

LEADERSHIP AND HEALTH INFORMATION MANAGEMENT  
IN CANADA

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By

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**UNIVERSITY OF REGINA**  
**FACULTY OF GRADUATE STUDIES AND RESEARCH**  
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## ABSTRACT

Health Information Management (HIM) professionals play a critical role in Canadian health settings. HIM professionals maintain the health information vital to providing quality patient care and they often serve in bridge roles that connect clinical, operational, administrative, and financial functions (AHIMA, 2015). Despite the importance of HIM to health care, HIM professionals are not represented at higher levels of management where their knowledge and expertise should be welcomed. Research on the reasons HIM professionals do not achieve and perform leadership roles in Canadian health settings is considerably limited.

This study explored the factors that influence leadership development of HIM professionals in Canada. The focus on leadership in this research concerns the identification and selection of leaders into formal and hierarchical roles within healthcare environments. Four bodies of literature were reviewed for the study. They related to the HIM organizational environment, gender issues, societal factors, and the individual characteristics of certified HIM professionals. A conceptual framework, which was derived from a review and analysis of literature, guided the presentation and discussion of the findings of the study.

A sequential explanatory mixed methods design was employed. Respondents for the quantitative phase of the investigation were certified HIM professionals ( $n = 381$ , 93.7% women) and HIM students ( $n = 50$ ; 80% women) who completed survey questions to assess their opinions related to career advancement and leadership development as well as standardized measures of leadership attributes (i.e., Multifactor Leadership Questionnaire-5x; Avolio & Bass, 2004) and personality characteristics (HEXACO-60;

Ashton & Lee, 2009). Participants for the qualitative interview phase of the research were HIM professionals ( $n = 14$ ; 85.7% women) and health leaders ( $n = 7$ ; 42.9% women). The interviews were conducted to obtain more detailed specific information that could not be gained from the results of the quantitative data collected for the study. In short, the interviews helped to further elaborate or explain the survey data collected for the study. A constructivist grounded theory (GT) approach was employed to analyze interview data.

Theory in the form of a multi-factorial conceptual model that identifies and explains influences that maintain the status quo and current leadership gap for HIM professionals is presented. Candidate factors of the model include (in no particular order): (a) individual characteristics, (b) issues related to gender, (c) education, (d) organizational culture, and (e) perceptions of HIM as a profession. These factors were reinforced throughout by the four themes that arose in the GT phase of research. The four themes were *invisible but important*, *career lifecycle*, *leadership*, and *gender*. Although the identified factors almost certainly interact with one another to limit HIM leadership development and career advancement, certain of these factors appear to exert a profound negative influence. Implications of these findings include consideration of raising the entry-to-practice educational requirement for generalist HIM professionals and development of senior HIM career pathways to support HIM practice and policy related to electronic health information systems, health funding, and resource allocation. It is vital that a critical mass of HIM professionals embark on their career with plans to achieve senior decision-making roles.

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## DEDICATION

Thus shall you think of this fleeting world:  
A star at dawn, a bubble in a stream,  
A flash of lightning in a summer cloud,  
A flickering lamp, a phantom, and a dream.  
From the Diamond Sutra, 1st Century BCE

This verse from the Diamond Sutra reminds us of the impermanence of life. Knowing that we have only a short time in this world allows us to step outside our daily routine and consider how we truly want to live. My husband, Murray, and I often reflect on this passage and ask ourselves, what is the purpose of our life? Our 2003 move from Smithers, BC, to Regina, SK, in order for him to return to university and for me to embark on a new career was one such time. Now, 12 years later, we have both completed our academic journeys. Along the way, our son, Liam, earned an undergraduate degree in industrial engineering and a machining certificate; and our daughter, Ailesh, is now embarking on her own voyage towards what she hopes will be a similar path to her father. I like to think that their parents' love of learning and adventure echoes within their souls and is deeply ingrained in their psyche. When Murray and I first proposed the dramatic life change to Liam and Ailesh, they were 11 and 9 years old, respectively. Both kids were game for the adventure and, although slightly nervous about the unknown, they were keen to support their parents in whatever we decided. It is the unwavering belief in our path, our love and commitment to each other as individuals and as a family, that has sustained me throughout this journey. Liam and Ailesh, I love you with all my heart and I am so very proud of you both. Murray, I can never thank you enough for being the stay-at-home and lead parent to Liam and Ailesh during their childhood, and for being the most supportive husband in the world! I could not have reached this goal without the three of you by my side.

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## **CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY**

### **1.1. The Research Problem**

The Health Information Management (HIM) profession is an important but relatively unknown and poorly understood profession, both in Canada and internationally (Australian Institute for Health and Wellness, 2010; Canadian Health Information Management Association [CHIMA], 2011; Murphy, 2010; Watzlaf, Rudman, Hart-Hester, & Ren, 2009). HIM professionals should be assuming leadership roles in a variety of settings; for example, in acute, community, and primary care, given the expanding role of health information technology, ever-increasing uses of health data, and the legal requirements surrounding access and privacy of health information. HIM professionals possess expert knowledge of health data origins, quality, linkages, and their proper use and maintenance. Accordingly, HIM professionals should be providing input and leadership into new information systems and information sharing policies and procedures relating to healthcare. However, this has not been the case. Rather, an opposite trend has been reported with a decline in the number of HIM professionals employed in leadership roles in health settings. Although no systematic analysis of Canadian HIM professionals in leadership roles has been completed, anecdotal evidence and my own work experience as an HIM professional for over 30 years supports this perception (G. Crook, Chief Executive Officer and Registrar of CHIMA, personal communication, February 13, 2013; March 4, 2015).

The reasons that few HIM professionals advance to health leadership positions remain unclear. A possible barrier to HIM leadership advancement may be the continued existence of a limited understanding of the profession and its contribution to healthcare

(Johns, 2013; Murphy, 2010; Shephard, 2010). Some support exists for this contention. The Australian Institute of Health and Welfare (2010) coding workforce paper reported that HIM professionals have difficulty gaining support from senior managers who do not see the value in the HIM skill set. Although HIM professionals consider their work highly specialized, they often report feeling under-appreciated and underutilized (Murphy, 2010). While the management of health information is inter-professional, HIM professionals are not included within the inter-professional health teams even though they should be (Kennedy, 2014).

The lack of leadership opportunities may also be linked to the limited advanced HIM education and training opportunities available to HIM professionals. In Canada, HIM training is completed predominantly through 2-year diploma programs offered at community colleges, institutes of technology, and private post-secondary institutions. In addition to diploma-level training, one newly accredited blended health informatics (HI) / HIM undergraduate degree program exists and one unaccredited undergraduate HIM degree-completion program is offered in Canada. Currently, no accredited Master's or Doctoral level HIM programs exist in Canada. Thus, HIM education has generally been viewed as supplying a skill set for a specific entry-level job rather than for providing general competencies such as critical thinking, analysis, problem solving, and leadership. At present, leadership training and development is not a formal accreditation learning requirement in HIM diploma or undergraduate degree programs, although individual programs may choose to include leadership content in their curricula. In addition, a formal career progression pathway to support and encourage career and leadership

development does not exist for the Canadian HIM professional, which may help to maintain the view of HIM as an entry-level profession.

Another possible barrier to HIM leadership roles, influence, recognition, and career advancement may be attributable to the demographics of the profession as 95% of Canadian certified HIM professionals are women. A substantial body of literature exists that documents gender inequality and the failure of women to advance in health-related leadership roles (American College of Healthcare Executives [ACHE], 2006; Lantz, 2008; Ragins, Townsend, & Mattis, 1998; Ryan & Haslam, 2005). Moreover, the academic literature supports male leadership advancement in female-dominated professions (e.g., Budig, 2002; Williams, 1992). While evidence supports a requirement for an increased HIM skill set (Jolly, 2011; Murray et al., 2011; O'Grady, 2009; Prism Economics & Analysis, 2014), little to no evidence exists regarding HIM opportunities for leadership development and career advancement or the way gender issues may influence their leadership and career advancement. My research will focus on describing the certified HIM professional population in Canada and exploring the factors that influence leadership development of certified HIM professionals in Canada. Interviews with HIM professionals and health leaders will further explore the reasons for leadership limitations and provide recommendations to overcome the barriers.

## **1.2. Research Purpose and Questions**

The purpose of this research was to explore the factors that influence the leadership development of certified HIM professionals in Canada. Four bodies of literature were reviewed for the study including the HIM organizational environment,

gender issues, societal factors, and the individual characteristics of HIM professionals.

Four questions were investigated:

1. In what ways do the individual characteristics of HIM professionals influence their leadership development?
2. How does gender influence the leadership development of HIM professionals?
3. In what ways do organizational and societal factors influence the leadership development of HIM professionals?
4. What suggestions can the participants offer to foster leadership development of HIM professionals?

HIM professionals work in many differing and key roles across Canadian healthcare. Examples of these roles include coding classification, decision support, release of health information, terminology standards, records management, data quality, and electronic health information system implementation and maintenance (CHIMA, 2013b). The HIM professional possesses the content knowledge to work with health information systems but not the information technology expertise required to support such systems. The HIM role in privacy and information lifecycle management is crucial; however, these roles remain largely unknown to health leaders and continue to be undervalued (Johns, 2013; Murphy, 2010; Shephard, 2010).

In the past two decades, HIM roles have expanded and changed as the implementation of electronic health information systems (EHIS) has accelerated. The implementation of EHIS provincially/territorially, nationally and internationally, although successful in certain aspects, has been plagued by problems, including a lack of skilled HIM human resources. The use of and access to health data and information has

expanded dramatically. For example, the Canadian Institute of Health Information (CIHI) has expanded its policy role considerably, moving from the storage and processing of data to an emphasis on research and analysis. CIHI plays an integral role in health policy decision support by providing a variety of reports as well as access to health and administrative data through 28 databases (CIHI, 2014). Coded health data are increasingly used as the basis for healthcare funding formulae such as activity-based funding (ABF) and quality care initiatives such as the hospital standardized mortality ratio, a tool used to compare hospital death rates and identify strategies to decrease deaths (CIHI, 2012).

The introduction of privacy and access legislation in Canada in the early 1990s had a major influence on the HIM profession. In most federal and provincial Acts, a custodian or trustee of personal information and/or personal health information must be appointed. Every province's legislation is unique and must be referred to separately to determine the rules per jurisdiction and between the private and public sector (Frelick, 2013). As the HIM professional is considered the custodian of the health record in public hospitals, the role of privacy officer is often assigned to the Director of HIM (MacDonald, Crook, & Cotton, 2013).

Research suggests that gender issues may also be a factor in the lack of leadership advancement for HIM professionals across Canada. For example, in 2014, the CHIMA membership database reflected a gender split of 90.6% female, 4.5% male, with 4.9% of unknown gender. As the HIM profession is comprised mainly of women, this research will explore the ways in which gender differences influence the leadership attributes, skills, styles, and performance of HIM professionals across Canada. In addition, Johns

(2013) reported that, although the female/male split is similar in Canada and the United States, only 1.7% of American female credentialed HIM professionals held executive positions in 2012 compared to 4.3% of male credentialed HIM professionals.

Information on Canadian HIM professionals is not available.

The literature suggests a further reason for the lack of leadership advancement for HIM professionals may be the education levels attained by certified HIM professionals. The CHIMA membership survey data (CHIMA, 2011) indicated that 81% of respondents stated that the highest education they completed was a diploma, 16% reported having an undergraduate degree, 3% held a Master's degree, and less than 1% had completed a Doctoral degree or post-Doctoral training. The numbers are similar in the United States. Johns (2013) reported that 10.5% of female credentialed HIM professionals held graduate degrees relative to 23.9% of their male counterparts. The statistics regarding continuing education are similar in Australia where a 2010 survey revealed that 92.8% of the HIM clinical coding roles were filled by women, yet men undertake advanced coding training at a ratio of 9:1 (Australian Institute for Health and Welfare, 2010). While clinical coding education is not equivalent to advanced university education, the Australian statistics do suggest an increased participation in advanced education in male versus female coders.

In addition, the lack of HIM leadership advancement may also be influenced by the placement of the HIM department within the health organizational structure. Specifically, it is possible that organizational reporting relationships will impose structural obstacles to HIM professional's leadership advancement (Johns, 2013). A 2008 American Health Information Management Association (AHIMA) membership

survey indicated that 46% of HIM directors reported to the Chief Financial Officer or equivalent (Johns, 2013). As Johns noted, the HIM skill set focuses primarily on information management rather than financial management, thereby instituting a barrier to direct line leadership advancement. Since the traditional advancement pattern is via vertical pathways up the formal organizational chart, reporting to the finance department may be detrimental to the HIM professional's leadership development. Only 8% of American credentialed HIM professionals surveyed reported to the Chief Information Officer (CIO) or equivalent, a career progression more congruent with the HIM professional's skill set. The incongruity of the skill set between finance and HIM plausibly makes it more difficult for HIM professionals to garner an understanding of their role and to pursue leadership development opportunities within this type of organizational reporting structure. In terms of the reporting structure for HIM departments in Canada, amalgamated information is currently not available.

Speaking of the American context, Johns (2013) commented that "the literature on gender and leadership in HIM is surprisingly underdeveloped" (p. 3). The same is true for Canada as no information is currently available concerning the gender breakdown and educational background of CIOs and Chief Privacy Officers in Canadian acute care facilities. Similarly, no available data exist regarding the backgrounds of managers responsible for HIM and related departments including Information Systems/Information Technology (IS/IT) and Decision Support. Limited information is available characterizing CIOs and HIM leaders in general. A Russian publication, entitled Chief Information Officer Magazine (International Data Group, n.d.), listed a readership/audience breakdown of 80% male and 20% female while

Boardroominsiders.com reported that 19.2% of Fortune 250 companies have a female CIO, up from 10% in recent years (Gillenwater, 2012).

A documented need exists for advanced HIM education in Canada (CHIMA, 2013b; O'Grady, 2009; Prism Economics & Analysis, 2014); however, this need is not translating into new programs or advanced education. Moreover, many HIM students are now entering HIM educational programs with university degrees or are training for a second career. Data concerning these changing student demographics have not been gathered. Without such data, it remains unknown whether notable demographic changes exist among new HIM students that may, in turn, influence their career trajectories. In order to examine the characteristics of individuals now entering the HIM programs, such as education level prior to entry and age range, HIM students were invited to participate in the quantitative phase of data collection for this study.

### **1.3. Significance of the Study**

This study is among the first systematic examination of the social, individual, and organizational factors that influence leadership development among HIM professionals in Canada. Anecdotal evidence exists to suggest that HIM professionals are limited in their leadership development and that their skill set is considered entry-level or clerical. A substantive empirically derived theory regarding how HIM professionals could manage their leadership development would address a literature gap and would be helpful for those who seek to progress toward formal leadership positions.

Secondly, the results of the study described the current demographics of HIM professionals and students and might help to inform recruitment strategies for health employers and academic programs. The findings of the study may inform the

development of policy in the area of advanced education and training for HIM professionals. In addition, the findings may be employed to raise awareness and recognition of HIM skills, knowledge, and the HIM profession's contribution to quality healthcare. Finally, the results of the study will inform the development of recommendations to advance HIM leadership and career development.

#### **1.4. Operational Definition of Key Terms**

A number of key concepts used in this study have been operationally defined. These concepts are the following:+

*Activity based funding (ABF)* - Activity based funding (ABF), also called patient focused funding, is the provision of funding based on case mix and type of patient seen (CIHI, 2013).

*Canadian College of Health Information Management (CCHIM)* - CCHIM is the federally chartered college responsible for accrediting Health Information Management (HIM) programs and certifying HIM professionals in Canada.

*Canadian Health Information Management Association (CHIMA)* - CHIMA is the national professional association of HIM professionals in Canada. CHIMA and CCHIM operate under one board of directors, although they hold separate letters of patent from the Canadian government.

*Case-Mix Groups (CMG)* - Case mix group methodology is the Canadian version of the Diagnosis Related Groups (DRG). "CMGs categorize patients into statistically and clinically homogeneous groups based on the collection of clinical and administrative data... Understanding the different care requirements of patients and clients forms the basis for comparing healthcare organizations and case mix-adjusted resource use" (CIHI,

2015, para. 2 and 4). CIHI now uses the CMG+ methodology, a refinement of the CMG methodology, that groups acute care inpatient discharges with similar clinical characteristics and resource utilization patterns.

*Diagnosis-Related Groups (DRG)* - The diagnosis related groups are similar to the Canadian CMGs; however, the main purpose of DRGs is to support reimbursement of healthcare, initially for Medicare patients but now for most patient populations.

*Electronic health record (EHR)*. The electronic health record (EHR) is defined as the longitudinal, interoperable, inter-connected, and cross-jurisdictional record of an individual's encounters with the health system from birth to death (Gibson, Levesque, & O'Reilly-Brunelle, 2013).

