canada</td>
</tr>
<tr>
<td>“Family medicine attributes related to satisfaction, health and costs”. Family Practice 2006; 23: 308-316. Mireia Sans-Corrales et al.</td>
<td>Primary Care Medicine</td>
<td>Literature Review</td>
<td>Patient/Provider/Practice</td>
<td>Spain</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>---------------------</td>
<td>-------------------------------------------------------------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>“How are different types of continuity achieved? A mixed methods longitudinal study”. British Journal of General Practice, 2006; 56: 749-755. Mary Boulton et al.</td>
<td>Medicine</td>
<td>Mixed Methods Longitudinal Study interviews and patient records (administrative data)</td>
<td>Patient/Provider</td>
<td>USA</td>
</tr>
<tr>
<td>“The interpersonal experience of health care through the eyes of patients with diabetes”. Social Science &amp; Medicine. 2006. 63;3067-3079. Paul Ciechanowski and Wayne J. Katon.</td>
<td>Social Sciences/Medicine</td>
<td>Qualitative semi structured interviews</td>
<td>Patient</td>
<td>USA</td>
</tr>
<tr>
<td>“Preferences for access to the GP: a discrete choice experiment”. British Journal of General Practice 2006; 56; 743-748. Greg Rubin et al.</td>
<td>Social Sciences</td>
<td>Discrete Choice Experiment</td>
<td>Patient</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>“Does continuity of care with a family physician reduce hospitalizations among older adults?” Journal of Health Services Research and Policy. Vol. 11 No. 4; 2006; 196-201. Verena H. Menec et al.</td>
<td>Nursing/Primary Care Medicine</td>
<td>Mixed Method Study - prospective cohort; survey and administrative data</td>
<td>Patient/System</td>
<td>Canada</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------</td>
<td>----------------------------------------------------------</td>
<td>-------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>“Continuity of care for older patients in family practice. How important is it?” Canadian Family Physician 2006. 52; 754-755. Graham Worrall and John Knight.</td>
<td>Nursing/ Medicine</td>
<td>Literature Review</td>
<td>Patient</td>
<td>Canada</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>---------------------------</td>
<td>----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>“A Comfortable Relationship: A Patient-derived Dimension of Ongoing Care” Family Medicine 2007; 39(4); 266-73. Nancy Pandhi et al.</td>
<td>Nursing/Social Work</td>
<td>Qualitative Study</td>
<td>Patient/Provider</td>
<td>USA</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>-----------------------------</td>
<td>------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>“We Only Own the Hours: Discontinuity of Care in the British Columbia Home Support System”. Canadian Journal on Aging. 2008. 27(1):89-99. Zena Sharman et al.</td>
<td>Nursing</td>
<td>Qualitative - focus groups and interviews</td>
<td>Patient/Provider</td>
<td>Canada</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>---------------------------------------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>“How should continuity of care in primary health care be assessed?” British Journal of General Practice. 2009; 59:276-283. Chris Salisbury et al.</td>
<td>Primary Care Medicine</td>
<td>Mixed Method case control study; conceptual - survey and administrative data</td>
<td>Patient Outcome Focus</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>-------------------------------------</td>
<td>---------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>“It’s all about recognition! Qualitative study of the value of interpersonal continuity in general practice”’. BMC Family Practice 2009 10:47. Heidi Bogelund Frederiksen et al.</td>
<td>Primary Care Medicine</td>
<td>Qualitative Study</td>
<td>Patients</td>
<td>Denmark</td>
</tr>
<tr>
<td>“Coordination of Diabetes Care in Four Delivery Models Using an Electronic Health Record”. Medical Care 2009; 47: 993-999. Lucy H. MacPhail et al.</td>
<td>Medicine</td>
<td>Qualitative- multiple case study</td>
<td>Patient/Provider</td>
<td>USA</td>
</tr>
<tr>
<td>“Illness carers and continuity of care in mental health services: A qualitative study of service users and carers.” Social Science &amp; Medicine 69 (2009) 632-639. Ian Rees Jones et al.</td>
<td>Social Sciences/ Medicine</td>
<td>Qualitative - cross sectional interviews</td>
<td>Patient/Provider</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>------------------</td>
<td>-----------------------------</td>
<td>-------------</td>
<td>------------------</td>
</tr>
<tr>
<td>“Continuity of Care in Mental Health: understanding and measuring a complex phenomenon”. Psychological Medicine. 2009. 39; 313-323. Burns et al.</td>
<td>Nursing/ Medicine</td>
<td>Validation of a Model</td>
<td>Patient/Provider</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>“Comprehensiveness and Continuity of Care and the Inseparability of Mental and Behavioral Health From the Patient-Centred Medical Home”. Families, Systems &amp; Health 2010, Vol 28, No 4, 348-355. W. Perry Dickinson and Benjamin F. Miller.</td>
<td>Primary Care Medicine</td>
<td>Perspective</td>
<td>Practice</td>
<td>USA</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------------------------</td>
<td>----------------------------------------</td>
<td>------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>“The Impact of Relationship Stage on the Determinants of Trust in the Pharmacist – Client Relationship: Results from a Social Marketing Campaign” Chiara Maniscalco. Social Marketing Quarterly Vol XVI No 4 Winter 2010.</td>
<td>Social Sciences/Business</td>
<td>Mixed Methods Study</td>
<td>Patient/Provider</td>
<td>Switzerland/USA</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>----------------------------------</td>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>“Does Having a Personal Physician Improve Quality of Care in Diabetes?” Journal of the American Board of Family Medicine. 2010; No.23; Vol.1; 82-87. William J. Hueston.</td>
<td>Primary Care Medicine</td>
<td>Quantitative Study- retrospective cohort study;</td>
<td>Patient</td>
<td>USA</td>
</tr>
<tr>
<td>“Patient Activation in Primary Healthcare”. Medical Care. Volume 49, Number 5, May 2011. Sabrina T. Wong et al.</td>
<td>Primary Care Medicine</td>
<td>Qualitative</td>
<td>Patient</td>
<td>Canada</td>
</tr>
<tr>
<td>“Experiences of and influences on continuity of care for service users and carers: synthesis of evidence from a research programme”. Gillian Parker et al. Health and Social Care in the Community, 2011, 19(6), 576-601.</td>
<td>Nursing/Social Sciences</td>
<td>Literature Review</td>
<td>Patient/Provider</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>------------------------------------</td>
<td>------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>“Preventive Service Gains from First Contact Access in the Primary Care Home”. Nancy Pandhi et al. JABFM. July-August 2011 Vol 24 No 4.</td>
<td>Primary Care Medicine</td>
<td>Quantitative Study - retrospective cohort study</td>
<td>Patient Outcome Focus</td>
<td>USA</td>
</tr>
<tr>
<td>“Patient Reported Care Coordination: Associations With Primary Care Continuity and Specialty Care Use.” Annals of Family Medicine. July/August 2011; Vol. 9, No. 4. David T. Liss et al.</td>
<td>Nursing/Medicine</td>
<td>Mixed Methods Study - cross sectional survey and administrative data</td>
<td>Patient</td>
<td>USA</td>
</tr>
<tr>
<td>“Trust, autonomy and relationships: The help-seeking preferences of young people in secondary level schools in London (UK).” Journal of Adolescence 34 (2011) 685-693. Gerard Leavey et al.</td>
<td>Sociology</td>
<td>Qualitative Study - cross sectional survey/ focus groups;</td>
<td>Patient/Provider</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>---------------------------------------------</td>
<td>--------------</td>
<td>------------------</td>
</tr>
<tr>
<td>“Achieving Continuity of Care: Facilitators and Barriers in Community Mental Health”. Implementation Science, 2011. 6;23. Belling et al.</td>
<td>Social Sciences</td>
<td>Qualitative Study - random sample survey</td>
<td>Provider</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>-------------------------------------</td>
<td>---------------</td>
<td>------------------</td>
</tr>
<tr>
<td>“Toward a conceptual consensus of continuity in mental healthcare: focused literature search and theory analysis”; 2013; International Journal on Evidence Based Healthcare; 11; 94-109; Amanda Digel Vandyk et al.</td>
<td>Nursing</td>
<td>Systematic Literature Review</td>
<td>Patient/Provider</td>
<td>Canada</td>
</tr>
<tr>
<td>“Continuity of Care: an Italian clinical experience” Intern Emerg Med (2013) 8: 595-599. Roberto Tarquini et al.</td>
<td>Medicine</td>
<td>Model of Continuity of Care Implemented in an Italian community</td>
<td>Provider/System</td>
<td>Italy</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>----------------------------------</td>
<td>-------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>“Service Users’ and Caregivers’ Perspectives on Continuity of Care in Out-of-Hours Primary Care.” Qualitative Health Research 2013 23 (3) 407-420. Niamh Gallagher et al.</td>
<td>Medicine</td>
<td>Qualitative Study - case study</td>
<td>Patient/Provider</td>
<td>Ireland/United Kingdom</td>
</tr>
<tr>
<td>“Unlocking information for coordination of care in Australia: a qualitative study of information continuity in four primary health care models”. BMC Family Practice. 2013; 14:34. Michelle Banfield et al.</td>
<td>Primary Care Medicine</td>
<td>Qualitative Study</td>
<td>Provider/Practice</td>
<td>Australia</td>
</tr>
<tr>
<td>“Predictors of relational continuity in primary care: patient, provider and practice factors”. BMC Family Practice 2013; 14;72. Elizabeth Kristjansson et al.</td>
<td>Primary Care Medicine</td>
<td>Mixed Methods Study</td>
<td>Patient/Provider/Practice</td>
<td>Canada</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------</td>
<td>-------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------</td>
<td>-----------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>“Concordance Between Continuity of Care Reported by Patients and Measured From Administrative Data”. Medical Care Research and Review .2014. Vol 7(2) 138-155. David J. Nyweide.</td>
<td>Primary Care Medicine</td>
<td>Mixed Method Study - cross sectional; patient reported and administrative data</td>
<td>Patient /Provider</td>
<td>USA</td>
</tr>
<tr>
<td>Article</td>
<td>Discipline</td>
<td>Type of Literature</td>
<td>Perspective</td>
<td>Location</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------------------</td>
<td>----------------------------------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>“Patient’s attitudes and experiences of relational continuity in semi-urban general practices in Oman”. Family Practice, 2014, Vol.00 No.00, 1-8. Mohammed Al-Azri et al.</td>
<td>Social Sciences/Medicine</td>
<td>Qualitative Study - questionnaire based survey</td>
<td>Patient</td>
<td>Oman</td>
</tr>
</tbody>
</table>
Appendix Two: Findings from Visits with Experienced Providers

I was able to visit nine primary care sites across Alberta and meet with thirty providers and leaders with experience and expertise in these environments. I was able to visit Family Care Clinics (FCC), Urgent Care Centers, Primary Care Networks (PCNs), physician clinics, and Community Health Centers from various locations in the province for the purpose of understanding relational continuity in their context; validating it with the literature; and understanding it within the confounds of the access/continuity tension. I will describe below the current state of relational continuity in Alberta based on my visits and discussions and then will identify some of the attributes, antecedents, and consequences that arose in those same discussions and visits. To be clear, this is not a comprehensive review of relational continuity in Alberta.

Some of the locations I visited were created or redefined specifically in recent years to address access issues for certain populations. Among these are Urgent Care Centers and FCCs. Physician clinics and PCNs on the other hand, are very diverse and varied in their approaches to priorities and care. Community Health Centers tend to be more focused on the needs of the vulnerable populations in their geographic locations and serving these; they are linked to community services and have community boards. Each varies in its understanding of relational continuity and the value it can bring to its services. Each location visited differed in their approach to or degree of progress in addressing relational continuity or even seeing it as something worth considering in the midst of their priorities. The province was in the midst of identifying a need for “attachment” of patients to “medical homes” within the context of Primary Care Evolution at the time I was doing these visits. The Alberta Primary Health Care Strategy
was also released during this time; the Fall of 2014. Attachment was also identified as a priority in this strategy. Relational continuity as identified in this concept analysis has not yet been part of the Alberta conversation to date. Attachment simply refers to the connection of a patient with a primary care provider and the creation of a panel or caseload of patients per provider. Measures have been used by Alberta Health to connect patients to Primary Care Networks since 2005 for the purpose of funding those networks. Specific understanding by the patients and providers around the relationship of those connections has not been explored until these recent evolution and strategy documents in which the impetus was an Office of the Auditor General Report on Primary Care in Alberta encouraging improvement of this understanding for both patient and provider. Measurement and study using administrative data has been occurring since 2005 including through the Health Quality Council of Alberta. The Primary Care Network Evolution work is utilizing specific approaches to help Primary Care Networks and physician clinics identify their patient panel or caseload. These are some important first steps on a road to improved relational continuity for patients.