*Health leader*. The definition of health leader that will be used for this research study is a person working in a position of senior, decision-making authority. Examples of health leader positions include Chief Executive Officer, Chief Privacy Officer, and Director of HIM.

*Health information management (HIM)*. The Canadian Health Information Management Association (CHIMA) defines Health Information Management (HIM) as "the discipline that focuses on healthcare data and the management of healthcare information, regardless of the medium and format" (CHIMA, 2015, para. 2).

*Leadership development*. My focus on leadership in this research concerns the identification and selection of leaders into formal and hierarchical roles within healthcare environments. As such, leadership development in the context of this study is used to support the formal advancement of HIM professionals in their career; therefore, the term

leadership development is used interchangeably to mean career development, career advancement, and career growth.

### **1.5. Limitations and Delimitations of Research Design**

The study has several limitations and delimitations. With regard to the limitations of the study, self-selection sampling bias may affect the findings of the study, that is, those who elect to participate may differ from those who do not. The invitation to participate in the quantitative phase of the research was circulated to all certified HIM professionals and current HIM students in Canada who hold CHIMA membership. Those who chose to participate in the research regarding leadership and HIM may be more likely to be leaders or potential leaders in HIM than those who elected not to participate. Alternatively, those that chose to participate may have their own agenda or particular viewpoint that they wanted to express, regardless of the research topic. Limited demographic information regarding the certified HIM professional membership was obtained and limited interviews were conducted. Consequently, the generalizability of the results is somewhat restricted and, as such, the findings should be interpreted with this caution in mind. Another limitation of the study is that leadership style and behaviours were assessed using self-report instruments rather than with a multi-rater method. This limitation is attenuated by the generally accepted quality of the measures used to aggregate data for relevant group comparisons (Avolio & Bass, 2004).

Given my position as Vice President of the Canadian College of Health Information Management (CCHIM), it is reasonable that potential participants may have been reluctant to participate or answer fully any question related to the profession, particularly during the interviews where the answer could be perceived as negative.

Although it was made clear in the advertisement and consent process that my role in this research was as a Doctoral student and that all information would be kept strictly confidential, it is likely that my role in the profession may have affected the participation of some potential respondents and may have tempered the responses of those who did participate. HIM professionals and health leaders who were interviewed were not identified and strict confidentiality and anonymity was stressed. Individuals who participated in the quantitative surveys were anonymous, that is, no identifying information was collected.

The study was also delimited by the following factors. The HIM Leadership Questionnaire (HIM-LQ) was developed for the current study and, as such, remains to be further tested using established psychometric evaluation procedures (Kline, 2005; Urbina, 2004). Further to the sample group, resource limitations including time and cost influenced the size of my sample. Data collection for the quantitative phase lasted for three months, from June 17 to October 1, 2014, to allow respondents the opportunity to participate and to take summer vacation and work deadline dates into consideration. Data collection was discontinued when few further responses were received and a decision was made to cease advertising given the timeframe had exceeded three months. A license for 500 participants was purchased for the Multifactor Leadership Questionnaire 5X (MLQ-5X; described in detail in the Research Design section) so a potential delimitation to the sample size was imposed based on cost; however, the license limit was not reached. The length required to complete the survey (approximately 30 to 40 minutes) may also have influenced the nature of the final sample. In fact, a substantial proportion of respondents who began the survey did not complete it. It is possible that the completers and non-

completers differed in unknown ways. In the development of results groupings, the distinctions made between various comparison groups were subjective and not based on any previous set of comparators (e.g., length of time in HIM profession, HIM leader group versus front-line workers). The qualitative phase of the research was necessarily delimited by practical considerations. It was neither possible nor desirable to interview every HIM professional and every health leader in Canada, given that GT methodology was used. In addition, GT does not lend itself to a standardized response; therefore, generalizability of the findings is not possible.

Given that I have been a certified HIM professional for over 30 years, it is impossible to ‘take myself out of the study’. However, although I am a certified HIM professional, I have worked in association management for the past nine years, which is a different role than those commonly held by HIM professionals. The use of GT allowed me to bring my knowledge and experience to the research field and have it contribute to the understanding of my findings (Glaser & Strauss, 1967; Charmaz, 2014). Employing a constructivist GT approach acknowledges my imbeddedness in the HIM world. (Detailed discussion regarding constructivist GT can be found in the Research Design section.) At each stage of my research, I tried to limit the influence of bias in data interpretation through following GT principles (B. Glaser, personal communication, February 15, 2015), and I discussed how a constructivist approach influenced data interpretation. For the quantitative data, where possible I employed psychometrically validated measures that have been extensively used to assess the constructs of interest. Although all inquiry involves subjectivity, for example, the selection of particular measures or the use of

selected questions over others, I made use of available methods to reduce subjectivity as much as possible.

### **1.6. Structure of the Dissertation**

The remaining chapters of this dissertation have been organized as follows. The literature review for the study is presented in Chapter 2. The conceptual framework, which is derived from a synthesis of the literature on the factors that influence the leadership development of certified HIM professionals as well as leadership theory, types, styles and behaviours, will guide the presentation and discussion of the findings of the study. Chapter 3 presents the stages in the historical development of the HIM profession beginning from 1910 to the present. The chapter gives some consideration to international, North American, national, and professional issues relevant to the development of health policy and regulation and their influence on the evolution of the HIM profession. Chapter 4 discusses the research design for the study. The chapter presents the mixed methods research design and it offers a rationale for the choice of that design for the study. The combined strengths of the quantitative and qualitative data collection methods provided me the tools to comprehensively explore the research problem and questions, which would not have been possible with the use of a single data collection method or approach. A discussion of grounded theory (GT) and its main schools of thought focused on the critical realist, relativist, and constructivist perspectives. The rationale for choice of the constructivist GT as well as the analyses and implications of that approach for data collection and analysis is presented.

Chapter 5 presents the results of the study. The process is guided by the conceptual framework about the societal factors, including leadership theory, styles, traits

and behaviours, organizational environment factors, and the individual characteristics of HIM professionals, that influence the leadership development of certified HIM professionals. Chapter 6 discusses the research findings. Chapter 7 discusses the implications of the study for policy, practice, theory, and further research. The chapter concludes with some recommendations arising from the study.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1. Introduction**

As my research explores leadership and certified HIM professionals, the literature review focuses on societal, gender, organizational, and individual factors that influence leadership development. In the first section, I describe the explicit and implicit theories of leadership. In addition, a discussion of the leadership styles, based on the Multifactor Leadership Questionnaire, the tool used in my quantitative survey, is presented to provide background material on the four leadership styles measured by the tool and their implications for leaders, followers, and organizations. Then, a conceptual model of factors influencing HIM leadership development is presented. Finally, the societal, organizational, and individual factors affecting leadership and their implications for the HIM profession are explored.

### **2.2. Leadership**

Leadership arises in all cultures and all levels of society. Although the patterns of behaviours, traits, and characteristics of a leader may vary across cultures, situations, and times, leadership itself is found to be consistently present even in societies without formalized positions of power. To study history is to study leaders. Indeed, written codes of leadership have been found in ancient Egypt, China, Rome, and Greece (Bass & Bass, 2008). A broad range of opinion exists regarding the nature of the qualities and attributes that are associated with effective and ineffective leadership (Dinh et al., 2014; Schyns & Schilling, 2011). Leadership research has shifted in focus from centering mainly on male individuals primarily in the private sector to a more inclusive research agenda that explores leadership in contexts including the public and not-for-profit sectors,

followers, the workplace, women, visible minorities, and in other cultural contexts (Avolio, Walumbwa, & Weber, 2009).

The workplace itself has changed over the last few centuries, moving from an economy consisting largely of manual and trade labour to today's highly skilled knowledge-based economy. Changes in both the workplace and workforce have had a profound effect on leadership research. During the last century, the formal study of leadership developed significantly with investigation of psychology and leadership, group psychology, transformational leadership, and the development of leadership assessment and training centres (Bass & Bass, 2008).

**2.2.1. Defining leadership.** Leadership has been variously described as the ability to get people to work together towards an organizational goal (Cyert, 1990), as a complex process of motivating people to act together towards an agreed upon organizational goal (Davidson, Elliott, & Daly, 2006), as a social influence that maximizes a group's efforts towards the completion of a goal (Kruse, 2013), and as a process of influencing and facilitating others to work together individually and collectively towards a shared purpose (Yukl, 2013). Although several definitions of leadership have been advanced, no widely accepted articulation of the construct has emerged (Yukl, 2010). My focus on leadership in this research concerns the identification and selection of leaders into formal and hierarchical roles within healthcare environments. In some cases, these leaders may have a formal title such as manager, director, or chief; however, my focus is more on the ability or power of the leader to influence policy, strategy, and decision-making regardless of their organizational title.

Leaders are seen as influencing others either directly or indirectly. Direct influence occurs when a leader personally interacts with followers through face-to-face contact or other forms of direct communication such as telephone or email. Leadership is viewed as indirect when others are influenced at some degree of remove. For example, a geographically distant leader's actions or organizational plans may influence others without any direct personal interaction (Yukl, 2013).

The study of leadership has been classified and investigated across five levels of conceptualization that include: (a) the individual, (b) the dyad, (c) the collective (i.e., shared), (d) the strategic (i.e., organization), and (e) a specific event (Dinh et al., 2014; Yukl, 2013). The *individual* concept of leadership emphasizes the study of the needs and self-governance of the individual, how their traits and behaviours explain their motivation to become or follow a leader. The *dyadic* concept centres on the relationship between the leader and the follower.

The *collective or shared* concept pertains to a group of some description (e.g., employees, soldiers). A group will have a different dynamic than a dyad, as there are many personalities, traits, behaviours, and levels of organizational commitment involved within the relationship. In addition to considering the traits, behaviours, and characteristics of the leader, follower, and group, the *strategic* concept of leadership incorporates perspectives that include information management, the internal and external environment, and internal and external influences. The *event* concept, a relatively recent addition to leadership theory, focuses on the specific context of time, place, and situation (Dinh et al., 2014; Yukl, 2013).

Definitions of trait, behaviour, attribute, and characteristic differ depending on the literature reviewed (DuBrin, 2013; Yukl, 2013). The American Psychological Association (APA) describes a trait as a relatively stable personal attribute that affects or influences behaviour across situations and contexts (APA, 2015). A behaviour is considered the way an individual acts and is based on an individual's traits. For example, if a leader is honest, this trait may be reflected through ethical behaviour. Characteristics or attributes, used interchangeably in this chapter, are the groupings of traits and behaviours that make up an individual's personality.

**2.2.2. Overview of theories of leadership.** The last century has seen considerable attention paid to leadership as a topic of inquiry. Theoretical understandings of leadership have been categorized as falling within the two broad perspectives of *explicit* and *implicit* leadership theories. Within each of these perspectives lie further typologies of leadership factors, personal attributes, associated behaviours, and follower perceptions.

Why do theories of leadership matter? Theories of leadership have been argued as having utility in two related ways. First, leadership theories are useful in generating testable hypotheses and guiding research agendas; and, second, the theories are believed useful in the context of applied leadership development (Bass & Bass, 2008). Explicit theories of leadership have been described as comprising emphases of trait, behaviour, situational (or contingency), power-influence, and integrative leadership approaches (Yukl, 2013). Implicit theories of leadership are based on the personal assumptions and perceptions of followers, subordinates, and superiors about the traits and characteristics of the ideal leader (DuBrin, 2013).

**2.2.2.1. *Explicit theories of leadership.*** Explicit leadership theory is centred on the leader with the core assumption being that a leader's traits and behaviour evoke a reaction in their followers. Leadership attributes have been described as being generally consistent across gender, culture, and organizational structures (House, Hanges, Javidan, Dorfman, & Gupta, 2004; Offermann, Kennedy, & Wirtz, 1994; Phillips & Lord, 1986; Yukl, 2013). Below I discuss the five major approaches to, or theories of, leadership (i.e., trait, behaviour, situational or contingency, power-influence, and integrative or new leadership) as described by Yukl (2013).

*Trait theory.* Trait leadership theory encompasses individual abilities and skills as they relate to both task competence and interpersonal relationships. Personality traits include honesty and humility, introversion/extraversion, and courage. Early researchers identified specific personality traits that consistently guarantee leadership success. More recent research addressing the trait approach has focused on implicit leadership theory and the importance of trait perception as it influences followers, leadership values, and ethical leadership (Bass & Bass, 2008; House et al., 2004; Lord et al., 1986).

As with most human attributes, the question arises about whether it is nature or nurture that produces leaders. Studies of leadership using samples of fraternal and identical twins suggest the influence of both innate (nature) and learned (nurture) aspects as accounting for leadership qualities (Arvey, Zhang, Avolio, & Krueger, 2007; Arvey, Rotundo, Johnson, Zhang, & McGue, 2006). Results suggest that nurture, or rather environmental influences, are more important than nature. These findings are significant in that they suggest that leadership qualities can be developed.

Individuals who understand leadership as an innate construct have been found less likely to engage in leadership development even though leadership development has been positively linked to enhanced leadership abilities (Reichard & Avolio, 2005). Thus, it appears that the belief that leadership is an inborn construct limits participation in programming activities that have been shown to be effective in developing leadership skills. Armed with the notion that leaders can be made, it follows that trait leadership theory should provide direction concerning how to cultivate leadership traits, the ways in which a leader influences followers, and how a leader can be more effective.

Trait theory approaches fell out of favour in the 1950s following the publication of findings suggesting that there were no consistent traits to differentiate leaders from non-leaders (Stogdill, [1948] and Mann [1959], in Lord, De Vader, & Alliger, 1986). Although the findings of Stogdill and Mann later came to be considered problematic, they had an enduring effect on trait theory (Lord et al., 1986). Based on the perception that trait leadership theories had failed to deliver, researchers disillusioned with the approach turned their attention to *behavioural* theories of leadership.

*Behavioural theory.* Behavioural theories focus on the managers' use of time, their activities and functions, and conflicts and responsibilities – in essence, focusing on what leaders do versus how they act. This new perspective led to the identification of effective leadership behaviour. In fairness to trait models, behavioural understandings of leadership were considered a progression or outgrowth of the trait approach rather than a radically new perspective (Lord et al., 1986). Nonetheless, both trait and behavioural approaches have been critiqued as being overly simplistic in that they examine

behaviours or traits individually rather than in a fuller context that considers factors such as the environment, organizational structure, and measurable goals (Yukl, 2010).

*Situational theory.* The *situational* approach focuses on the context within which the leadership activity takes place and explicitly addresses factors such as organization type, the characteristics of followers, and external factors, such as the current economic situation. Situational research is comparative in nature and seeks to learn which leadership qualities or characteristics are consistent or disparate across organizations, environments, and cultures. The situational approach also attempts to identify specific aspects that may moderate leadership attributes in certain situations. One situation may call for leadership characteristics that may not be effective or desirable in a different situation (Yukl, 2013).

*Power-influence approach.* The *power-influence* approach seeks to explain how the type and amount of power utilized by a leader influences followers, superiors, peers, and clients (Yukl, 2013). Research using a power-influence approach has focused on how the power of a leader relates to leadership effectiveness. Three outcomes are considered possible based on the tactics that a leader elects to use, which, in turn, are affected by the leader's traits, behaviours, and the situation (DuBrin, 2013). The possible outcomes are described as *commitment*, *compliance*, and *resistance*.

Commitment is defined as the enthusiastic embrace of the leader's strategy with full effort expended to meet an objective. Compliance is described as an outcome in which the leader was influential in affecting the targeted person's task behaviour but not his or her attitude. Resistance means the attempt to exert influence has been unsuccessful (DuBrin, 2013). Leaders who are viewed as competent by followers and senior leaders

achieve more legitimate power or influence and therefore, are able to influence organizational strategies. Three general types of influence tactics have been identified including impression management, such as self-promotion; political tactics that affect organizational decisions, such as influencing the agenda for a meeting; and proactive tactics that have a direct task objective such as changing a procedure to influence an outcome (Yukl, 2013).

*Integrative leadership approach (contingency and situational).* The final leadership theory considered is the *integrative* or contingency and situational approach. An integrative approach seeks to combine more than one leadership variable in the same study. For example, a researcher may seek to determine the ways in which traits, behaviours, and/or situational variables affect or are affected by leaders and followers and within what organizational contexts (Yukl, 2013).

**2.2.2.2. Implicit theories of leadership.** Individuals develop personal perspectives regarding what they consider leadership qualities based on personal, familial, societal, and cultural beliefs. Implicit leadership theory is based on follower and stakeholder perceptions of a leader and how the follower or stakeholder perceives leadership attributes, traits, or behaviours (DuBrin, 2013; Offerman et al., 1994). When an individual encounters a person who demonstrates qualities that fit his or her perception of a leader, the individual equates the person's abilities with leadership. These beliefs are not based on objective criteria but rather on the individual's implicit perceptions of what makes a good leader (Martin & Epitropaki, 2001).