Prior to the release of the Primary Health Care Strategy and the Primary Care Network Evolution document there was little focus given to relational continuity in the province of Alberta. The conversation of attachment in any kind of formal regard is very new. One expert I heard comment on this at a workshop in the Fall 2013 put it in these terms - and I paraphrase: When PCNs were put in place in Alberta I assumed the goal was for them to cover every geography and if a patient required primary care services every Albertan would have access to same through the PCNs in their geography; every Albertan would be attached to a PCN. That wasn’t; and isn’t today the reality. Alberta continues to have physician clinics that have chosen
to not be a part of a PCN and the PCNs do not all measure formal attachment nor do they all consider opening their doors to those they haven’t yet seen in their clinics.

Many PCN services remain very separate from the services provided by the physician clinics that function as part of their PCNs. No two PCNs function alike or have the same priorities. The priorities identified within the Primary Care Evolution document and the Primary Health Care Strategy certainly have not been the priorities of all primary care or primary health care services in the province to date.

There are however pockets of PCNs, physician clinics and now FCCs that are more focused and advanced in these priorities. Some have been measuring and improving processes to support at least the attribute of longitudinal continuity for as many as ten plus years. Access priorities in the province have, in some cases however, made longitudinal continuity difficult. This in turn makes it difficult to support or implement other attributes of relational continuity as well. There has been little common messaging to the public to date to encourage relational continuity or even attachment though some individual clinics and networks have worked to support this message through their services. Alberta has continued to try to solve the access problems by creating more emergency room and urgent care services. Walk in services remain strong, too across the province; some of them are even new and supported by Primary Care Networks. Given the varied options available to Albertans for first access to the healthcare system and the recent increase in some of these options there is a reduced focus on relational continuity or its possible advantages. Many Albertans still remain “unattached” or without a primary care “home” or primary care provider.

There are definitely pockets of expertise in Alberta regarding primary care and relational continuity. There are even some good measures to show this; though few to show true outcomes
related to relational continuity; a continued work in progress. Many are still working to better measure relational continuity and outcomes. Those I spoke to and the physician clinics, PCN’s, FCCs and Urgent Care Centers that I visited had different populations they served; different experience in the implementation of relational continuity; and different challenges to address in trying to achieve it. For many relational continuity was an important concept needing implementation and is a continued work in progress. None of those I spoke to or the sites I visited have matured relational continuity to a level that meets all the aspects of the concept as developed in this thesis. However, a number of those sites and individuals recognized, understood, and spoke to many of the attributes/characteristics of relational continuity found in the literature. Many spoke to the issues of implementing relational continuity in a province where access remains the priority; integration and collaboration is not the norm; payment remains fee for service or the capitation model is not open for discussion in consideration of risk factor adjustment; data is not available in many cases to look at system level impacts; and support for relational continuity is just starting to appear as perhaps something to add value.

Urgent Care Centers are mostly open extended hours every day and are available in a number of locations across the province (Calgary Downtown and South), Airdrie, Cochrane, and Edmonton to name a few. Only the Calgary Downtown urgent care is open 24/7—based on population served and the fact that 24/7 services were historically offered by another organization in downtown Calgary. These urgent care centers are in place to fill the gaps related to access. Many run just like an emergency room in terms of triage and wait; they will do follow ups and book appointments but patients still need to join the waiting “queue” and there is no continuity in the providers they see. Many patients come back time and again. Where social work and mental health services exist they create relationship and try to support plans of care
within and sometimes outside of the urgent care center. Attempt is often made to attach a patient to primary care; when physicians have openings - often practices are closed. Continuity of care is an issue. Often after hour or extended hour services don’t have access to patient records and don’t regularly connect back to the primary care physician regarding the urgent care visits even if the patient has a regular primary care physician. The processes for connecting after hour, extended hour, or urgent care visits back to a primary care provider are not regulated and so often depend on the impetus of the individual provider. Physicians in the urgent care setting bill the same as those in the primary care setting; fee for service provided.

The FCCs are new in Alberta and are doing their best to establish regular patient caseloads as primary care clinics. This is a work in progress. They have interdisciplinary teams and physicians are paid salary like all other team members. They work extended hours; book appointments; will see walk-ins (though prefer appointments) and any team member can see the patient based on the patient need.

Community Health Centers are similar to FCCs but they have private boards and are community funded and run. This model supports a physician/nurse practitioner and team based approach to care where providers are considered equal team members and all support the patient needs based on their full scope of practice. Improvement work continues to build on this model of team based care as barriers to this continue to exist; including models of payment, part time providers, and after hour care. Where there is extended hours providers work varying shifts and, of course, have days off. Part time providers are also a concern when it comes to relational

---

1. Attribute – longitudinality
2. Attribute – undergirding that connects care over time
3. Antecedent - team
4. Antecedent - payment
5. Antecedent - team
continuity. In these cases those concerned about relational continuity look to manage schedules and patient panels or caseloads between teams so the individual patient still has a defined team of as few providers as possible⁶,⁷. For example, the team may consist of two full time physicians or a physician and nurse practitioner that share a caseload. One of either physician or the nurse practitioner are available along with a defined group of other team members; instead of the patient possibly seeing just any provider in the clinic when there are many physicians and nurse practitioners. This limits the number of providers the patient is exposed to.

The above challenges are also true in primary care physician offices. With fee for service payment⁸, however, it is often difficult to support team at all. In a fee for service payment approach the physician must see the whites of the patient’s eyes in order to get paid. Often the physician has a limited number of team members because of the need to pay these team members in addition to him/her self. Overhead costs also must come from those physician wages. As a result Nurse Practitioner (NP) trials have failed in a number of circumstances. Some physician clinics have managed to hire team members thanks to dollars from the PCN and an increased ability to work more effectively and efficiently by applying quality improvement using Advanced Access methods. Even where payment has changed, however, there is still many physicians choosing what they are willing to do and what team members; if any, they are willing to work with⁶. Physicians are exerting their preferences in most cases - not the preferences of the other team members or the patients; or based on consensus or even based on the evidence⁹.