Individual's perceptions of what constitutes effective leadership characteristics have been found to be inconsistent (Schyns & Schilling, 2011). For example, intelligence

and pleasantness, although most often associated with effective leadership, have been considered ineffective by some individuals and unfavourable attributes, such as being weak and narrow-minded, have been considered effective. These findings raise the question of whether a consistent link exists between favourable/unfavourable attributes and effective/ineffective leaders (Kenney, Schwartz-Kenney, & Blascovich, 1996).

Data from leadership evaluation questionnaires that assess traits and behaviours of leaders have been used extensively to create leadership training programs, to develop management compensation packages, and to inform other decisions that affect leadership and management in organizations. Research used in leader training and evaluation programs should be carefully considered as to whether the results validly and accurately measure specific behaviours or whether they are biased based on the implicit leadership beliefs held by raters (Phillips & Lord, 1986). Evaluations completed by subordinates may include inherent biases based on the evaluator's mood, gender, race, culture, and organizational structure (Hall & Lord, 1995). In order to understand the implications of implicit leadership theory, a discussion on followership is warranted.

*Followership.* The 1990s saw a shift in leadership research moving from a focus on leader characteristics to those of the follower or subordinate. A follower is someone who follows a leader regardless of whether or not a leader is in a structural relationship with them, whereas a subordinate is someone who reports directly to a leader in a structured setting (Yukl, 2013). Research investigating followership shows that decisions about a leader's abilities are made based on leader actions, team performance, external conditions, and position held within the organizational hierarchy (Yukl, 2013).

Followership research includes investigation into individual recognition of leaders based on information stored in long-term memory, or Rosch's (1978) *family resemblance* structure. Individuals are believed more likely to perceive someone as a leader if that person fits into their picture of a leader, such as producing strong performance outcomes, whether the performance outcomes are actually related to the leader or not (Hall & Lord, 1995). It has been argued that individual follower perceptions are affected by more than the individual's recognition and belief of how a leader behaves (Collinson, 2006; Hall & Lord, 1995; Yukl, 2013). Interaction between a leader and follower(s) occurs at the dyadic, societal, and group levels and differing influences within these groupings act to construct perceptions of leadership.

Dyad-level interaction includes characteristics from both the follower and the leader and research in this area explains how these characteristics affect followers' perceptions. For example, if a subordinate considers a manager to hold the same values and attitudes as him- or herself, the subordinate is more likely to form a favourable or positive impression of the person as leader. The initial positive impression of the leader is maintained over a period, even when the reason for the initial impression is forgotten (Hall & Lord, 1995). If the leader acts in the style that the follower is expecting, the follower's perceptions of the leader are strengthened.

Group-level influences on leadership are based on multiple people considering the leader's characteristics (Hall & Lord, 1995). Leaders emerge in groups differently than in a dyadic relationship. Emergence in groups is based on participation of the group as a whole as well as individual participation in relation to the group. Primary work groups, or those considered in a team setting, may exhibit greater homogeneity due to group size

or demographics. Although group perceptions may vary depending on leader-member exchange, the more homogenous the group, the more common the perception of *leader* may be.

It has been argued that organizations cannot be successful without exceptional or courageous followers (Chaleff, 2003). Organizations cannot be successful if followers are not efficient and effective as there are many more followers in the workplace than there are leaders. Workplace structures and culture can contribute to the shifting nature of organization, group, and individual agency for those in follower positions (Collinson, 2006). Whether an individual is in a staff level or middle-management position, frustration can arise when senior leaders appear to disregard or misinterpret information that may improve organizational performance. A courageous follower may be willing to "speak truth to power" and inform senior leadership of dissension in the ranks and the reason, rather than engaging in the dissemination of subversive discussion.

*Followership/subordinate perceptions.* Follower perception is important to leadership theory because of the many implications for the leader and the organization (Yukl, 2013). A leader who is perceived to be effective and competent will likely remain in a leadership position or even be promoted, and may attain greater power and be more able to influence change. For the organization, a leader who is viewed as effective can positively influence the organizational direction, strategy, and vision. An organization may flourish or perish, depending on a leader's ability to make innovative and responsible changes when needed (Yukl, 2013).

Understanding how, why, and when individuals choose to follow a leader is important to the study of leadership theory. The decision to follow a leader may be based

a number of evolutionary factors, such as: a) a recognition of a need for coordination, b) encountering situations that require planning and intelligence, c) the need to make collective decisions in situations where differing opinions exist, d) initiation of group action once a decision is made, and e) the need to maintain group cohesion (Van Vugt, Hogan, & Kaiser, 2008). Recognition of worthy leaders could make the difference between survival and failure. Followers will select different leaders depending on the situation, for example, directive leaders are more likely to be followed when life and limb are at stake whereas participative leaders are more likely to be effective in a stable organization where process improvement and employee satisfaction are important. Situations may also arise where leaders are resented or considered unnecessary.

*Leader substitute / leader irrelevance approach.* Situations exist in the workplace that may render direct leadership unnecessary (Yukl, 2013). Substitutes for leadership can exist in teams of highly skilled employees where the members of the team are committed to an organizational goal. Self-management by employees can result in a decreased need for direct management of work and lead to increased employee satisfaction (Manz & Sims Jr., 1980). Technological advancements can provide everything from quality controls to performance measures and allow for assessment or adjustment of one's own productivity levels (Yukl, 2013). Commitment to professional ethics may also lead to situations where direct management or leadership is not necessary. In these situations, directed management and leadership may be seen as intrusive and may be more of an inhibitor to work flow and production than limited leadership.

Leadership research is based on the assumption that leadership is directly related to organizational success or failure (Pfeffer, 1977). Pfeffer argues that there are three reasons that a leader's influence on an organization would be negligible including: a) leaders are selected based on a limited scope of behaviours, b) a leader's actions are constrained by the organizational structure, and c) there are few factors that a leader is able to influence that affect an organization's performance. The external situation in which the organization functions may have more influence on the success or failure of a company than the leader. For example, a decrease in the international price of oil will have a direct influence on a hospital's budget if the province in question relies heavily on oil royalty revenues for its global budget.

Many organizations currently operate under a collaborative leadership model whereby responsibility for ideas and innovation depends on shared authority and power, prompting some to consider leaders irrelevant (Hout, 1999). Rather than dismiss leaders as irrelevant, Hackman and Wageman (2007) pose five questions that may reframe leadership relevance: a) under what conditions does leadership matter (p. 43), b) how do leader's personal attributes interact with situational properties to shape outcomes (p. 44), c) are good and poor leadership qualitatively different phenomena (p.45), d) how can leadership models be reframed so they treat all system members as both leaders and followers (p. 45), and e) how can leaders be helped to learn (p. 46)? Leadership development programs that consider these five questions may be more effective in nurturing emotional maturity in leaders, and promoting growth in their followers.

**2.2.3. Culture and leadership.** Although similarities have been reported regarding perceptions of effective and ineffective leadership traits and characteristics

(Lord et al., 1986; Offerman et al., 1994), cultural differences have also been found to affect perceptions of leadership attributes (Ayman & Chemers, 1983; Ling, Chia, & Fang, 2000; Schyns & Schilling, 2011). Ling and colleagues (2000) contend that social and cultural context exerts a substantial influence on leadership that extends to the perceptions of both leaders and followers. As cross-cultural communication and collaboration becomes more common, the question of whether leadership qualities and attributes are universal or culture-bound becomes increasingly important.

In recent years, a large body of work has been completed on cultural leadership theory. The Global Leadership and Organizational Behavior Effectiveness (GLOBE; House et al., 2004) project comprised an investigation that involved assessment of nine culturally relevant attributes of societal and cultural elements and the ways in which these influenced leadership across cultures. House et al. provided evidence to support the existence of universal leadership qualities that contribute to effective leadership such as integrity, motivation, and intelligence. House and colleagues concluded that their findings support a link between societal and organizational culture in that organizations tended to mirror the societies in which they develop.

The importance of culturally-based leadership theory should not be underestimated. Cultural and societal differences are important when considering leadership in Canada today. Cultural diversity is increasing across Canada, with regional differences in the distributions of specific cultural backgrounds. For example, the cultural diversity in Saskatchewan includes First Nations, Canadian settlers, and immigrants. Saskatchewan has the highest per capita First Nations population in Canada with 15.6% of the population identifying as First Nations. The most common sources of immigration

to Saskatchewan are the Philippines, the United Kingdom, and the United States, respectively (Statistics Canada, 2011a). The ability to understand and appreciate cultural diversity is an increasingly important consideration in leadership activity today.

**2.2.4. Analysis of leadership approaches.** Leadership theory literature is abundant, often contradictory, and at times confusing (Yukl, 2013). Explicit and implicit leadership approaches are helpful in parsing out the distinction between the effect a leader has on his or her followers, and the perceptions that followers may hold that affect their opinion of who a leader is and how a leader behaves. Understanding that both leader actions and follower perceptions are important in leadership development is a key element in becoming an effective leader. Leadership theory can support leader development in the HIM profession by providing perspective regarding who is seen as a leader and why, in what context, and how one can develop to *act* like a leader.

Traits and behaviours consistent with effective leadership outcomes are now considered within the situation and are known to change depending on context. Integrative leadership approaches make sense in today's healthcare environment of constant change. Leadership theory supports leadership development by providing insights concerning how the perception of leaders has changed; how power and influence can be positive or negative depending on intent; when, and in what situations differing leadership styles may be effective; and the role of culture vis-à-vis leadership effectiveness.

If a person is aware of the traits and behaviours commonly considered effective in a leader, these attributes can be learned and modeled within their own practice and work setting to promote a perception of themselves as a potential leader. Unfortunately,

individuals who believe that leaders are born and that leadership traits are inherent and unchangeable may be limiting their ability to cultivate these traits and behaviours within themselves. Leadership development plays an important role in supporting an individual's growth as a manager or leader.

**2.2.5. Leadership development.** Leadership development has been characterized as consisting of development, training, and education (Brungardt, 1996). According to Brungardt, leadership development refers to any type of growth to enhance leadership potential. Leadership development has been further described "as a positive change in the effective use of leadership behaviors" (DeRue, Nahrgang, Hollenbeck, & Workman, 2012, p. 998).

Leadership development activities are formal and informal, structured and unstructured, and can occur throughout a person's lifetime (Brungardt, 1996). Leadership education, a component of leadership development, is formal, structured learning that usually occurs or is offered in an academic setting. Leadership training is an activity specific to a role, job, or skill that promotes the ability of the individual to translate the leadership activity to a real-life situation.

Early research investigating leadership development found that trait and character development, such as assertiveness and confidence, is strongly formed in childhood (Gardner, 1990). Positive parental interaction has been associated with young people attempting leadership roles and taking on responsibility (Bass, 1960). School and group sports often provide first opportunities for adolescents to trial leadership outside the family unit and being mentored as an adolescent and young adult may influence future leadership behaviour. The belief that leadership can be taught has gained prominence in

the last decade and the focus on leadership development, education, and training has gained popularity (DeRue et al., 2012).

Experiential learning, where individuals take on challenging roles and tasks, has shown promise in developing leadership skills (Day, 2000; DeRue & Wellman, 2009). The majority of research regarding leadership development assumes that an individual can generalize the lessons learned to improve their overall performance; yet recent findings would suggest that the results might be mitigated by person, experience, and context (DeRue et al., 2012; DeRue & Wellman, 2009). In particular, the quality of the experiential challenge has been found to be important to skills development, and social support from co-workers and supervisors has been found to facilitate an individual's ability to maintain their attention to the task at hand (DeRue & Wellman, 2009). When an experience is found to be too challenging, the ability to learn and retain knowledge is diminished.

**2.2.5.1. Education and leadership.** Although formal education is widely viewed as a key strategy for leadership development, leadership and formal education has not been well studied (Barbuto, Fritz, Matkin, Marx, 2007; Lojpur, Aleksić, Vlahović, Pejić Bach, & Peković, 2014). Most studies that include education level as a leadership variable do so from the perspective of comparing leadership styles or influence tactics and include other demographic factors such as age and gender. The full range leadership model encompasses passive/avoidant, transactional, and transformational leadership behaviours. Passive/avoidant leadership includes management by exception and *laissez faire* leadership. *Laissez-faire* leadership has been described as an absence of leadership. Transactional leadership includes management by exception, contingent rewards, or the

clear delineation of expectations and rewards. Transformational leadership includes compassionate, inspirational, and motivational leadership emphasizing inclusivity, intellectual stimulation, and creativity (Antonakis, Avolio, & Sivasubramaniam, 2003).

Participants in the Barbuto et al. (2007) study included 56 leaders and 234 raters employed in a variety of organizational types in both rural and urban settings throughout the United States. Women leaders comprised 64% percent of the sample group with 62% females in the rater group. Results revealed significant differences in followers' ratings of leadership behaviours based on leader education levels. Leaders who had earned a Master's degree received the highest rating for individualized consideration and there was a pronounced effect on followers' perceptions of transactional and/or transformational behaviours.

Transactional and transformational leadership styles are considered two of the more effective leadership styles within the full range leadership model (Avolio & Bass, 2004). In the Barbuto et al. (2007) leadership study, the lower the level of the leaders' education, the more likely the leadership style was viewed as management by exception. Perceived differences in influence tactics and leadership style by gender diminished as the leaders' educational levels increased. Consistent with the research findings, it can be argued that a lack of advanced education has a negative influence on the ability for HIM professionals to be seen as leaders. Barbuto and colleagues' research provides empirical support for what has become an unspoken truth within organizations, that is, advanced education equates to leadership.

While an association between formal education and leadership has not been well demonstrated, the literature addressing educational levels and management provide a

further avenue for study. Especially notable are studies published in nursing journals that consider advanced education with respect to the roles of the nurse manager and nurse executive. A recent survey of 35 nurse managers (31.5% with a graduate degree) and 93 nursing executives (84% with a graduate degree) revealed disparities in the perception of the need for advanced education between the two groups and between those with graduate degrees and those without (Kleinman, 2003). Of the nurse managers, 11% felt that a graduate degree was not at all important to their role, whereas only 1% of the nurse executives felt that a nurse manager did not need a graduate degree. Kleinman (2003) notes that the difference in perspectives between the two groups may be due to the nurse managers receiving their training while on the job. The nurse managers may also have worked their way up through the ranks and been promoted based on performance and length of service.

Given the growing complexity of the healthcare system, the nurse executives' perspective that advanced education is important for their management and leadership roles appears to include a more accurate picture of their working environment than that of the nurse managers (Ingersoll, 1998). Kleinman's (2003) findings are important for the HIM profession. Both groups work in healthcare, are predominantly women, had a similar entry to practice until the start of the 21st century, and have experienced similar changes to their work due to technological change and the flattening of healthcare's organizational structure.

As Kleinman (2003) states in her conclusion, given the complexity and importance of the roles of nurse manager and nurse executive, a graduate degree should be considered a requirement for management-level nurses starting at the manager level.

Managers in healthcare must be made aware that any requirement for an advanced degree is more than a formality or promotional hurdle. The competencies outlined as important for nurse managers and nurse executives are similar to the competencies required for an HIM manager or director. These competencies include strategic planning, finance, management of information systems, risk management, management theory, human resource management, health law, and organizational behaviour.

Nursing is arguably an appropriate comparison group to consider when investigating HIM leadership development as the transition in nursing career progression is similar to, yet considerably ahead of, HIM career progression. Nursing as a career has evolved profoundly in a relatively short period due to rapid changes in healthcare technology and organizational culture (Kleinman, 2003). Nursing research has focused on advanced practice competencies that require higher levels of skill – skills that are usually acquired through advanced levels of education or specialty certification (Ketefian, Redman, Hanucharurnkul, Masterson, & Neves, 1999). The HIM profession in Canada continues to focus mainly on diploma-level entry to practice competencies given that the majority of HIM programs in Canada are at that level. This focus on diploma entry to practice is changing with baccalaureate and graduate competencies introduced in 2000 and 2012, respectively (CHIMA, 2012). Practice competencies for specific advanced health information certifications are currently under development; however, progress has been slow.

**2.2.5.2. Leadership training.** Leadership training has been evaluated in different settings including the military, university students, and banking (Barling, Weber, & Kelloway, 1996; Kirkpatrick & Locke, 1996; Popper, Landau, & Gluskinos, 1992).

Training individuals in the transformational leadership style appears to have a positive effect on subordinates' organizational commitment, on subordinate perceptions of their leaders, and may have a positive effect on financial performance in a banking setting (Barling et al., 1996). Leadership training programs range from short, intensive one-day sessions provided by for-profit companies such as the Dale Carnegie Institute and the HayGroup, to leadership certificate programs offered through accredited universities such as the University of Regina's Professional Leadership Certificate program. Organizations may offer leadership training to their staff through workplace programs such as Lean, a process improvement methodology, which has been shown to produce long-term changes in behaviour (Marchildon, 2013).