---

⁶ Attribute - shared accountability  
⁷ Antecedent- team  
⁸ Antecedent - payment  
⁹ Attribute - mutual investment
One of the other challenges within physician clinics occurs when a provider retires or moves. It makes it easier with a team to manage relational continuity in this situation but many of these clinics also want to ensure that the patient has some choice\(^\text{10}\) in their provider and team; including when a provider leaves. This requires an ability and willingness to handoff the patient care and file to other providers in the same clinic or, possibly, in another clinic. This sharing also becomes an issue when trying to support continuity of care when patients live, work, or play in different locations\(^\text{11}\). It is difficult to arrange care with other sites and services and most care, especially with fee for service payment, requires that the patient actually be seen\(^\text{12}\). There is little support for care via email or phone or other modes of access for a number of reasons; including the availability of technology, issues of confidentiality, and payment. Another difficulty is accessing resources that support patient care; patient and provider resources that are consistent in the province\(^\text{13}\). Some of this is being worked on through Netcare and myhealthalberta, for example, but lots of issues remain.

Many primary care providers in Alberta are starting to recognize the value of relational continuity as coproduced\(^\text{14}\). The providers are having discussions with the patients about relational continuity and shared accountability\(^\text{15}\). It was identified, however, by more than one of the experts I spoke with that there is still an air of “the patient being lucky to see us” whereas we need to recognize how lucky we as providers are that the patient has chosen to have a relationship with us\(^\text{16}\). It is not yet well adopted practice to truly recognize the patient as the

\(^{10}\) Antecedent - choice
\(^{11}\) Attribute - undergirding that connects care over time
\(^{12}\) Attribute - responsive
\(^{13}\) Attribute – therapeutic, responsive
\(^{14}\) Attribute – co-constructed
\(^{15}\) Attribute - shared accountability
\(^{16}\) Antecedent - valued
leader and the role of providers as being to work towards meeting their needs and supporting their health rather than following our own agendas or meeting our own needs. We still have a very provider centric system and many are still focused on reimbursement rather than evidence based primary care\(^{17}\). Having said that; a number of physicians and teams are pushing hard in Alberta to support other methods of reimbursement other than fee for service and some work is beginning to happen in Alberta on this subject. In the meantime only two primary care physician clinics are on what Alberta calls Alternate Payment Plans. We have much to learn from these two clinics and what they have been able to advance in terms of relational continuity when there has been incentive to do so.

One other important aspect to note; managing relational continuity and access is a difficult balancing act\(^{18}\) but it can be done. Experts in the province working toward improved relational continuity are continually working to balance their access alongside relational continuity; recognizing how difficult it is to do one without the other. One cannot maintain relational continuity if the patient can`t get in to see their provider and team. This also makes a difference to utilization of emergency room and urgent care services\(^{19}\) by their patients and fewer adverse events where a provider might accidentally overlook something in that individual patient`s care if they don`t know them. Experts that I spoke with identified numerous cases where better relational continuity improved medication management; health outcomes; the prevention or early identification of concerns i.e. cancer\(^{20}\). Examples included patients seeing two to three providers taking the same medication three times; not being aware that all three

\(^{17}\) Attribute - therapeutic
\(^{18}\) Antecedent – access to continuity
\(^{19}\) Consequence – emergency room utilization
\(^{20}\) Consequences – improved patient outcomes and improved quality of care
medications were the same with different names and none of the providers being aware of this either. Early detection of concerns and issues were identified once patients and providers knew each other better and care was supported proactively\textsuperscript{10}.

Specialty referral and access remains a big issue across the province. Specialty services are not always connecting back with primary care though there are services in the province that are doing this well\textsuperscript{21}.

One real shining star on most attributes of relational continuity found in the literature was a Community Health Center in an urban setting serving the most vulnerable of that city’s population. Unfortunately they are just now in the throes of gathering outcome data so I will look forward to seeing what their findings reveal in the future. Measurement is a huge problem in the province and though there has been commitment to start looking at attachment of patients to primary care physicians or medical homes through the PCN Evolution project there is limited understanding of what other aspects are important to relational continuity (other than simply attaching patients to a physician) and there is also limited agreement and support to the addition of other team members; especially nurse practitioners to these settings.

The Community Health Centre I visited had worked through a lot of these issues and concerns over the past two years; owing their success to advanced access approaches\textsuperscript{22} - Access-Improvement-Measures (AIM) and the principles were applied and adhered to. They are starting to see the results. They treat all providers as equals on the team; the patient can see the provider they need to in order to best meet their needs but the team is connected and have a plan of care for the patient. They know the patient and support the needs of the patient regardless of the

\textsuperscript{21} Attribute - undergirding that connects care over time
\textsuperscript{22} Antecedent – access to continuity
setting. They put tradition aside and support the patient to get to their lab or diagnostic test; ensure the patient gets to surgery and the acute care team understands their issues and needs i.e. homeless. They link the patient with the other health and social services they may require and work to gain insight as to what issues the patient may be struggling with and even bring services to them. They reach out and connect with other community team members to track patients down and make sure they can support them to meet their needs. They even do health prevention and promotion with their very vulnerable population of patients. Their patients trust them and come to them with their issues and trust that they will support them to connect with what they need as they try to understand the context that individual patient is dealing with.

They are working with their patients to see the value of relational continuity and supporting them well across the continuum of care with community support or outreach workers; continuity in team provision of care; integration and collaboration with other health services and community agencies such as shelters and food banks.

Most experts that I spoke with that had gained traction in improving access, continuity and team had established cultures of quality improvement. All had done Office Practice Redesign or AIM work and had grown a culture of continuous quality improvement; never happy with the status quo. Whole person comprehensive approach to care was seen as important where relational continuity was seen as important. Some saw value in relational continuity only for the older adult or those with complex chronic disease; didn’t see it of value or importance for the

---

23 Attribute – mutual investment
24 Attribute – mutual investment
25 Attribute – trust
26 Attribute – responsive
27 Attribute - individual
28 Attribute – undergirding that connects care over time
29 Attribute – whole person
30 Antecedent - valued
younger or well population. Also, PCNs often offer services directly and not through primary care physician clinics i.e. separate clinics and after hour services for the whole PCN. This doesn’t support relational continuity though certainly these PCNs do their best to support informational continuity and do make sure information gets back to the most responsible physician. Some urban PCNs have access to lots of physician residents or new physicians and so build new physician practices and panels through their separate PCN clinics i.e. unattached clinics. Some have better collaboration/integration than others; work with their local hospitals to look at discharges and emergency room (ER) visits as well. Some issues with duplication of services with other health services i.e. AHS. Some issues of consistency and equity and availability of services. No formal approaches or accountabilities related to evidence based practice in place for the most part; though pushing for accreditation in primary care clinics in the province. Policy barriers and system/information technology barriers stand in the way of good integration and collaboration and supporting continuity of patient care in many respects (i.e. LPN in assisted living can’t take a phone order from a physician). On a patient centered care front I was most impressed that some primary care providers truly supported the patient from where they were i.e. immigrants with certain cultural beliefs who needed to be supported through the system to understand our cultural believes and to reduce their fears around their own in understanding and venturing through our system and being able to get better. Truly had the needs of the patient at the forefront and did whatever it took to help that patient meet their needs with success - a rarity still in the Alberta system. With vulnerable populations it is difficult to find a

31 Attribute - therapeutic
balance in access at times\textsuperscript{32}; balancing appointments with “no shows”; a constant work in progress but some real innovative ideas around getting the patient to have some ownership in the issue and help improve it. Some areas and experts are improving it through Plan-Do-Study-Act and continuous quality improvement cycles. I met with some truly inspiring providers and administrators working on the ground to improve care for the individual in our province. Real linkage to the community and other health care services to meet the needs; don’t try to do it all on their own. Create volunteer opportunities where there are gaps; looking constantly for innovative community solutions. Advocate where there is a gap i.e. women’s homeless shelters. With vulnerable populations there becomes a more day to day need to link with other services around the social determinants of health; recognizing the impact it has on their population to truly be healthy or get well i.e. healing wounds. Vulnerable populations and some outreach services; population health and advocacy approaches around healthy communities. Integration and continuity issues remain to a great extent in relation to extended hours, after hour clinics, walk-in clinics, HealthLink.

Private clinics offer availability to care through other avenues than just face to face i.e. phone and email\textsuperscript{33}. This is for those who can afford to subsidize their care through payment to belong to the private clinic; payment that supports continuous care\textsuperscript{34} by a provider and team. I am not sure the impact these private clinics have on emergency room or hospital use\textsuperscript{35}. Some primary care clinics are working on more patient centered care approaches to care i.e. Cognitive

\textsuperscript{32} Antecedent – access to continuity
\textsuperscript{33} Attribute - responsive
\textsuperscript{34} Attribute - longitudinal
\textsuperscript{35} Consequences – hospital and emergency room utilization
Behavior Therapy (CBT), coaching models of care on a formal basis. There are still some primary care providers not on an Electronic Medical Record but the majority are. Unfortunately many of these don’t connect to other health information systems and are stand-alone systems. Proactive planned care is offered out of some primary care clinics; calling patients to come in for preventative care or for work done i.e. labs prior to their next physician visit. This is a proactive outreach to bring patients in to the clinic in some cases. It doesn’t, however, reach out around an incident or issue in supporting patients through the loss of a family member, for example. Sometimes outreach occurs following a visit to hospital or the emergency room but this is also rare. Posting of measurement data is occurring on the walls in some clinics - all holding one another accountable for access and continuity (panel/attachment) for example.

It is often not just the provider having relationship discussions with the patient but the front reception and the staff answering the phones as well. It is important that these providers support relational continuity well. There seems to be a focus in many primary care locations on making sure reception is part of the team and understands the value of their role in supporting relational continuity with the patient. In other work I have done around access to primary health care for vulnerable populations, however, community supports working with these populations have identified issues related to the approachability of such services. For the most part patients want to be a part of a relationship with a primary care provider (want a most responsible primary care provider) and understand the value of this once discussions are able to take place.

36 Attribute – co-constructed
37 Attribute - mutual investment
38 Antecedent – access to continuity
39 Antecedent - valued
Providers do need to be able to make time for this relationship building - often a challenge given short visits; especially with physicians and most especially with those paid by the visit. Part time physicians and rural physicians who are covering other service areas i.e. emergency room, hospital, anesthesiology, general surgery, and obstetrics find it difficult to balance this work with their panel/caseload management. In remote rural areas often a shortage of providers makes relationship building difficult and there is also more turnover of staff in these locations.

Individual patients who work in a different location than they live; or go to school elsewhere see little collaboration between clinics or networks to support their mobility. More responsive ways to connect between providers and patients would also be helpful on this front i.e. phone calls, email. There is not a good handle on the population that is connected to a primary care provider and team and those who are not; who we would consider in Alberta to be “unattached”. Attachment and a move to relational continuity on a provincial front would be helpful to be clearer on the population and their needs. Alberta Health has developed an attachment policy and PCN Evolution is pushing Primary Care Networks to provide panel and provide attachment to their population but there is not clear buy in to this or accountability around it to date.

Choice is limited across the province - patients are often connected to a physician that is available and there is little opportunity or ability to change that. In some locations choice is valued and made more available. This appears to depend often on resource availability but as

---

40 Antecedent - time
41 Antecedent - time
42 Attribute – undergirding that connects care over time
43 Attribute - responsive
44 Antecedent - choice
providers we often make assumptions as to the patient preference for that relationship. Only some providers and sites have the discussions and support what is best for the patient on that front. As well some patients value more from a team and some are attached only to one provider; usually a physician. Linkages with extended team members are also varied as is the evidence based practice. There is no clear equity or accountability on this front in the province. The places I visited varied greatly. Some used data and patient input to help make their decisions; others did what is best for them as providers based on their interests and assumptions regarding the patient populations they serve. Approaches to identifying the true needs and interests of the patients and populations served were not often clear. Exceptions and exemplars exist across the province. We all have lots to learn from each other and should be building on the successes that exist. Some clinics and PCNs have great data support and good measures while others do not. Alberta is still working on consistency on this front but there is no apparent “system of primary health care” and much of the provincial priority appears to remain focused on acute care. Access to primary care continues to be an issue in Alberta and emergency rooms remain overwhelmed. Despite the addition of hospital and continuing care beds pressures on the acute care system have not been relieved. Costs to the system continue to grow. There have been some studies to show that longitudinal continuity may well be able to impact this but much work is left to do to support improved primary health care and relational continuity in the province\textsuperscript{45}. Relational Continuity may well be a great part of this solution but there has been no impetus to find out by truly giving

\textsuperscript{45} Consequences – emergency room and hospital utilization; cost effectiveness
it a chance through accountability and longitudinal on the ground measurement of the value (or not) of same. There is still a real focus on longitudinality\textsuperscript{46} and administrative data.