**2.2.6. Leadership styles.** Leadership effectiveness can be evaluated in a number of ways that include goal achievement or performance improvement, followers' attitudes and perceptions, improved performance attributed to the leader as recognized by followers or other assessors, or the extent to which a person's career trajectory is moving upward in an organization. Once again, little agreement exists regarding ideal methods of evaluating leadership effectiveness and many of the concepts are based on the evaluator's conception of leadership, their values, and objectives (DuBrin, 2013; Yukl, 2013). Leadership effectiveness has been shown to be associated with specific leadership styles, such as transformational leadership style, irrespective of culture or situation (Bass & Bass, 2008; House et al., 2004).

Leadership effectiveness may be seen differently by groups within an organization. For example, followers may view a leader as effective based on personality traits that are agreeable to them, whereas senior management may see the leader as

effective based on financial indicators. Three types of variables aimed at assessing leadership effectiveness include: (a) characteristics of the leader, for example, traits or behaviour; (b) characteristics of the follower, for example, skill level or belief in the leader; and (c) characteristics of the situation, for example, healthcare versus business setting or organizational culture (Yukl, 2013).

Although many leadership styles have been identified over the years, the five styles discussed in this section are those addressed by the Multifactor Leadership Questionnaire. These styles are the charismatic, transactional, passive/avoidant, transformational, and the full range model of leadership (Avolio & Bass, 2004). The Multifactor Leadership Questionnaire (MLQ) 5X short and long form assesses leader and follower perceptions of the person being assessed (Avolio & Bass, 2004). The MLQ is based on the full leadership model and is considered easy to understand, to link leadership style to expected outcomes, and to provide a pathway to become a more effective leader (Antonakis et al., 2003; Avolio & Bass, 1991; Avolio & Bass, 2004; Fuller, Patterson, Hester, & Stringer, 1996; Lowe, Kroeck, & Sivasubramaniam, 1996).

**2.2.6.1. Charismatic leadership.** Charismatic leadership style is said to have at least three core components: a) communication of a vision, b) implementation of the vision, and c) communicating in a charismatic manner (Kirkpatrick & Locke, 1996). In terms of leadership, charisma is considered a unique quality of purpose, power, and determination that makes some individuals want to follow a leader (DuBrin, 2013). Charismatic leadership is often referred to as *idealized influence* (Antonakis, 2012). Two types of charismatic leadership theory have evolved – attribution theory and self-concept or behavioural theory (Antonakis, 2012; Yukl, 2013).

Attribution theory posits that followers attribute results and characteristics to a leader, which in turn lead to follower commitment, self-sacrifice, and improved performance (DuBrin, 2013). Self-concept theory indicates that individuals follow a leader because they have faith or a belief that the leader's vision is right, they feel affection for the leader, and they believe that they can contribute to the outcome of the vision or goal (Yukl, 2013). The difference between the two constructs is important in that they differ in how they are performed and how they are measured (Antonakis, 2012). The influence process of charismatic leadership theory is based on the relationship between the leader and followers, the vision and personal identification with the vision or the leader, and internalization of the vision as their own. Charismatic leadership styles have been found to improve follower productivity and enhance job satisfaction (Antonakis, 2012; Kirkpatrick & Locke, 1996).

Charismatic leadership may have positive or negative effects (DuBrin, 2013; Yukl, 2013). Positive effects can include increased productivity, greater job satisfaction for subordinates, and loyalty to an organization's vision and mission rather than to the leader. Negative effects can include follower feelings of belittlement, fear of the consequences of disobeying, and the centralization of authority in the leader resulting in an inability of followers to make decisions. In terms of organizational implications, charismatic leadership can be risky due to the power imbalance between the leader and the followers. Charismatic leadership tends to work well in crises or dynamic and innovative growth; however, the effects of a charismatic leader likely do not remain once he or she has left the organization.

**2.2.6.2. Transactional leadership.** The transactional leadership approach is best suited to structured, traditionally organized entities such as those that set targets for production (Avolio & Bass, 2004). The transactional style was originally characterized as using contingent rewards to motivate employees to reach targets, and by incorporating passive management by exception. Passive management by exception introduces punishment or corrective action to motivate employees when performance targets are not met.

An additional and later component of transactional leadership is described as active management by exception. Active management by exception is the process by which a supervisor actively seeks out mistakes and reinforces procedures and rules to keep employees on task (Yukl, 2013). Bass and Avolio (2004) describe transactional leadership as three distinct types of behaviour: a) a corrective form with the active setting of standards reflected in contingent rewards, b) a passive form where the leader does not act until mistakes are made as reflected in passive management by exception, and c) the active form of management by exception where the focus is on seeking out mistakes.

Burns (1978, in Avolio & Bass, 2004) considered transactional and transformational leadership styles to be on a continuum with transactional leadership at one end and transformational at the other. Contingent reward has been positively correlated to both transactional and transformational leadership. The transactional style of leadership appears to be more a management function with the establishment of follower responsibilities, the provision of a reward when the goals or standards are met, and corrective action when they are not (Eagly, Johannesen-Schmidt, van Engen, 2003).

**2.2.6.3. *Passive/Avoidant leadership.*** Bass and Avolio (2004) report that passive management by exception, although commonly considered part of the transactional leadership style, is often joined with laissez faire leadership to create a passive/avoidant leadership style category. Laissez faire leadership style is considered an absence of leadership or indifference to task, goal, and subordinate (Yukl, 2013). A leader is considered passive/avoidant when he or she either avoids dealing with a problem or only acts after a problem has arisen.

**2.2.6.4. *Transformational leadership.*** Transformational leadership was first introduced by Burns in 1978; however, it is now considered a neo-charismatic style of leadership (Dinh et al., 2014) in that it is inspirational in nature as it moves beyond the focus on the leader. The focus of the transformational leader is the development, motivation, and transformation of his or her followers towards the attainment of organizational goals (DuBrin, 2013). Transformational leadership is well suited to "intelligent" organizations that have blurred or crossed lines of authority and flattened internal hierarchies (Avolio & Bass, 2004) such as the new healthcare structures in Canada found following regionalization.

The transformational style is considered a more effective style of leadership than the transactional style of leadership (Avolio & Bass, 2004; Lowe et al., 1996). In their meta-analytic review of the Multifactor Leadership Questionnaire (MLQ) literature, Lowe et al. (1996) found that transformational leadership resulted in changes to follower behaviour, perceptions, and effort, and was more effective than transactional leadership.

Transformational leadership was commonly thought to be more prevalent and effective in private organizations and at higher level positions of leadership; however,

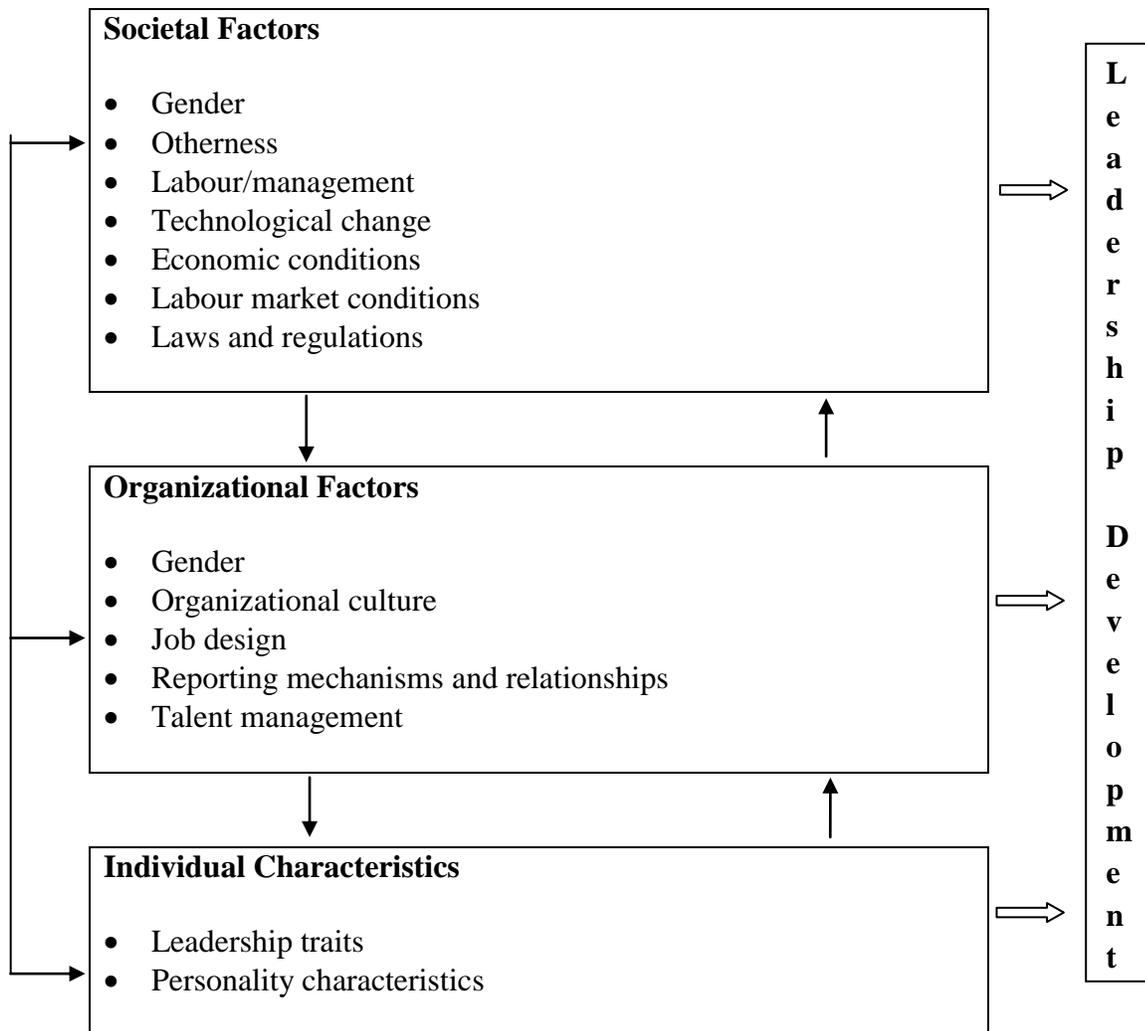
Lowe et al. (1996) found that effectiveness was rated in a similar pattern for public and private organizations, as well as at senior and lower levels of management. These findings are significant in that the results point to the importance of leadership training to support transformational leadership at all levels of an organization, regardless of type or size. The results also support the consideration of assessing leadership style during hiring interviews of lower and middle management employees.

**2.2.6.5. Full range model of leadership.** The full range model of leadership was introduced by Bass in 1985 and expanded upon by Bass and Avolio in the 1990s (Bass, 1985; Bass & Avolio, 1995; Avolio & Bass, 2004). The full range model incorporates transactional, transformational, and the passive/avoidant leadership styles. Some scholars consider the model's name misleading as it excludes important leadership behaviours such as task leadership and some aspects of strategic leadership (Antonakis, 2012; Yukl, 2013). Bass and Avolio (2004) consider that the full range model creates a new framework for understanding higher and lower order effects of leadership style. A higher order effect would be, for example, follower commitment to the organization's vision, whereas a lower order effect may be the desire for an immediate personal reward. The full range model maintains that the style of leadership may change depending on situation and context, and that an effective leader will be able to modify their leadership style to suit the follower and organizational needs.

### **2.3. Factors Influencing HIM Leadership Development in Canada**

The factors influencing HIM leadership development in Canada are presented in a conceptual model for purposes of clarity, relevance, and structure (Figure 1. Model of the Factors Influencing HIM Leadership Development). The model was created for the purposes of this research and does not include all factors influencing leadership development; however, it is meant to include those factors that are most critical to my research.

Figure 1. Model of Factors Influencing HIM Leadership Development\*.



**2.3.1. Societal factors influencing leadership.** Beliefs held by members of society arguably influence the extent to which individuals or groups are perceived as leaders. Gender, disability, and ethnicity issues, to name but a few, have long represented factors affecting leadership advancement in North America. Economic conditions, technological change, regulations, and labour unions influence leadership development.

Contemporary health settings are beset with ever-changing technologies, such as implementation of the electronic health record; with policy innovations, such as activity-based funding; and by health human resource and financial issues, such as fiscal constraint. The sheer complexity of modern health systems together with the inherent instabilities of government funding requires both managers and leaders. While leaders may generally agree that the *content* skills of leadership, such as communication and decision-making abilities, have not fundamentally changed for centuries, the *context* in which these activities take place has changed in areas that include global economic uncertainty and ever-increasing electronic connectivity (Kouzes & Posner, 2002).

**2.3.1.1. Gender.** A significant body of literature suggests that gendered social practices are the primary limiting factor in the ability of women to move into leadership and executive positions across organizational settings (Brumberg & Tomes, 1982; Catalyst, 2013; Eagly, Karau, & Makhijani, 1995; Eagly, Makhijani, & Klonsky, 1992; Gatrell & Swan, 2008; Grimm & Stern, 1974; McDonagh, Bobrowski, Hoss, Paris, & Schulte, 2014; Ross-Smith & Chesterman, 2009; Trinidad & Normore, 2005; Warner, 2011). Gender bias is considered present when one sex, or the stereotypical behaviours and characteristics of one sex, are favoured over another (Warren, 2009). The leadership

performance of women is judged against a social norm that favours men, and senior and executive positions continue to be defined using male values (McDonagh et al., 2014; Ross-Smith & Chesterman, 2009; Stead, 2013). Manifestations of these gender-related issues include a reluctance among women to apply for promotions or executive positions, a bias against women during job selection processes, and a consequent deficit of women assuming leadership and senior executive roles.

Women's struggles to ascend the corporate leadership ladder have been variously characterized as hitting a glass ceiling or being contained within a glass box (Johns, 2013; Ryan & Haslam, 2005; Sanchez-Hucles & Davis, 2010). More recently, Eagly and Carli (2007) have characterized the struggle for women to reach positions of power and leadership as traveling through a labyrinth. Although it is now possible for women to break through the so-called glass ceiling, there often follows an obstacle-ridden path to leadership roles. Women must navigate an obstacle course to attain leadership positions whereas men travel on a clear and open road in the company of influential others.

**2.3.1.2. Otherness.** The focus of workplace legislation in Canada dealing with issues of discrimination based on class, gender, race, disability, age, or sexual orientation is founded on the concepts of equal pay for equal work and employment equity (Sawchuk, 2007). The concept of equal pay for equal work is complex and problematic in that presumptions about what constitutes equal work are often based on social class considerations that are so pervasive that they are taken for granted. The aspect of employment equity brings human rights issues to the forefront and personal characteristics such as age, disability, and sexual orientation become important factors for consideration.

Organizational behaviour that supports increased equity and respect for human rights has been shown to be related to higher job satisfaction, greater organizational commitment by employees, more positive evaluations of management, and decreased levels of employee turnover (Sawchuk, 2007). Conflict and tension in organizations related to social injustice or inequity can be understood within a horizontal or vertical context. Sawchuk (2007) describes horizontal tensions as those that arise from individual differences and interaction within the group or organization, for example, the ongoing negotiation around scarce or limited resources and workplace interdependency. He describes vertical tensions as those between employer and employee that are unique to capitalism and the accumulation of capital, power, and control. When viewed from the horizontal and vertical context, leadership development can be described as a form of *symbolic violence*, which affirms and legitimizes the reproductive power of those in dominant positions (Tomlinson, O'Reilly, & Wallace, 2013). In other words, by convincing leaders that acting or leading in a certain way is to their benefit within an organization, the dominant power of the white, middle-to-upper class male is reinforced and confirmed.

While non-discriminatory and pay equity practice regarding women, visible minorities, and the workplace is now entrenched in law in North America, the law has yet to equate with practice. Despite an increase in the published literature concerning gender, visible minorities, disability and leadership, discrimination continues to be pervasive (Gatrell & Swan, 2008). The *glass ceiling* still exists, not to mention the *concrete ceiling* for women of colour. While white women can see the top but not reach it, women of colour cannot even see the top. First Nation's men and women in leadership

are so uncommon that they are rarely mentioned in the leadership literature. It is often complicated to differentiate the reasons for discrimination against people of colour as the individual effects of gender; ethnicity, race, sexual identity, and disability are difficult to uncover (Sanchez-Hucles & Davis, 2010).

**2.3.1.3. Labour/Management.** Given the growing pressure on organizations brought about by economic, technological, and social change, the effect of these changes in unionized settings is an important consideration in leadership development. Collective bargaining focuses not only on salary and benefits but can lay out the foundation for employee engagement. Prescriptive contracts can have a detrimental effect on employee engagement in the workplace while progressive contracts that invite participation and research may hold the key to supportive organizational redesign (Kochan & Dyer, 1976). Although union/management relationships are based on an adversarial system, Kochan and Dyer (1976) suggest that union leadership can be an effective partner with management in the creation and implementation of quality of work life initiatives.