\textsuperscript{46} Attribute - longitudinality
Appendix Three: Model Case Study

Relationship continuity in a primary health care setting would ideally look like the following model case. I will discuss relational continuity in the context of a “Health Home”. Health homes are a new concept in Alberta. A health home refers to a ‘home base’ within the health care system, where an individual can access primary health care and be connected to the other health and social services that they need. A health home provides individuals access to a core set of comprehensive primary health care services, delivered by a primary health care team (Alberta Health, 2014).

Where relational continuity is implemented according to this concept analysis the patient is connected to a primary care provider and visible team that are designed to meet the needs of the patient\(^{47}\). The patient is supported to find a connection with a primary care provider and team of choice\(^{48}\); one they feel comfortable with. If they are not happy with their present connection or are moving and need to be connected elsewhere; the team will proactively support connecting them to a new primary care provider and team\(^{49}\). Same day access is ensured for the patient to the primary care provider and team; frontline reception is welcoming and helps support these connections\(^{47}\). The provider and team support cultural and language differences meeting the needs of the population they are serving; utilizing language line or hiring staff that support the patient needs as appropriate\(^{50}\).

The primary focus of the primary care provider and team is looking after the needs of the patient. There is a focus on customer service and a no wait culture; supporting the needs of the

\(^{47}\) Antecedent – access to continuity  
\(^{48}\) Antecedent - choice  
\(^{49}\) Antecedent - valued  
\(^{50}\) Attribute - responsive
patient as soon as possible\textsuperscript{50}. The approach to care is effective, efficient and supportive of the patient first and foremost. The culture is one in which the primary care provider and team is privileged to see and support the patient\textsuperscript{49} not the other way around. Contact can be made between the patient, primary care provider, and team via email or phone as well as via face to face visit\textsuperscript{30}. Access to care can be through any provider on the team. Extended hours are offered - i.e. until 8pm 7 days a week with 24/7 coverage or on call. These extended hours can be a clinic or community service; managed to meet the needs of the population being served. The primary care provider does not have to be the individual providing the after hour service in all circumstances. The after hour service may be provided by another member of the patient’s team or a member of the extended health home or neighborhood team\textsuperscript{51}. The after hour care, however, needs to support and recognize the patient’s relationship with their provider and team using appropriate information and communications in linking the after hour care back to that relationship\textsuperscript{51}. There should not, however, be the need to go to urgent or emergent care unless an emergency level of care is required\textsuperscript{52}. The patient and primary care provider and team have a shared accountability\textsuperscript{53} for the plan of care and work together\textsuperscript{54} to proactively manage the patient’s care as much as possible. The patient isn’t made to feel rushed in a visit and is able to address their concerns.\textsuperscript{55} The patient visit or connection with their primary care provider and team recognizes the patient need and agenda; not the health provider’s agenda. The team collaborates to provide what is needed for the patient. Team members talk through the tensions and resolve them\textsuperscript{53} with each other if and when they arise. Team members ensure the patient

\textsuperscript{51} Attribute – undergirding that connects care over time
\textsuperscript{52} Consequences – utilization of emergency room and hospital
\textsuperscript{53} Attribute – shared accountability
\textsuperscript{54} Attribute – co-constructed
\textsuperscript{55} Antecedent - time
stays connected to the primary care relationship by reaching out to the patient proactively\(^{56}\) around issues, concerns or patient needs. Proactive processes are put in place to connect with the patient on a needed basis\(^ {56}\) i.e. loved one dies; need to come in after an emergency room visit or for preventive reasons (all based on clinical guidelines but also on individual patient history and need). If the patient is too vulnerable and can’t manage and has no other informal caregiver to assist; aspects such as case management and other services such as outreach coordinators can be put in place to assist\(^ {57}\). Improving patient outcomes and reducing health service utilization and cost as appropriate\(^ {58}\) is part of the responsibility of the primary care provider, patient and team. There is trust\(^ {59}\) and the development of a therapeutic\(^ {60}\) relationship the patient and provider both want to stay connected to over the lifespan\(^ {61}\). Family is linked to the relationship and able to develop their own relationship with the same provider and team so as to support patient and family care both; strengthening the bond\(^ {59}\) and mutual investment. It is important for services to be innovative and creative in supporting care which is evidence based\(^ {60}\) but also recognizes the circumstances of the individual patient\(^ {59}\). Care is about supporting and meeting patient needs in innovative ways; regardless of the population. The primary care provider and team use best evidence to support a healing relationship\(^ {60}\) based on the whole person; not an individual disease specific approach to care\(^ {62}\). It is important to understand how the patient can best be supported by the evidence given their circumstances i.e. cost of the medication; behaviors able to manage in the midst of their present lifestyle and pressures. Patients require help to cope better and to

\(^{56}\) Attribute – mutual investment
\(^{57}\) Attribute - individual
\(^{58}\) Consequence – utilization of hospital and emergency services
\(^{59}\) Attribute - trust
\(^{60}\) Attribute - therapeutic
\(^{61}\) Attribute - longitudinal
\(^{62}\) Attribute – whole person
improve over time. Providers consider family and community context; if the patient has informal caregiver(s) then providers ensure they are part of the planning of care. Care is planned with the patient. The provider and team connect the patient with the resources needed to support them; health and social resources. The provider and team let the patient see them as “human”; providers share things about themselves where helpful. Providers are willing to be there for the patient by showing empathy and compassion and building trust. The relationship is a therapeutic helpful, change based relationship. Mutual accountability is created with the patient along with other team members involved in that patient’s care. Teams work together to address the issues and solve the problems; share in the celebrations and grief.

With vulnerable populations there may be a need to focus on more community linkages and even harm reduction in the provision of care. For example, if the population is very vulnerable with addictions and several health conditions then outreach coordinators would likely be required to link the population with other services in the community, i.e. Mental Health, Financial Hub, Housing, Homeless Connect. More case management services may be required to follow and support patients across settings; especially those patients with high chronic care needs and vulnerabilities. All health services are aware of the primary care relationship; where it is and how to access it. Hospital and emergency room staff link the patient back to that relationship; ensuring that the primary care provider is aware of the patient visit and reasons for the visit. The primary care provider and team proactively reach out to follow up with the patient and to link

---

63 Attribute - responsive
64 Attribute – co-constructed
65 Attribute - mutual investment
66 Attribute – shared accountability
67 Attribute - mutual investment
68 Attribute - undergirding that connects care over time
with specialty services as required; also ensuring the hospital and emergency room staff have a plan of care for the patient as appropriate so they are better able to address the patient needs in those circumstances\textsuperscript{68}. The primary care provider and team continue to follow and holistically manage\textsuperscript{69} the patient even in times of high specialty care need or crisis i.e. cancer. The team ensures the patient stays connected to the primary care relationship by reaching out to the patient. Those specialty services (ie. cancer care) also help support the primary care relationship so chronic care can be better managed once acute aspects or events are over. Information systems help support the communications required to accomplish the above. All communication links back to the primary care provider the patient has the relationship with (anchor/quarterback).

The primary care provider and team proactively work to keep the patient out of the emergency room and acute care through the reduction of exacerbations of illness as much as possible. There should be a reduction in utilization with improved management\textsuperscript{70}. This is important to measure and set accountabilities around. A care plan across settings will exist for the patient with high, frequent system use and who has trouble with self-management or controlling their disease through medications, etc. Case management of these patients will be key in order to catch issues early and avoid hospitalization where possible. In order to accomplish this it is important that the primary care provider and team connect with others in home care, mental health, public health, and continuing care/assisted living as required in managing plans of care and proactively addressing issues. Clear avenues of communication are necessary. A whole person, comprehensive approach to care\textsuperscript{71} is crucial; there is not a carved out approach within primary care settings. Specialty care clinic linkages and even co-location of

\textsuperscript{68} Attribute – whole person care
\textsuperscript{69} Consequences – improved utilization of emergency room and hospital services; improved patient outcomes; improved quality
\textsuperscript{71} Attribute - whole person
such services are important. Alberta Health Services (AHS) resources are used if available so services are not duplicated but rather integrated across settings. Specific protocols and pathways of care are in place to guide care and mostly to add clarity around when there is need to refer and how to refer to other programs/specialties\textsuperscript{72}.

Capability building by specialists with primary care around core/key population issues will also be valuable in supporting the relationship i.e. mental health, chronic disease management, addictions. This helps to enable the primary care provider and team to provide best evidence care on an ongoing basis as evidence changes. Processes are in place to support staying up to date on services\textsuperscript{73}.

Ongoing measurement is required; including understanding the patient perspective and involving patients in the establishment and evaluation of services between the primary care provider, team and patient\textsuperscript{74}. Services and the relationship between the provider, team and patient need to be continuously improved based on patient need. Patient perspective or role in outcomes is also important to capture. Only the patient can achieve many of the outcomes and it is the primary care provider and team’s job to support them to reach these outcomes. There is a need to capture and understand this in the measures.

Change management supports are available for and working with the primary care providers and teams; supporting capability building and facilitating improvement in the “Health Home”\textsuperscript{75}. A culture of continuous improvement is supported and built; where the team is never happy with the status quo but is continuously trying to improve their services and supports for

\textsuperscript{72} Attributes - therapeutic
\textsuperscript{73} Attribute - therapeutic
\textsuperscript{74} Consequences – patient experience; measuring outcomes;
\textsuperscript{75} Antecedent - team
their patients. Payment\textsuperscript{76} supports caring for all patients equally and encourages care of the most vulnerable. The culture ensures all team members are treated equally; all have an equal role on the team. Physicians and the team work together through regular meetings and discussions around improving quality. Inter-professional collaborative practice occurs within the core team and in collaborating and integrating with other services the patient requires outside the primary care provider and team\textsuperscript{75}.

Retirements of primary care providers are managed. Patients are connected with a new provider or other existing providers. Discussions are held with patients prior to a provider leaving and the patient is supported to connect to the provider and team of their choice. Patients are involved in the decision around new providers and families are kept together\textsuperscript{77}. Services are coordinated in other locations where patients might require them based on where they live, work and play in relation to their health home. This coordination will also occur with services not offered through the health home\textsuperscript{78, 79}.

A case study presenting ideal relational continuity with all defining attributes present may look like the following (just one example):

Mrs. M is a 48 year old mother of four who has just recently relocated to Alberta from Ontario with her husband. Upon getting settled Mrs. M. is looking for a primary care provider to see her and her family for their needs. Mrs. M suffers from hypertension, diabetes and has a few cardiac concerns over the past couple of years. One of her children, a boy age 14 years has a BMI of 36 and a second child, a girl age 7 suffers from

\textsuperscript{76} Antecedent - payment
\textsuperscript{77} Attribute – co-construction
\textsuperscript{78} Attribute - undergirding that connects care over time
\textsuperscript{79} Attribute - responsive
Asthma. The other two children, a girl aged 9 months and a girl aged 10 have no chronic conditions and the Dad, aged 50 years is also healthy.

Mrs. M. goes on line to find where the “Health Home” connections are in her new community. She is able to book an appointment on line for her and her family to see a primary care provider the following week; she is not in urgent need of a visit as all is stable. The following week she and her family meet with the primary care provider who tells them about himself and introduces them to his team and the services provided. He gives the family time to ask him questions and understand his values and approaches to care. He also identifies that he recognizes that it is nice to have a female available to provide some of the female care required and introduces one of his partner providers; a female nurse practitioner who also supports the care he provides his patients. The family agrees to continue to see Dr. P though they are clear that after time if the fit between themselves and he and his team is not the right fit; he will support them to connect with another primary care provider and team instead. On the way out of the office the family meets the receptionist who helps them to complete any paperwork required and gives them information on accessing Dr. P and his team; including any afterhours care related to the Health Home. Dr. P. asks for the various family members to return to see him over the course of the next month on an individual basis so he can connect with each of them and their individual care needs. His staff calls for old records from where the family previously had their healthcare delivered.

Two weeks following the visit to Dr. P., Mrs. M’s 6 year old daughter has trouble with her asthma and needs to be seen as soon as possible. Mrs. M calls the Health Home and the 6 year old is seen by Dr. P. that same day. He assesses and treats her and then
links her with another core member of the team to support her asthma ongoing; telling Mrs. M that the 6 year old can see this team member regularly to work toward more proactive ways to manage her asthma so she doesn’t have to bring her to see him as often though he will continue to monitor her care. An appointment is booked with the team member, a respiratory therapist, for two days later.