In the healthcare setting across Canada, affiliations are variable in terms of the type of union into which HIM professionals are allocated. For example, in British Columbia the unions tend to bargain as a provincial unit and an HIM professional job role in an acute care facility in BC may be assigned to the Hospital Employees Union (Hospital Employees Union, n.d.) that represents clerical, housekeeping, and other supportive service providers or the Health Sciences Association of BC (Health Sciences Association of BC, n.d.) that represents social service and healthcare professionals. In other provinces in Canada such as Ontario, HIM professionals may work in unionized or non-unionized hospitals, which can result in HIM professionals in similar roles earning

different wages and benefits and having greater flexibility in terms of higher profile committee work, sometimes within city blocks of each other.

Managing and leading are usually defined as distinct and separate processes although the two can be intrinsically linked (Yukl, 2013). While managers may or may not manage people – as in cases where they manage services or programs – leaders will always have followers. Whether or not a manager directs employees, the success of the manager may be linked to their capability as a leader (Yukl, 2010). The need for managers is said to increase in larger, more complex organizations, whereas the need for leaders increases as the environment becomes increasingly dynamic and unstable (Yukl, 2010). Both of these features are characteristic of today's healthcare environments. The hiring of supervisors and managers in unionized and some non-unionized settings was traditionally based on seniority and a technical or clinical skill set rather than management experience. These hiring practices often result in managers who are ill prepared to complete their administrative responsibilities and to participate in mentoring, succession planning, and supportive leadership (Kleinman, 2003).

**2.3.1.4. Technological change.** Technological change has an ongoing and enduring influence on society; leading to increased productivity, workplace innovation, and increased access to computer technology to support healthcare. Technological advances can lead to changes in human resource requirements, such as downsizing and re-skilling of the workforce, and economic growth (Landes, 2003). Technological advances have an influence on leadership development through the requirement of skills such as change management, project management, and risk management.

**2.3.1.5. Economic conditions.** The shifting economic conditions across the country have a profound effect on leadership opportunities across all professions. Regionalization of healthcare in Canada was driven by the fiscal pressures of the 1990s and resulted in a reorganization of the provision of healthcare services and a flattening of organizational structures (Naylor, 1999). The downsizing of acute care hospitals in terms of numbers of facilities and number of beds, increasing technological change, and the strengthening of services in the community care sector has shifted the healthcare work environment. In the context of health settings in Canada, the move to regionalization has resulted in a change to the size, shape, and culture of organizations all of which have a significant influence on leadership (House & Aditya, 1997).

With cost containment and downsizing as key drivers behind the regionalization process, the healthcare environment has become a more complicated and complex workplace setting. The roles of supervisor, manager, and executive leader have undergone substantial change and pressure that requires an increasing competency in business intelligence, knowledge, critical thinking and problem solving skills, as well as leadership skills (Caviart Group, 2015; Kleinman, 2003). Higher-level decisions are now made at a lower organizational level; yet the education and training of managers may not have kept pace with their responsibilities. During times of economic recession and market downturns, support for continuing education and training is adversely affected. Not only are education budgets often downsized for tuition/registration, travel, and accommodations; but the inability to replace employees during education leave often leads to an increased workload on return to work. These factors can affect an employee's

desire to participate in continuing professional education, in particular education and training that is seen as benefiting the employer more than the employee.

**2.3.1.6. Labour market conditions.** Labour market conditions are closely linked with the economy and technological change. Two recent HI and HIM human resource sector studies have identified a gap in the skill set and human resource requirements for senior HIM positions across Canada (O'Grady, 2009; Prism Economics & Analysis, 2014). Due to the rapid technological change occurring in healthcare starting in the 1980s, the labour market conditions for the HIM profession have changed. As healthcare organizations adapt to change, new roles are created along with new educational and skill requirements. The number of HIM professionals graduating and certifying has not kept pace with available positions. With the expanding scope of HIM roles, there is a need to increase the number of certified HIM professionals to meet the demands of the workforce (O'Grady, 2009; Prism Economics & Analysis, 2014). The need for senior level HIM professionals may drive employers to hire individuals with leadership, analytical, or business credentials in place of certified HIM professionals, as they may see the HIM skills gap as easier to fill than the more advanced analytic, business, or leadership skill set that the individuals have obtained.

The Human Resource Skills Development Canada (HRSDC) National Occupation Classification (NOC) is the Canadian career classification system used by government, researchers, and career counselors as a means to explain the character of different work types and to analyze labour market trends (HRSDC, 2013). The major group that HIM is assigned to is *Administrative and financial supervisors and administrative occupations*, with the minor group of *Court reporters, transcriptionists,*

*records management technicians and statistical officers.* The HIM NOC grouping does not accurately reflect the complexity of the profession, the different levels of HIM education, and currently limits the visibility of the profession to those interested in a clerical type of career. To increase enrollment in HIM programs and support the current labour market trends, the HIM profession must become a career of choice. In order to become a career of choice, individuals must be aware of the many career choices and career paths available to them in the HIM field.

**2.3.1.7. Laws and regulations.** In a democracy, legislation is developed by governments to regulate behaviour based on the collective consciousness of the time (Durkheim, 1893). In healthcare, laws and regulations have changed to reflect society's sensibilities. Laws and regulations that affect the HIM profession include those around access, use, and disclosure of personal health information, particularly in relation to electronic health records; healthcare funding and sustainability; hospital and health facility regulations; and the regulation of health professionals. Personal interaction with a patient/client through assessment and/or treatment is usually a requirement of a profession before it will be considered for status as a Regulated Health Profession. The HIM profession does not fit within this broad definition. The introduction of laws, regulations, and acts provides an opportunity for leadership through new opportunities that may arise during implementation. To illustrate, an example of legislation that produced new leadership opportunities for the HIM profession is provided.

The Access to Information Act and the Privacy Act of 1982 were important pieces of legislation that outlined allowable access to and protection of personal health information in governmental organizations. The Personal Information Protection and

Electronic Documents Act (PIPEDA), which passed in 2000, extended the protection of personal information to the private sector and, shortly thereafter, provincial governments enacted legislation to outline the protection, access, and disclosure allowed for personal health information contained in public health facilities. Leadership opportunities that arose from these pieces of legislation included the creation of new roles, such as Chief Privacy Officer, and the responsibility for the development and implementation of health organizations' privacy and security policies and processes.

**2.3.2. Organizational factors influencing leadership.** The ability of an individual to become a leader within an organizational structure can be affected by a number of factors. Reporting relationships, the presence or absence of a formal mentoring program, and union/management contracts influence how an individual works and communicates within an organization. The workplace environment or culture can support or deter the motivation of individuals to move up the corporate ladder. Although altering an organization's culture is not easy, once awareness of the issues exist then progressive steps can be taken.

HIM professionals are predominantly women who possess limited education and are thus situated in a demographic commonly discriminated against, in general. Awareness by HIM professionals of the limiting factors in an organization may provide the professionals with the information needed to start to overcome these obstacles. Changes to the culture and practices at all levels of an organization should positively influence the ability of HIM professionals to gain positions of senior leadership in Canada.

**2.3.2.1. Organizational Culture.** Gendered social practices have been highlighted as the primary factor in the ability of women to move into leadership and executive positions. Research has shown that changes to gendered practices made at the local organizational level may be easier to accomplish than at the societal level (House et al., 2004). Information derived from successful initiatives can provide incentive and guidance for organizations to improve their current leadership development practices. Given that women continue to be under-represented in senior leadership positions across the employment spectrum and in healthcare leadership in particular, awareness of entrenched gendered practices at the organizational level is an important first step in moving forward with change.

Gender-based expectations that specify the ways in which people are to behave carry over into the work setting (Eagly et al., 1992). The construct of gender includes the presence of feminine or masculine characteristics. The leadership literature continues to refer to behaviour as *masculine* or *feminine* when describing the different leadership styles (Gerzema & D'Antonio, 2013; Stead, 2013; Trinidad & Normore, 2005). The characterization of leaders as typically male has a negative influence on women in the workplace, and when these notions become axiomatic, a profound barrier to promotion and opportunity for advancement is erected. Males tend to be assessed more favourably than females in terms of both leader competence and subordinates' satisfaction with the leader. During hiring procedures, women are found to be strongly discriminated against in that not only are they devalued in terms of leadership potential, they appear not even to be considered for such positions (Eagly et al., 1992).

Eagly and colleagues (1992) observed that the situation for women is not improving, despite increases in workplace equality. The articles included in their meta-analytic review supported a stronger trend for male leaders to be valued more highly over female leaders. When the male position of power is threatened, men were found to rate women more harshly as leaders. These findings question whether women have the ability to rise to higher levels of leadership or whether such opportunities are being eroded. In a later meta-analysis, Eagly, Karau, and Makhijani (1995) found that women were rated equally effective as men in terms of leadership; however, these ratings were attributable to leadership roles congruent with their gender. Men were rated higher in masculine roles, for example, military leadership, and women were rated higher in feminine roles such as primary school and healthcare administrative roles.

A more recent meta-analysis of gender and leadership styles found that women tended to be more effective as leaders (van Engen & Willemsen, 2004). Despite this finding, women had to be *better* leaders to be hired or promoted and to retain their positions. Results supported that women leaders performed extremely well in styles related to effectiveness. This finding challenges the rationalization that women are not hired into positions of leadership and power because they lack appropriate leadership skills. Unfortunately, these results have not led to a corresponding increase in the number of women in the top jobs.

Some researchers argue that gender differences in the workplace are linked to differences in male and female perspectives concerning life goals, the importance of the competitive edge, and the importance of family and career (Hakim, 2006). Evidence suggests that widespread stereotypes regarding gender differences link closely to research

findings and are therefore based in reality (Eagly, 1995; Hakim 2006). Research regarding gendered stereotypes can be beneficial to furthering the agenda of gender equality in pay and opportunity; however, there is a danger that it can be used to reinforce the stereotypes that negatively influence women's ability to access senior leadership positions (Eagly, 1995). Will this particular research focus reinforce the belief that the lack of progress in leadership is the women's fault or, in fact, their desire?

Liff and Ward (2001) argue that women are rejecting the organization of leadership work rather than the position itself. They suggest that organizational culture and structure make it difficult for women to put themselves forward as credible candidates. The informal practices and insidious messages, for example, the belief that women have to be *superwomen* to be seen as legitimate competition, lead women to reject the pursuit of more senior positions (Liff & Ward, 2001). Women also experience a diminished desire to attain top positions as they age due to the perceived lack of opportunity (Warner, 2011). While women continue to support other women as they attempt to move up the organizational hierarchy, fewer women are putting themselves forward as candidates including in healthcare organizations (McDonagh et al., 2014).

*Women in healthcare leadership.* A substantial body of research supports the fact of gender inequality and the failure of women to advance in health-related leadership roles (American College of Healthcare Executives [ACHE], 2012; Lanz, 2008; McDonagh et al., 2014; Ragins et al., 1998; Ryan & Haslam, 2005). Despite general agreement that senior management and executive leadership positions in healthcare organizations should reflect the cultural, ethnic, and gender diversity found in the general population, women remain disproportionately unrepresented in these roles. When

women are hired into these positions, they receive significantly lower salaries than men do (ACHE, 2012; Catalyst, 2013; Lanz, 2008). Women in leadership roles tend to hold positions at the lower levels of an organization (Eagly et al., 2003). Further, in female dominated professions such as those found in healthcare, men advance in leadership disproportionately to women (ACHE, 2012; Budig, 2002; Grimm & Stern, 1974, Williams, 1992).

The American College of Healthcare Executives (ACHE; 2006) comparative study of career attainment for men and women in healthcare executive positions revealed some promising changes from previous survey results from 1990 through 2000. Questionnaires for the 2006 study were distributed to 1,597 US healthcare executive affiliates with a response rate of 837 or 52%. While disparity remained between men and women in attaining CEO positions, the results indicated that women achieved CEO positions at 63% of the male rate, up from 40% reported in a similar 1990 ACHE study. In a 2012 survey; however, women achieved the role of CEO at the rate of 50% compared to men, down 13% from 2006. The 2012 survey was distributed to 4,330 US healthcare executives with a response rate of 1,588 or 37%. In both the 2006 and 2012 surveys, women were found to have majored in healthcare management training at the same rate as men did, up from the previous surveys, and women were more likely than men were to be experienced clinicians who moved into executive positions.

In the US, women continue to aspire to the top healthcare executive position of CEO at a rate of 37% compared to 66% of men (ACHE, 2012). This finding is intriguing in that it suggests that women may not aspire to C-suite positions to the same degree as their male counterparts do. Aspiring to be the CEO is admittedly not for everyone;

however, the reported differences may be reflective of the ways in which potential applicants view the attractiveness of the job as well as their own competitiveness.

Research exploring the reasons women do not aspire to senior leadership positions have described organizational culture, structure, and practices as influencing their views of top jobs (Carter & Silva, 2010; Liff & Ward, 2004; Olsson & Walker, 2004). It is not so much that women do not aspire to leadership as that they are left feeling they are not yet ready for these positions; they lose confidence that they will ever reach a senior position, or that they simply give up their aspiration for leadership positions (Coffman & Neuenfeldt, 2014). Given the forces at play, one wonders if most women will ever believe that they are ready for senior leadership positions. It appears clear that women continue to be excluded from networks and mentorships and they are not seen as plausible candidates due to male-dominant organizational cultures. While healthcare organizations tend to have more women than other business environments, the majority of the top leadership spots are still held by men.

**2.3.2.2. Job design.** Job design is an important factor in leadership development in an organization for a variety of reasons. The design of a job has a direct effect on job enrichment and goal setting (Whittington, Goodwin, & Murray, 2004). An enriched job consists of five core task dimensions as outlined by Hackman and Oldman (1976). Hackman and Oldman's task dimensions are skill variety, task identity, task significance, autonomy, and feedback. The first three dimensions relate to the meaningfulness of the work as perceived by the employee. Autonomy is how responsible the employee feels for the work result or outcome. Feedback is the process through which the employee is aware of or provided with knowledge of the actual results of the work activities. The

combination of meaningful work and feelings of responsibility and autonomy can result in internal motivation, better work performance, job satisfaction, and job commitment (Whittington et al., 2004). A rewarding job may have a mitigating effect on worker commitment to an organization in the absence of the daily influence of a transformational leader.

Performance reviews are a key feature of a strong employee feedback mechanism. In order to conduct a fair and equitable performance evaluation, often linked to promotional opportunities, job descriptions must be in place and must be accurate. Job descriptions may become outdated particularly in times of rapid technological and organizational change, and they may not accurately reflect the reality of a person's work. Both under- and over-employment can have a negative influence on performance and work satisfaction and result in a skewed view of an employee's real potential (Judge, Thoresen, Bono, & Patton, 2001).

**2.3.2.3. Reporting mechanisms and relationships.** Research has shown that the behaviour of one's supervisor in relation to promotion and organizational success is an important factor in the consideration of a subordinate's career progression (Katz & Tushman, 1983). Gate-keeping supervisors in particular, those with strong departmental and internal/external communications networks, were central to the ability of new professionals to build a network and be promoted. Katz and Tushman believe that career decisions, who is promoted and when, are linked to the ability to tap into formal and informal organizational lines of communication. In an organization where a department, service, or individual has a reporting relationship to a leader where the role is not well understood, communication and promotion opportunities may be jeopardized.

*Informal communication channels.* Unofficial communication channels and informal networks are those not structured or recognized by an organization; rather, they are based on the social relationships within the organization (Kandelousi, Ali, & Abdollahi, 2010). Access to unofficial communication channels such as informal mentoring relationships, informal business lunches or dinners, and extra-curricular activities such as golf or tennis, are important avenues to gain career opportunities and advancement (Combs, 2003). Both men and women generally seek out informal communication relationships; however, men's and women's ability to access the type of mentoring relationships necessary to move ahead in senior healthcare positions are not equal (Ibarra, Carter, & Silva, 2010; Neubert & Palmer, 2004). Men's informal networks are more successful in providing help with career advancement as men in positions of power tend to focus on developmental opportunities for junior men rather than women (Fitzsimmons, Callan, & Paulsen, 2014; Ibarra et al., 2010). Cross-gender socialization activities that allow for increased informal communication between colleagues can improve leadership attributes and mutual understanding of both men's and women's contributions.

**2.3.2.4. Talent management.** Performance reviews, when done properly, are an important element in leadership development, career progression, and a component of talent management. Yet performance reviews have been criticized due to inconsistency in provision, subjectiveness of the review, and a lack of linkage to long term personal and career goals (Wilson & Western, 2000). Succession planning, an important aspect of talent management, is not often completed in general in industry, and is completed even less frequently in healthcare settings (Warren, 2009). Senior leaders are the most likely

to receive and benefit from multi-rater performance reviews, executive training programs, succession planning, and high potential leadership initiatives. As healthcare organizations do not usually provide talent management programs beyond senior leadership, they risk overlooking and limiting potential talent.