When Mrs. M goes into Dr. P for her first individually scheduled appointment with him as her new primary care provider Dr. P. asks her about herself and how she is finding her new home. They have a conversation about the community; where to find things and the programs available. They discuss what she and her husband do, how the kids are doing, schools, adjustment, and more. This time is spent just getting to know each other. Dr. P. then asks Mrs. M. about her health history and how she is managing with her health concerns. He asks specifically if there is anything she needs from him and they discuss how they can work together on her plan of care; what it should look like. He tells her what he and his team can offer her and what their expertise is. He provides her with other avenues to link with and contact the team if needed. They plan to see each other again in a month to see how Mrs. M is settling and plan to go over recent test results around her chronic conditions and how she is managing same. Dr. P is working to build a relationship with Mrs. M. before linking her to other team members on the team. He asks too that she bring her husband next time to the visit. A nurse will be helping to support Mrs. M’s care.

The following week Mr. M. ends up in the local emergency room following a scare while he was at work; some unexpected left sided weakness. As it turned out he was fine; the episode was attributed to stress. The stress was likely as a result of all the recent
change - a new job and new home. The Health Home receives the paperwork on Mr. M’s emergency room visit via the information system. The emergency room is clear that Mr. M is connected to Dr. P and his Health Home as it is captured in the information system. The booking clerk sets up a call between Dr. P and Mr. M. the following day to discuss the visit to the emergency room. The phone call is for Dr. P to check in on Mr. M - to proactively reach out and see if he has any immediate needs. An appointment is then booked for Mr. M to see Dr. P. and meet a member of his team who can help support Mr. M with his stress management. Mr. M is concerned that there may be more going on that was missed so Dr. P promises to do a thorough assessment when he comes to see him.

When the 14 year old comes for his individual appointment with Dr. P. his mother, Mrs. M, accompanies him. Dr. P has immediate concerns about the BMI but doesn’t want to be too judgmental or scare the young man from coming back to see him. Mrs. M and the boy do not yet seem ready to talk about the child’s weight. Dr. P. wants to create a supportive environment in which they can work together to address all that may be contributing to this concern. There is likely a need to address some behavior change with the patient and his family; a relationship will be important to getting improved outcomes. Dr. P takes it slow and once relationships are established he speaks to his concerns and connects the family with the dietitian from the Healthy Living Program. Mrs. M is also connected to Public Health by Dr. P for her 9 month old daughter as Mrs. M identifies, during the visit with the 14 year old, that she needs to get her youngest daughter immunized.
## Appendix Four: Attributes of Relational Continuity

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Therapeutic</th>
<th>Longitudinal</th>
<th>Responsive</th>
<th>Co-Constructed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>The patient seeks expert care, judgement, advice, guidance related to their health and the professional provider offers competent, effective, satisfying, helpful, safe, secure, quality advice and care in return.</td>
<td>The patient and provider have a continuous, lasting, ongoing, commitment to one another over time that transcends multiple illness episodes.</td>
<td>The commitment between a provider and patient is accommodating, flexible, supportive, available, and accessible. Care is responsive to the needs of the patient and will change over time as required.</td>
<td>Both patient and provider contribute to the creation and maintenance of that patient’s health. The plan of care is coproduced.</td>
</tr>
<tr>
<td>Attributes</td>
<td>Mutual Investment</td>
<td>Trust</td>
<td>Whole Person</td>
<td>Shared Accountability</td>
</tr>
<tr>
<td>------------</td>
<td>------------------</td>
<td>-------</td>
<td>--------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>There is commitment by both provider and patient to be open with and understand one another. There is effort made to truly know one another; having social, contextual, and cultural knowledge of one another. Tacit knowledge of one another. A relationship is built that is reciprocal.</td>
<td>The patient and the provider trust and are loyal to one another. There is empathy, regard, respect for and confidence in one another.</td>
<td>The provider addresses the patient from a comprehensive whole person perspective not as a disease or a body part. Care includes proactive prevention and coordination of care. The focus is on the person and not the illness.</td>
<td>There is a sense of accountability to one another in support of whole person primary care for the patient; as agreed to by the patient. A sustained sense of responsibility to one another;</td>
</tr>
</tbody>
</table>
# Appendix Five: Antecedents of Relational Continuity

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>Access</th>
<th>Valued</th>
<th>Time</th>
<th>Patient Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>In order for relationship continuity to develop the patient has to have access to the provider and team that they have chosen a relationship with and must be able to access that provider and team when they have a need to.</td>
<td>The patient and the provider must both value and understand the need for the relationship in order for relationship continuity to develop.</td>
<td>The provider and team need to ensure there is the ability to provide services to the patient that are regular, timely, and provide sufficient time in the consultation to deal with the patient’s problems and for interaction that will promote the formation of a relationship.</td>
<td>The patient needs to be able to choose the provider and team in which they plan to develop a relationship with.</td>
</tr>
<tr>
<td>Antecedents</td>
<td>Team</td>
<td>Payment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Relational continuity needs to be with a visible interprofessional collaborative practice team in order to provide the best quality care to the patient. Team needs to be present to support all the other antecedents and attributes of relational continuity. One provider cannot manage the expectations or requirements of chronic care and support to the individual that is required for best evidence care.</td>
<td>Payment reform is required in order for relational continuity to be consistently applied and supported if physician providers are going to be a key provider seen in this concept. Fee-for-service payment in its present form cannot support the attributes and other antecedents for relational continuity and becomes a barrier for providers, namely physicians, to provide any of these aspects of relational continuity outside of longitudinal continuity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>References</td>
<td>Wagner &amp; Reid, 2007; Haggerty et al, 2003; Price &amp; Lau, 2013; Buetow, 2004; Haven et al., 2010; Wierdsma et al., 2001; Liss et al., 2011; Burns et al., 2009; Spenceley et al., 2013; Freeman et al., 2003; Freeman et al., 2007; Haggerty et al., 2008</td>
<td>Spenceley et al., 2013; Leger, 2011; Baron &amp; Cassel, 2008 Wranik &amp; Durier-Copp, 2010; Porter et al., 2013; Nasmith et al, 2010; Oekle et al., ….; Davis et al., 2005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>