*Mentorship.* Mentoring is the process whereby, with intent and involvement, a mentor contributes to a mentee's professional development and career advancement (Mertz, 2004). Mentoring has two main functions that include career functions, such as sponsorship and exposure to influential people that promotes career advancement, and psychosocial functions, such as counseling and acceptance that promotes a sense of competence (Kram, 1983). Mentoring has been credited with helping many highly successful people to attain their goals and advance their careers. Mentoring supports learning, guides new and mid-level professionals, and fosters career advancement (Chan, 2000). Mentoring has been consistently attributed to career development and job satisfaction, salary and benefits attainment, and promotion (Carter & Silva, 2010; Dreher & Cox, 1996; Ehrich, Hansford, & Tennent, 2004). In fact, it has been bluntly suggested that one cannot be successful without a mentor (Mertz, 2004).

The two main types of mentorship relationships have been described as *formal* or *informal* (Dinolfo & Nugent, 2010). Formal mentorship relationships arise out of structured, managed, and sanctioned organizational programs whereby a mentor may be assigned a mentee by a third party (Ehrich et al., 2004). Informal mentorships are spontaneous relationships that arise through the self-identification and self-selection of the mentor and/or mentee based on similarities in goals, attitudes, or personalities (Chao, Walz, & Gardner, 1992; Ragins, Cotton, & Miller, 2000). Research comparing

informally mentored individuals to non-mentored individuals has shown consistent results whereby more positive job attitudes and greater career satisfaction, commitment, salary, and mobility are reported by the mentored individual (Chao et al., 1992; Ragins et al., 2000).

Conflicting results have been found when comparing formal and informal mentorship relationships (Allen & Eby, 2003; Allen, Eby, & Lentz, 2006; Chao et al., 1992; Ragins et al., 2000); however, formal mentorship programs have been found to be successful in relation to promotions. In the Ibarra and colleagues (2010) study of 4,143 MBA graduates, women who found mentors through formal workplace mentorship programs were more successful in earning promotions by a ratio of almost three to two compared to those who were informally mentored. In the same study, men still outperformed women in terms of promotions by a further three to two ratio (Ibarra et al., 2010). One of the reasons why women are not as successful as men in earning promotions through mentoring programs appears to be that men have mentors with more organizational power. The more senior the mentor is, the faster the career advancement happens for the mentee.

Mentoring is not the only relationship that provides psychosocial support and career enhancement. Peer relationships have been shown to provide developmental support in both career and personal growth throughout the different stages of an individual's career path (Kram & Isabella, 1985). Kram and Isabella found that supportive relationships with a boss, peer, or subordinate could provide career support through a variety of methods including information sharing, trust and personal disclosure,

as well as strong friendships. Mentoring relationships are important in moving up the corporate ladder, while peer relationships are important throughout one's career.

**2.3.3. Individual characteristics affecting leadership.** Individual characteristics affecting leadership can be grouped into two distinct categories - leadership traits and personality characteristics. As mentioned earlier, a trait is a relatively stable personal attribute that affects or influences behaviour across situations and contexts (APA, 2015). Personality is generally understood to be a more or less enduring pattern of behaviour across time and situations (APA, 2015). A personality characteristic is a subset of the personality. The personality characteristic of a leader is the pattern of behaviour attributed to the leader by followers and others to support a leadership style.

**2.3.3.1. Leadership traits.** Leadership traits are considered important in leadership theory because they make explicit the implicit leadership theory used by researchers, they are commonly used to describe our experience of ourselves and others, and they have been consistently linked to leader emergence and leader effectiveness (Bono & Judge, 2004; McCrae & John, 1992). Leadership traits are assessed and measured using various hierarchical models and inventories, such as the Five-Factor Model of Personality (Bono & Judge, 2004; Judge & Bono, 2000) and the HEXACO Personality Inventory (Ashton & Lee, 2009; Lee & Ashton, 2004).

The *Big Five* traits are surgency or extroversion; conscientiousness; agreeableness; adjustment or emotionality; and intellectance or openness to experience (Ashton et al., 2004; Yukl, 2013). Research by Aston and colleagues found that six, not five, factors of personality consistently emerged across different languages. Honesty, sincerity, and fairness consistently arose as the fifth or sixth largest factor in numerous

studies. *Honesty/humility* is assessed on the HEXACO scale but it is not considered one of the *Big Five* traits. Since I used the HEXACO-60 personality scale as one of my quantitative assessment tools, the six HEXACO leadership personality traits are described below.

*Honesty/humility.* Honesty/humility, which includes authenticity, fairness, and trustworthiness, is displayed when a leader shares accolades or acknowledgement of a job well done with others from the team. Humility is the ability to be selfless and to put others forward for commendations. By displaying honesty and humility, a leader is considered trustworthy, which in turn can lead to follower commitment to the leader's vision and support for the leader's ability to influence followers (Ashton et al., 2004; Ashton & Lee, 2009; DuBrin, 2013; Zaccaro, Kemp, & Bader, 2003).

Emotional stability and maturity equates to *Emotionality* and includes having an internal locus of control. Leaders with emotional stability believe that they are able to influence their environment by their actions rather than events happening by chance or by outside influences (Yukl, 2013). Positive emotionality includes the ability to self evaluate, to be assertive without being aggressive, and to take responsibility for their own actions and that of their team. Emotionality is variously considered a trait, a behaviour, and an interpersonal skill. Emotional stability is important in a leader as it promotes consistency in behaviour, which allows followers to feel safe during times of change and upheaval (DuBrin, 2013; Yukl, 2013).

*Extraversion.* Extraversion is associated with sociability and assertiveness. Leaders who are extraverted are more comfortable in social situations, in expressing their opinion, and are often considered friendly and likeable. People who are introverted are

considered more reflective and better listeners (Whitbourne, 2011). While it is commonly considered that people who are extraverts will make better leaders due to their ability to be outspoken and garner attention, introverts should also be considered as leaders given their ability to listen closely and consider the opinions of others (DuBrin, 2013; Whitbourne, 2011; Yukl, 2013). The leadership qualities associated with extraversion can be learned, and so while people may be inherently extraverted or introverted, introverts can adopt the positive traits of an extravert. Research has shown that extraverted leadership works well in situations where employees are not proactive, but can be counterproductive in environments where the employees want to contribute ideas (Grant, Gino, & Hofman, 2011).

*Agreeableness.* The ability for a leader to be warm, gentle, trusting and trustworthy is linked to the trait of *Agreeableness* (Judge & Bono, 2000). Agreeableness is important in leadership in situations requiring consensus and the ability to work together with others (Daft, 2015). Successful leaders must be seen as approachable, friendly, and non-arrogant in order to get the best out of their followers.

*Conscientiousness.* Conscientiousness is when a leader is described as dependable, responsible, and achievement oriented (Daft, 2015; Yukl, 2013). Conscientious leaders tend to focus on a smaller number of goals, which are purposefully pursued, rather than becoming easily distracted and moving onto new pursuits. Feelings of guilt have been positively linked to a leader's sense of responsibility to others and to their organizational goal. Conscientiousness is about attaining superior performance by oneself to accomplish goals, and leading others by example.

*Openness to Experience.* A leaders' level of *Openness to Experience* is considered consistent with curiosity, creativity, open mindedness, and the ability to seek out new experiences (Daft, 2015). Openness to experience is linked to a leader's ability to pursue and promote change, which is essential in the 21st century environment of continuous technological change and limited resources. Openness to Experience has been positively linked with intelligence, the only Big Five trait to do so (Judge & Bono, 2000).

*Task related traits.* Task related traits - such as emotional intelligence, social intelligence, and learning ability - are considered managerial competencies that combine skill and trait (Yukl, 2013). Emotional intelligence is the ability to assess verbal and non-verbal communication, translate the communication quickly, and respond with behaviour appropriate for the situation rather than react to a situation with emotion. Social intelligence is closely related to emotional intelligence; however, it is considered the ability to assess the functional leadership requirements necessary for a given situation using social perceptiveness and behavioural flexibility. Learning ability is the capacity to learn from mistakes, to change beliefs when new or better information is available, and to adapt to changes in the environment.

**2.3.3.2. Personality characteristics.** Specific personality characteristics such as motivation, integrity, confidence, and ambition have been linked to effective leadership (DuBrin, 2013; Yukl, 2013). When viewed through the lens of leadership ability, the personal characteristics of the leader and follower are important factors in determining who will lead and how they will lead, and who will follow and how they will follow. Personality characteristics have more direct effects on an individual's behaviour than

traits by acting as mediating variables, although they are often dependent on context or situation such as job attainment, job rank, and wealth (Judge & Kammeyer-Mueller, 2012).

*Motivation.* Motivation is an important and common aspect of different leadership theories including transactional theory, contingency theories such as path-goal and leadership substitute theory, expectancy theory, and transformational theory (DuBrin, 2013; Yukl, 2013). Leaders can motivate individuals in a dyadic relationship through worker engagement such as one-on-one communication, mentoring, and employee recognition. A group dynamic can be positively affected and motivated towards shared goal completion when the leader has emotional stability and good problem solving skills, particularly during times of stress and economic instability (DuBrin, 2013).

Engagement in meaningful work can be a strong motivator for individuals and groups, particularly when people believe they can have an influence on society, their customers, the work team, and on themselves (Cranston & Keller, 2013). The leader's role in motivating followers in these four key areas is in identifying how the individual or team's contribution affects specific outcomes related to each area. An example of how an HIM leader could motivate coding professionals through their belief that they can influence society and internal customers would be for the leader to produce a scenario. The results of the coded data during that scenario would provide evidence to support a change in delivery of services and to convey the effects the changes had on the patient group within the population. An example for the motivation of a work team would be to focus on improvements in turnaround time and coding consistency rates for the group.

Provision of career pathways and advancement options within the organization may provide strong motivation for individuals who are highly skilled HIM coders.

Motivation does not always have a positive outcome. Motivation based on a specific reward, such as in transactional leadership theory, may not always be effective. If the ability to provide the reward is removed, such as in times of fiscal restraint, the employees may lose their motivation to produce at the required or projected rate (DuBrin, 2013; Yukl, 2013). When a leader's key motivation is personal gain, the ability to influence followers will be limited unless the leader can influence follower commitment to the goal (Clements & Washburn, 1999).

*Integrity.* According to Yukl (2013), integrity means that a leader behaves ethically and honestly in a manner consistent with the values that they advocate. To gain the trust of followers, a leader must act in a consistent and trustworthy manner. The extent to which a leader is seen as truthful is considered a measure of that leader's integrity. Leaders who are considered deceptive will have a limited ability to influence followers and others, as they cannot be trusted. If a leader is seen to break promises or agreements, they will lose credibility. A leader who is seen as manipulative or coercive may lose follower trust. A leader must act in a manner consistent with their words, vision, and values, in order to be seen as acting with integrity. Finally, a leader with integrity will take responsibility for their actions and decisions, particularly during times of controversy and failure (Yukl, 2013).

Integrity plays a key role in such leadership styles as ethical and authentic leadership. As a leadership characteristic, personal integrity is considered an essential

element for effective leadership across cultures (Yukl, 2013). Integrity is closely linked to the leadership trait of honesty.

*Confidence.* To advance in one's career, a person must possess the self-confidence to put their ideas forward and to attempt new and challenging projects. Leaders who are self-confident are more likely to set challenging goals for themselves, expect results for themselves and their followers, are able to make decisions in times of crisis, and may increase the commitment of followers through their optimism and persistence in carrying out their work (Yukl, 2013). Participative leadership styles such as transformational and charismatic leadership require a leader with self-confidence to engage followers, solicit ideas, and gain commitment and trust. Self-confidence allows leaders and followers to be proactive rather than reactive to change. Leaders who are not self-confident may delay dealing with complex challenges, may not participate at the decision-making table or articulate their ideas, and may not take responsibility for their actions.

Confidence influences one's decision regarding whether to apply for management or leadership positions. Desvaux, Devillard-Hoellinger, and Meaney (2008) described a Hewlett-Packard internal report that revealed women would only apply for a job if they felt they met 100% of the job requirements, whereas men would apply if they felt they met 60% of the requirements (as cited in Sandberg, 2013). A lack of confidence may inhibit women from reaching leadership positions simply by virtue of the fact that they do not apply for the positions (Coffman & Neuenfeldt, 2014). When having informal discussions regarding leadership positions with HIM professionals who are concerned with the trend to hire non-HIM professionals into HIM-related Director roles, the

majority of the individuals that I spoke with had not applied for the role themselves, as they felt unqualified despite their years of experience.

An over-abundance of confidence can also be detrimental. Over-confidence in a leader may be seen as arrogance by followers. If a leader is emotionally immature, he/she may not be responsive to the ideas of others and may ignore opinions that contradict the leader's viewpoint or position (Yukl, 2013). A leader who is seen as over-confident or arrogant will have difficulty in gaining cooperation and buy-in from those who are not directly under their authority.

*Ambition.* Judge and Kammeyer-Mueller (2012) define ambition as the continuous desire to improve oneself, and to strive for success and accomplishment. The focus of ambition is the journey rather than the destination. Ambition is different from aspiration in that aspiration is directed at a specific goal, whereas ambition is a long-term and sometimes life commitment. A leader's goals may change over time and upon goal attainment; however, the reason or ambition behind the striving remains consistent. Ambition is linked to the leadership trait of conscientiousness; however, it differs slightly but importantly in that conscientiousness is tied to the meeting of a goal for the specific purpose of goal achievement whereas ambition links achievement with success in attainment, wealth, or job rank. With conscientiousness, goal achievement is tied to performance while ambition is the desire to attain the goal regardless of performance.

Ambition, although often considered a negative characteristic, has been linked to a higher level of achievement in education and career leading to life satisfaction and longevity (Judge & Kammeyer-Mueller, 2012). Ambition has been shown to act as a moderator between general mental stability and success and it is linked to a realistic view

of one's ability to be successful. Individuals tend to focus more time and energy on areas of their life in which they can be successful. As career advancement and leadership opportunities in healthcare become explicitly tied to advanced education, it would be interesting to study if the increasing requirement for advanced education is self-limiting HIM professionals' ambitions to roles only at the entry or intermediate level within an organization.

#### **2.4. Implications for Health Information Management**

The implications of leadership research for HIM professionals are compelling. Research has supported the notion that leadership traits can be taught (Avolio et al., 2009). Moreover, studies have characterized universal attributes of leaders as perceived by followers (House et al., 2004). While there is still debate regarding whether leadership traits are universally effective or ineffective (Schyns & Schilling, 2011), knowledge about what traits and behaviours are mainly considered effective is important to support HIM leadership development. Particularly in this time of constant environment change, HIM professionals must learn management and leadership skills to supplement their technical training to become effective leaders. The higher an individual rises in an organizational hierarchy, the greater the requirement for management and leadership skills such as critical thinking and decision making, and the lower the requirement for technical skills such as coding and abstracting or release of information.

The three categories of factors that influence HIM leadership development (societal, organizational, and individual characteristics) are inter-related. For example, although gender is described as a societal factor, the effects permeate into the organizational and individual domains. As 95% of HIM professionals in Canada are

women, gender is perhaps the strongest predictor of the ability for HIM professionals to climb the corporate ladder. An awareness of the ways in which gendered social practices or gender biases inhibit women's ability to lead, or to be seen as leaders, is an important first step in breaking down the invisible barriers to success. Implementing policies and processes that support gender equality within an organization, such as mentorship programs and gender neutral employment policies, may bring about substantive change more quickly than waiting for society to move forward. Changes in societal and organizational gender-related practices should, in turn, inspire the individual motivation and confidence for women to pursue leadership roles. For example, a recent survey of American HIM professionals investigating the progression of HIM roles and functions in the United States found that the majority of respondents believe that HIM professionals are responders to change rather than change initiators (Watzlaf et al., 2009). The lack of ability, confidence, motivation, or initiative to put themselves and their skill set forward to initiate change may have a direct effect on the ability of HIM professionals to be seen as leaders.

A survey of Canadian HIM professionals conducted by CHIMA (2011) revealed that one third of the respondents would not recommend joining the HIM profession, citing a perceived lack of awareness and recognition of the profession as the main reason. These results did not appear to be influenced by the age of the respondent or by the length of time in the profession. Despite the perception of lack of awareness or recognition of the profession, only 55% of HIM professionals strongly agreed that they had a responsibility to act as an advocate for the profession with only 31% agreeing they had the tools to do so. Why do 45% of the HIM professionals surveyed believe that they

do not have a responsibility to act as an advocate for their own profession? Why do so few feel they have the tools to do so? How can these perceptions be changed?

The attitudes of HIM professionals towards their role in professional advocacy and continuing education may have a detrimental effect on the ability of the profession to take a leadership role and may confine the HIM profession to a secondary role in the new electronic environment (Watzlaf et al., 2009). HIM professionals must take the initiative to generate new roles applicable to their organization's electronic health information systems (EHIS) and decision support needs, develop the skill set and gain the education required, and put themselves forward as the professionals best poised to lead the change.

When asked about continuing education, 59% of Canadian HIM professionals felt strongly that continuing education was essential to career success with an additional 24% agreeing somewhat; 33% stated they participated in continuing education only to maintain their HIM certification (CHIMA, 2011). The ability for healthcare organizations to support continuing education is often linked to the economy and the provincial budgets. Intelligence is one of the identified eight distinctive factors in implicit leadership theory and the lack of advanced education may affect how HIM professionals are viewed as leaders (Barbuto et al., 2007; Offerman et al., 1994). The fact that few HIM professionals in Canada have an undergraduate or advanced university degree may play into a perception that HIM is only an entry-level profession and may limit the ability of HIM professionals to be seen as leaders.

The lack of advanced degrees among HIM professionals also has a negative influence on the research agenda. Few Canadian HIM professionals are trained in research and fewer yet have published research in peer-reviewed journals. Is the lack of

awareness of the profession tied to the small body of HIM research in Canada conducted by certified HIM professionals?

The decline in the number of HIM professionals in leadership positions over the past 15 or so years may be due, in part, to HIM professionals not continuing with formal education and, therefore, not applying for such positions. Over the past two years, while researching HIM roles and associated qualifications, I have found that the vast majority of postings for a Director of Health Information Management or equivalent role now require a minimum of a Bachelor's degree and more often ask for a Master's degree. Recently, in keeping with a growing trend, a major Greater Toronto Area hospital removed the wording, "or related experience" from their leadership job descriptions. The effect of this change is that the minimum educational requirement of an undergraduate or Master's degree can no longer be supplemented by work experience (G. Crook, Chief Executive Officer and Registrar of CHIMA, personal communication, May 2015). Why are more HIM professionals not pursuing advanced education or applying for leadership positions? Are HIM professionals ambitious in terms of their career goals or are they unaware of the options for career advancement? Do HIM professionals lack the confidence to apply for senior positions or have they given up following previous rejections?

Ten to fifteen years ago, patient care was not a common topic at the senior leadership and board table. Patient safety concerns, performance accountability, and increasing healthcare costs have led to accountability agreements and data reporting requirements with the provincial ministries of health (Alberta Health Services, 2014; British Columbia Ministry of Health, 2014; Ontario Ministry of Health and Long-Term

Care, 2013). HIM professionals are able to add value to healthcare organizations through their ability to interpret the wealth of data and information that exists, to increase the transparency and accountability of facilities through performance indicators, and to support process and performance improvement (Stationwala, 2014). However, they cannot contribute fully if they are not invited to the decision-making table.

HIM professionals should be included at the same organizational level as senior financial positions as the data collected and analyzed by HIM professionals is as important, if not more important, than financial data (Stationwala, 2014). The data provided by HIM professionals have assisted healthcare organizations to move out of financial deficit situations and have been used to increase and improve patient service delivery. One way the data have led to better performance and service delivery changes is through the ability to share comparative information through the CIHI databases and reporting systems. Senior level discussions of issues such as funding reform, improvement of quality outcomes, and service realignment from acute to community care, would all benefit from HIM input at the executive level (Stationwala, 2014).

In this chapter I outline the contextual and empirical factors that relate to leadership development and career advancement, in general, and to the HIM profession, in particular. Leadership development literature supports the need for education, training, and career development for HIM professionals. Research into personality characteristics and traits of HIM professionals is required to determine factors influencing leadership, specific to this population.

The next chapter will present the stages in the historical development of the HIM profession.

## CHAPTER 3: STAGES IN THE HISTORICAL DEVELOPMENT OF THE HIM PROFESSION

### 3.1. Introduction

Why is it important to consider the history of HIM when discussing the current and future states of the profession? Studying the progression of the HIM profession from an historical perspective allows one to view the profession's strategic challenges and opportunities from a contextual perspective. History can be helpful in studying the trends that affected the beginning of the HIM profession, how the profession responded and adapted, and how successful the response was in terms of professional growth. It has been argued that one cannot truly understand our present without first knowing our past and this is true for organizations as well as individuals (Boeker, 1989; Merriam & Brockett, 2007).

When describing organizations, Stinchcombe (1965) explains that historical events at the time of its founding define the traits of the organization and determine its initial form. These traits and initial structure then function to maintain the original characteristics of the organization. To change the future, we must understand the forces and context that shaped and influenced the past (Allison, 1995; Boeker, 1989). Accordingly, this chapter situates the current research in a framework that includes a consideration of the evolutionary forces over the history of the HIM profession and establishes a period of development of the HIM profession from 1910 to present. The discussion is centred around time periods, artificially created by the author, to clearly identify significant developments and milestones in the advancement of the HIM field during each of the specific timeframes.

### 3.2. 1910 to 1927

In 1897, the *Bertillon Classification of Causes of Death*, which came to be known as the *International List of Causes of Death* and was the first classification system to be accepted as an international standard, was approved and adopted by the American Public Health Association for use by registrars in Canada and the United States (Moriyama, Loy, & Robb-Smith, 2011; World Health Organization, n.d.). A mortality classification system was needed to produce comparable statistics worldwide regarding cause of death although the need for a classification system for disease and procedures was already under discussion. A classification for disease and procedures would rely on standardized medical record practices. In the early part of the 20th century, medical research was increasing in importance concurrent with the development of cancer treatments, ulcer diagnoses and treatment, and radiography. Despite the increasing need for complete and accurate medical records, hospitals did not necessarily have the funds to support their maintenance, while many did not recognize the importance of the medical record to research (Myers, 1912a).

During the 1800s, early medical studies in North America were conducted mainly in proprietary or for-profit schools with few university programs offering a solid foundation on which to practice medicine. Medical education in the mid-19th century consisted mainly of two semesters of 16-week lectures and no practical experience. In 1893, with the opening of the Johns Hopkins University School of Medicine, the model for medical school education began to change. The focus of medical education shifted towards university programs, which offered a combination of medical training and medical research. In 1910, the Carnegie Foundation for the

Advancement of Teaching commissioned Abraham Flexner, an American educator, to report on the state of medical education and the Flexner Report, as it came to be known, was published (Ludmerer, 2010).

Although education reform in medicine had started in the 1800s, the Flexner report is credited with emphasizing the need for original medical research, training in the scientific method, and experiential learning (Ludmerer, 2010). Flexner (1910) stated in his report that laboratory findings and information collected at the bedside from the patient were of equal importance when determining diagnoses. Flexner maintained that, "the careful taking and keeping of records is in the first instance the means of clarifying the students' own experience..." (p. 99). The Flexner Report is credited with modernizing medical training and placing an emphasis on research and clinical documentation which would indirectly lead to the creation of the American College of Surgeons (ACS). The ACS was founded in 1913 to "develop, exemplify, and enforce" (ACS, 1913, p. vii) the quality of hospital care by setting standards for surgical education and training (Davis & LaCour, 2013). Following the creation of the American College of Surgeons (ACS), the assessment of the quality of patient care in North America began in earnest.

The HIM profession was developed in concert with the ACS and with the creation of the Club of Medical Record Clerks in 1912. Grace Whiting Myers, a medical librarian, formed the Club initially under the auspices of the Medical Library Association (Lipscomb, 2003; Myers, 1912b). The Club included physicians responsible for, or with an interest in, medical libraries and medical records, and medical librarians who were responsible for medical records as well as the library.

Myers (1912a) hoped that the formation of the Club of Medical Record Clerks would increase the profile of the medical record and its importance in medical care:

And to him who cares for it all with the proper sense of his responsibilities comes an opportunity for personal influence which may be as far-reaching as he chooses to make it, for through his efforts it is possible to bring to light a wealth of material which might otherwise remain forever in obscurity. (Myers, 1912a, p.57)

The Club was formed with the main purpose of evaluating the standards of hospital medical records to support the accountability of physicians and surgeons (Myers, 1912b). Medical librarianship and, by extension, medical record librarianship, offered a professional occupation for women in the early 1900s and was increasingly viewed as an alternative to becoming a teacher or secretary (Brodman, 1980). From the outset the profession was dominated by women and as with other primarily female professions, the societal values at the core of the creation of the profession – servitude and restraint of ambition – may linger and continue to be a deterrent for those who no longer espouse these 'virtues' (Anderson, 1989).

In 1915, Dr. E. A. Codman and colleagues developed innovations to monitor and record patient care. Codman is credited with creating the problem-oriented medical record, a method of defining and recording patient information by each problem rather than by the patient service, such as medical or surgical service, or by chronological events (Porterfield, 1976; Johns, 2011). The Club of Medical Record Clerks and the ACS understood that it was vitally important to have an accurate and complete record of the care and treatment that was provided to the patient while they were in hospital. Dr.

Codman's analysis of patient outcomes led to the establishment of the Hospital Standardization Program.

In 1917, the ACS developed the Hospital Standardization Program, the pre-cursor to today's hospital accreditation (Ray & Landry, 2016). The first onsite quality reviews of hospitals and their records took place in 1918. Canada was a member of the ACS and participated in onsite reviews. According to Huffman (as cited in Johns, 2011, p. 6), prior to the Hospital Standardization Program, medical records were incomplete in that they did not contain graphical or laboratory data and they did not contain standardized language to record the reason for admission or final diagnosis upon patient discharge or death.

Work on what was now called the *International List of Causes of Death* was discontinued during World War I (WWI) (Moriyama et al., 2011). WWI highlighted the need for a classification that went beyond cause of death to include disease and injury and in 1919, the *Standard Nomenclature of Diseases and Pathological Conditions, Injuries and Poisonings* was published in the United States. The nomenclature was limited in the number of codes it contained and, therefore, limited in use. In 1928, a National Conference on Nomenclature of Disease was convened with invited attendees from various medical, public health, military, and hospital associations. The National Conference resulted in the acceptance and adoption of a standard nomenclature in 1930 with the first publication of the *Standard Nomenclature of Disease and Operations* (Moriyama et al, 2011). The introduction of a standard nomenclature for capturing morbidity data was of great importance to the Medical Record Librarian (MRL)

profession as the MRLs would catalogue the codes onto index cards for research and reporting purposes.

### **3.3. 1928 to 1947**

In 1928, the Association of Record Librarians of North America (ARLNA) was created to expand upon the work of the Club of Medical Record Clerks and to formalize the education of MRL. The ARLNA was initially comprised of members from 25 states, Canada, and the District of Columbia (Myers, 1929). Over the next decade, the ARLNA worked closely with the American College of Surgeons (ACS) and the American Hospital Association (AHA) on issues related to records management, standards, and privacy. The ARLNA was held in high esteem by these two influential bodies, as evidenced by the appointment of ARLNA representatives to a number of central AHA and ACS committees including AHA's Committee of Clinical Records (ARLNA, 1932; Myers, 1929). The purpose of the committee was to develop standard records management practices and to participate in the adoption of a nomenclature of diseases and surgical procedures (Myers, 1929). Over the course of the next decade, a close working relationship was established among the ARLNA, the ACS, and the AHA.

The Great Depression (1929 to 1939) led Canadians to barter food for healthcare and increased the awareness of the need for access to medical services (Canadian Museum of History, 2010). While the federal government tried to introduce the *Employment and Social Security Act*, which provided for such items as health and accident insurance and an old-age pension, the Act was considered unconstitutional as it went against the jurisdictional tenets of the *British North American Act* (BNA). As the federal government continued to grapple with the provisions in the BNA regarding

federal/provincial responsibilities, the 1930s saw an increase in private medical service insurance plans including Blue Cross, Windsor Medical Services Plan, and Associated Medical Services, Inc. A number of large hospitals opened their doors throughout the 1930s as a result of new technologies and the increased prevalence of hospital-based procedures (Canadian Museum of History, 2010). Accreditation of hospitals extended across the country with the publication of the first Standards Manual in 1925, resulting in an increased focus in the 1930s on the importance of complete, accurate, and timely medical records (Accreditation Canada, 2013).

The early Hospital Standardization Program consisted of only one page of standards. The standard specific to medical records referred to their completeness, timeliness, accuracy, and access (Johns, 2011; Porterfield, 1976). To meet the standards, the documentation and monitoring of medical records had to be improved and the role of the Medical Record Librarian became increasingly important.

To support the requirement for training in medical record library science, a formal course of study was approved by the ARLNA in 1932 (Johns, 2011). Registration and certification of MRLs (the professional title of those who graduated from a program in medical record librarianship) began in 1933 to support standardization of record management practices and to evaluate the skill level of people working in the HIM field. By this time, MRLs had established themselves as the guardians of proper record keeping (Berg & Harterink, 2004). A national qualifying examination was developed, as were criteria for eligibility for a credential of Registered Record Librarian (RRL). The first five MRL programs were accredited by ARLNA starting in 1934, were all hospital-based, and utilized a mix of practical hands-on training and coursework (ARLNA, 1934).

Advances in record keeping progressed in the 1930s and 1940s with the development of a systematic method of maintaining the records (CAMRL, July 1944). The centralized unit system of filing records was considered state of the art and best practice when designing a medical record department. A centralized system is a process by which all records are located in one area within the hospital, and using the unit numbering system, each patient has one identifying number assigned from the first encounter at the hospital through to the last encounter. The patient record is sorted in reverse chronological order inside a file folder with the unit number so that all encounters are stored together for ease of access. Indices were kept in alphabetical patient name order to allow for the retrieval of the records upon readmission and for the statistical reporting of diseases, operations, and physicians. Although the filing and numbering systems are simplistic in today's healthcare environment, the ability to retrieve and access medical records in a consistent and timely fashion was a significant step forward. The clinical information on the cards was then coded using the *Standardized Nomenclature of Disease and Operations*.

Each advance in records management and statistical data collection reinforced the requirement for a strong program of professional study. The MRL was considered the hospital statistician; nowhere else in the hospital was information contained on the quality and quantity of work performed, information that provided for "the intelligent operation of [the] hospital" (Cyprian, 1945, p. 7). Although the work of the MRL was of increasing importance in the assessment of quality of care and maintenance of the legal health record, the role was not well understood. In the January 1945 CAMRL Bulletin, early reference was made to the lack of understanding of the MRL professional's duties.

In 1938, the Canadian and American groups formally separated and the ARLNA changed its name to the American Association of Medical Record Librarians (AAMRL; AHIMA, 1998). The Canadian Association of Medical Record Librarians (CAMRL) was formed in 1934 (CAMRL, 1950a). Little information is available from this period and it is difficult to determine why the two groups parted ways although it could be that a critical mass of MRLs had been reached, allowing for the creation of a Canadian organization. Nonetheless, a close working relationship was maintained between the two associations and the RRL credential continued to be used in Canada. In 1942, the Canadian members formalized the CAMRL with registration of the federal charter and the letters patent was received from the Canadian government in 1949.

#### **3.4. 1948 to 1970**

Between 1925 and 1951, the accreditation process expanded and became more complex. By 1948, the accreditation standard for large hospitals included the requirement for the medical record department to be directed by a trained MRL, preferably one with a credential (MacEachern, 1948). The growth of the Hospital Standardization Program led eventually to the formation of the Joint Commission on Accreditation of Hospitals in the United States in 1951, now called the Joint Commission, and the Canadian Commission on Hospital Accreditation in 1953, now called Accreditation Canada (Accreditation Canada, 2013; Joint Commission, 2013). By 1969, the Canadian Council on Hospital Accreditation had expanded their record keeping standards from a focus on large hospitals, to include the requirement for all medical record departments in accredited acute care facilities to have, at a minimum, access to a qualified MRL for consultation purposes (Couture, 1969).

According to Johns (2011), new processes were required to maintain and organize the records as well as to compile indices for referencing purposes. MRLs became responsible for monitoring the use of standardized medical nomenclatures and for ensuring proper records management principles were upheld. "These new professionals were pivotal in ensuring the efficient functioning of the modern hospital according to the scientific management ideals. Her (this was distinctly a woman's profession from the start) meticulous work, requiring precision and communication skills, would guarantee the upward flow of inscriptions..." (Timmermans & Berg, 2003, pp. 43-45).

Timmermans and Berg posit that it was improved record keeping and records management practices that made it possible for medical records to become useful as a legal tool although it would be many years before consistent record keeping and record management practices were entrenched in hospital practice. Berg and Harterink (2004) credit "the spread of the principles of 'scientific management' within hospitals", including movement towards the patient-centric records, as coming from the "newly emerging profession of 'medical record librarian'" (p. 21).

As the demand for health services increased and the financial resources to support care decreased, the Canadian government commissioned a report into the existing and future needs of Canadians for health services. The Royal Commission on Health Services, chaired by Justice Emmett Hall and established in 1961, was considered the most comprehensive country-wide health services report to have been created. The Commission published a number of reports in four major areas between 1961 and 1965 that contained 256 recommendations. The four areas investigated were the education and training of health-related personnel, preventative medicine, diagnostic and treatment

procedures, and rehabilitation facilities (Courtney, 1965). Although most of the recommendations would eventually be ignored due to the political climate of the period, the reports espoused a publicly funded medical insurance plan and included recommendations regarding the education of health professionals (Boan, 2009).

One of the four reports, the Royal Commission on Health Services: Medical Education in Canada (MacFarlane, 1964), included information and recommendations regarding the educational status and requirements for 25 paramedical professions, one of which was the Medical Record Librarian. In 1964, 12 schools situated in hospitals offered a 12-month program for MRLs. Two programs were offered through CAMRL and the Canadian Hospital Association – one for training medical record clerks and one for training Accredited Record Technicians. It is noted in the 1964 Royal Commission report that degree options for MRLs did not exist in Canada but did exist in the United States. "The supply of Medical Record Librarians has not kept up to the increase in population and the expansion of hospital beds. One of the problems to be faced in increasing the number of Medical Record Librarians is the shortage of trained teaching personnel" (MacFarlane, 1964, p. 310). This comment remains relevant today, as HIM programs find it difficult to recruit qualified HIM professionals, that is, people with the requisite education and work experience, for the role of program head and professor/instructor. The Commission Report provided three recommendations for the paramedical group that were applicable to MRLs: 1) that most paramedicals be trained as team members in health science centres; 2) that standard training subsidies be made available; and 3) that members of the medical profession be involved with the

professional committees created by the groups and associations. The report highlighted the need for continuing and expanded education for the paramedical professions.

Initially, HIM programs were approximately 18 months in length and delivered in a hospital setting. Programming included didactic instruction in a classroom setting together with practical, hands-on experience (CAMRL, 1950b; CAMRL, 1953). Accredited programs were eventually relocated to colleges and universities across Canada. In reviewing the available historical information, it was difficult to piece together the changes in academic preparedness. What is clear; however, is that the need for advanced education was recognized relatively early in the development of the profession (Huffman, 1957).

HIM professionals themselves did not feel that the diploma level training prepared them for new and expanding roles. In a 1967 survey of Quebec HIMs, 60.4% of the diploma level graduates reported that their education was inadequate for their current roles (Couture, 1969). Included in the 1968 CAMRL conference papers was the first mention of a call for a graduate level program with a focus on management, education, and research (Moroney, 1969). In 1969, a survey was circulated to the CAMRL membership inquiring about interest in a Master's in Medical Record Administration and individual eligibility to apply (CAMRL, 1969). Unfortunately, the results of this survey are unavailable.

In 1963, the Hospital Medical Records Institute (HMRI) was created collaboratively by the Ontario Medical Association, the Ontario Hospital Association, and the Ontario Association of Medical Record Librarians (Robertson, 1970). The purpose of HMRI was to promote the medical audit. Data from the health record were

coded using the current version of the International Classification of Diseases (ICD) and abstracted by MRLs onto a paper abstract, submitted to HMRI, and returned to the hospital in the form of indices including patient service, diagnoses, physician, and hospital summaries. According to Robertson, by 1970 five provinces in Canada and 77 general acute care hospitals were submitting data to HMRI equaling approximately 600,000 annual discharge abstracts. The reports provided by HMRI were for the individual hospitals themselves and were not shared or amalgamated for further use.

Hospitals in Canada that did not report to HMRI submitted data to the Commission on Professional and Hospital Activities in Maryland, United States, and its Professional Activity Study (PAS) system. The main purpose of the PAS was to provide summary reports to hospital management and physicians for immediate use in audit and length-of-stay reviews (Slee, 1970). The PAS had a secondary purpose to amalgamate data for research purposes for its Commission and for appropriate and justified investigation as determined by policies set out by the Commission. By 1970, 30% of all Canadian and U.S. hospitals reported through the PAS system. According to Slee, the number of abstracts submitted in 1970 approached 11 million.

Submission to both HMRI and PAS was voluntary and the use of the data at the time was questionable. Hospital management and administrators did not always understand how to use the data and they were not convinced of its value. Moreover, medical utilization and audit committees required expert assistance to analyze the data. Despite the lack of data use in healthcare organizations, PAS and HMRI made a significant contribution to healthcare by providing aggregated data about hospital medical practice that had not previously been available (Kincaid, 1968). The collection and

analysis of the International Classification of Diseases (ICD) coded and abstracted data highlighted the role of the MRL as experts in information retrieval and presentation (Fitzpatrick, 1970). The collection of data via a paper abstract using a pencil to fill in the computer sheets was cumbersome and labour intensive and unfortunately, more time was spent on the inputting of data by HIMs during the 1970s and 1980s rather than on analyzing and presenting data to help hospital administrators understand the data. At the same time, utilization review of hospital resources was beginning in earnest and the HIM profession missed an excellent opportunity to declare their expertise and take ownership of data analytics and utilization management, possibly because they did not understand how to present the data so it would be more useful and relevant for hospital administration.

During the 1960s and 1970s, the MRL was the department head of the records department and was considered to be at the senior executive level of hospital management, reporting directly to the hospital administrator, the most senior leader within the hospital. Changes in healthcare were already influencing the role of the HIM: "No other hospital profession is undergoing more radical change in its basic orientation than that of the medical record librarian. Although there are many reasons, they all spring from the fundamentally new emphasis on the *use* of the information the MRL was originally assigned to guard" (Kincaid, 1968, p. 2). At some point between 1953 and 1968, an undergraduate degree program in Medical Record Science was accredited at Notre Dame University in Nelson, BC. The undergraduate degree would focus on medical record science as well as management and leadership content. In 1968, at the CAMRL annual conference, there was an announcement that the creation of an

undergraduate program was under consideration or development in Quebec at McGill University; however this program did not come to fruition. In 1977, it was noted that discussions were underway with Dr. Douglas T. Kenny, President of the University of British Columbia, to develop a health records program in the department of health sciences to replace the program in Nelson as Notre Dame University was closing its doors (CHRA, 1977). When Notre Dame closed its doors, the only HIM university program in Canada ceased to exist; no information could be found on the reasons for the decision not to transition the program to UBC.

The 1960s saw the introduction of computers into the hospital setting. The early computers were used mostly for administrative and financial purposes although the interest in computer use to support medical care was increasing. A new profession called *medical informatics* emerged with the goal of supporting and improving clinical decision making and reducing medical errors. Medical record documentation, coded data, and active decision support in the form of alerts and reminders were the focus of these early systems although funding for electronic patient records was limited. Hospital administrators were more likely to approve spending on computers that supported the business side of health rather than the medical side as the financial benefits of computerized health records had not yet been realized and there was strong physician resistance to the cumbersome systems of the time (Berner, Detmer, & Simborg, 2005).

### **3.5. 1971 to 1990**

The period spanning 1971 to 1990 saw rapid growth in the development of the electronic health record (EHR). The EHR is defined as the longitudinal, interoperable, inter-connected, and cross-jurisdictional record of an individual's encounters with the healthcare system from birth to death (Gibson et al., 2013). The EHR connects electronic patient records (EPR) from hospitals and other healthcare organizations and electronic medical records (EMR), the record of care from primary care physicians and specialist physician offices. The EPR was initially introduced into specific hospital departments within a siloed structure and without interconnectivity among departments at the same site. While the laboratory information system (LIS), for example, may connect to the Admission/Discharge/ Transfer system used for registration purposes, the LIS may not have been accessible by clinicians from the patient care unit. The same was true for early EMRs; the system may have provided information to a primary care physician within a clinic; however, the patient information was not available for viewing should the patient be admitted to hospital or attend a different physician's office.

Networking of computer systems was introduced in the 1980s. The ability for systems to connect and exchange information became more prevalent and interchange protocols such as Health Level Seven (HL7) became essential. HL7 International, founded in 1987, is the standards organization responsible for the HL7 framework that supports the sharing, integration, and retrieval of electronic health information (Health Level Seven International, 2015). With the capability to exchange and share information within and between computer systems, the usefulness of computer technology increased (Berner et al., 2005).

Computer technology did not only support the improvement of clinical decision making, it importantly facilitated the capacity to link clinical and financial data. Escalating healthcare costs in the 1980s led to the introduction of Diagnosis-Related Groups (DRG) and the Prospective Payment System (PPS) legislation in the US, which increased the motivation to link clinical and financial systems. In Canada, Case Mix Group (CMG) methodology became increasingly important following the introduction of the PPS in the US, with the derived information being used for forecasting, planning, and analysis. The introduction of complexity and severity modeling added a further refinement (Preyra, 2004).

In the early 1970s, CAMRL changed its name to the Canadian Health Record Association (CHRA) to incorporate a broader definition of the patient record beyond a medical focus. In 1972, the Canadian College of Health Record Administrators (CCHRA) was incorporated with its own letters patent to grant credentials and to assess the state of HIM education in Canada (Crook, Abrams, Arnold, 2013). During the 1970s and 1980s, the requirement for a qualified Health Record Administrator (HRA) became further entrenched into the Canadian acute care hospital accreditation standards. By 1992, Standard 8.1 of the Clinical Records section of the Acute Care standards stated that the director of clinical records must be a certified HRA. According to the Director of Program Development for Accreditation Canada, in 1996 the accreditation standards took a more interdisciplinary approach that focused on the service provided to patients rather than on the role of individual departments (Director of Program Development for Accreditation Canada, personal communication, November 25, 2014). As a result, specific standards detailing the qualifications of individual staff members were replaced

with more general standards requiring simply that essential education and experience be identified for all positions within an organization.

The move away from an accreditation requirement for a certified HIM professional as the director of health record services has had a detrimental effect on the HIM profession and on acute care HIM departments. Individuals hired into these positions without the knowledge and skill set taught within HIM programs may not understand the implication of changes made. For example, changes to records management or data quality practices may be made without a full understanding of how these changes can affect the quality and flow of information through the entire HIM life cycle. An individual trained in health informatics may understand the requirement for connectivity and security in an electronic health record environment but they do not learn about the flow of information throughout the entire healthcare organization nor do they receive education specific to records management in a hybrid record environment (Gibson, Dixon, & Abrams, 2015). The hybrid record, as the name implies, is a combination of paper and electronic media and is the most common state of the EHR in Canada today (Gibson et al., 2013; HIMSSAnalytics, 2015).

In 1970, a CAMRL president's committee – The Aims and Objectives Committee - presented a report to the membership for consideration (Moroney, Macdonald, Bradley, Bury, & Holmes, 1970). The committee members included two physicians and three MRLs. The report was based on survey data gathered from across Canada in 1970 and received from approximately 200 hospital administrators, three provincial MRL associations, three groups and regional sub-committees (not further defined), and seven individual members. The results of the survey revealed that the educational requirements

for medical record personnel were changing. The future levels of required medical record personnel listed within the report included certificate level record technicians, diploma level MRL I (administrator) and II (analyst/researcher), Bachelor's degree, Master's degree, and Doctorate level MRLs.

Unfortunately, no substantive action was taken and the findings of The Aims and Objectives Committee survey were apparently shelved, as no further mention was made of this seminal report in future Bulletins. I gather, from additional readings found in board minutes, that if the membership was not wholly supportive of an initiative, for example, mandatory continuing professional education credits, the boards of the time may not have had the fortitude to make unpopular decisions. Had the report been acted upon in the 1970s, the HIM profession would have benefited greatly from moving forward with advanced education at a time when the power and influence of hospital administrators was behind the desire for advancing the profession. Instead, it was nearly 25 years later before a formal plan for advanced education was put in place.

The *Privacy Act* of 1982 comprised the first Canadian privacy legislation, which would influence personal health information (Bennett, 1990). With the introduction of computers, the social insurance number, linkages between computer systems, and universal identifiers, privacy and access to personal information became a prominent policy issue. The creation of the *Privacy Act* of 1982 was the culmination of a number of Acts and recommendations from task teams starting in the 1970s. The *Access to Information Act* and the *Privacy Act* were incorporated into Bill C-43 in 1982. The *Personal Information Protection and Electronic Documents Act* (PIPEDA) was passed into legislation in 2000 and it extended the *Privacy Act*, which initially affected only

governmental organizations, to cover the private sector and by 2004 to cover the health system.

British Columbia, Alberta, and Quebec have legislation that is considered substantially similar to PIPEDA in all regards, making their provincial legislation the *de facto* legislation for their jurisdiction (Frelick, 2013). Ontario, New Brunswick, and Newfoundland and Labrador have privacy legislation that protects personal health information in a manner substantially similar to PIPEDA (Office of the Privacy Commissioner of Canada, 2009); however, these provincial legislations do not cover all content included in PIPEDA. When a provincial or territorial legislation is not considered substantially similar to the federal legislation, both sets of legislation must be considered during the development of policy and procedures related to personal health information. The differences in which legislation is relevant for personal health information adds a layer of complexity for HIM professionals when they are dealing with requests for access or disclosure of health information. The passing of the Acts had an effect on the HIM departments in that the Director of HIM often was assigned the additional task of Privacy Officer without any additional staff or funding. The layering of additional responsibilities without increased staffing or funding; starting with increased data collection, analysis, and reporting, and now including privacy and release of information workload considerations, may have affected the HIM Director's ability to consider change proactively and plan accordingly.

### 3.6. 1991 to 2005

In 1991, the National Task Force on Health Information published a report that recommended the creation of a coordinating council to improve the state of health information in Canada (National Health Information Council, 1991). The report outlined the information needs of specific groups in Canada including healthcare providers, administrators of hospitals and programs, policy analysts and researchers, politicians and policy makers, and healthcare consumers. In response to the report, the Canadian government amalgamated HMRI and the Management Information Systems (MIS) group in 1994 to form the Canadian Institute of Health Information (CIHI) and, in 1995, specific programs from Statistics Canada and Health Canada were added to the new organization (CIHI, 2008). Funded by the federal, provincial, and territorial governments, the initial mandate of CIHI was to provide quality, timely data and information to improve the health of Canadians. The role of CIHI has expanded over the years to include policy and other levels of care and the most recent CIHI mandate is to “lead the development and maintenance of comprehensive and integrated health information that enables sound policy and effective health system management that improve health and healthcare” (CIHI, n.d., p. 8).

The *Report of the National Task Force on Health Information* (National Health Information Council, 1991) is a blueprint of the need and direction for continuing and advanced education in health information management. In 1995, there were two levels of HIM training: (1) a certificate program, usually one year in length, for Health Record Technicians (HRT) and, (2) a diploma program, two years in length for most of Canada and three years in Quebec, for Health Record Administrators (HRA). There were two

corresponding credentials: CCHRA(A) for HRTs and CCHRA(C) for HRAs. The credential stood for, respectively, certified with the Canadian College of Health Record Administrators at an Associate or Certificant level (Reece, 1996).

Given the results of the *Report of the National Task Force on Health Information* (National Health Information Council, 1991) and the rapid changes in information use and technological advance, CHRA launched an investigation in 1991 into the educational requirements for future HIM graduates. In 1996, the CHRA released a report titled, *Reforming Education for Health Information Professionals: Answering questions about the CHRA's education plans* (Reece, 1996). The report detailed the five-year investigation and the reasons for the decision to move to an undergraduate degree entry-level to HIM practice. The reasons for the decision included the changing role of the health record practitioner, technological advances in the EHR, and the increasing importance of health information in decision-making. The report contained results from an October 1995 CHRA survey of "non-traditional" employers - meaning chief executive officers, physicians, and those involved in planning and decision-making. The survey found that 80% of these individuals believed that their information needs were not being met. In addition, 56% of the respondents did not believe that HIM professionals graduated with a sufficient knowledge and skill set to meet their current health information needs. Results reported from an April 1995 CHRA survey sent to "traditional" HIM Directors ( $n=47$ ) for acute care HIM departments, found that 61.7% believed that the existing diploma training was sufficient to meet their needs.

Was the discrepancy in these two perspectives - the traditional HIM directors and non-traditional health leaders - driven by a difference in the understanding of the

importance of health information and implications for the future? Alternatively, could the difference in opinion come from a position of self-protection and safety for the HIM directors who were undoubtedly diploma graduates themselves, given the low percentage of HIM professionals with undergraduate or graduate degrees? Whatever the case, the CHRA chose to move forward with its plan for a phase out of HIM diploma programs and the introduction of an undergraduate degree entry-to-practice starting with graduates in 2006. Although other professions (e.g., nursing) chose an 18- to 20-year implementation period, the CHRA selected a 10-year timeframe in which to execute this major initiative (Rodger, 1984).

To support the undergraduate degree entry qualification to HIM practice, the learning content for HIM professionals underwent major revisions in 1996 to increase knowledge of electronic systems, data collection and use, and privacy and legislative requirements for personal health information. The learning content to support management and leadership was mostly removed from the diploma level programs in 1996 and incorporated into the undergraduate learning content document developed in 2000 (CHRA, 1996; CHRA, 1998).

In May 2000, the CHIMA Board of Directors extended the deadline for the diploma level college program phase out to 2006; however, the deadline to phase out the HRT certificate programs by 2001 remained in place (CHRA, 2001). The change to an undergraduate degree for entry-to-practice was reversed in 2002 due to a strong push-back from the CHRA membership, HIM directors, and the diploma-granting academic institutions. The push-back occurred because of the dramatic decrease expected in HIM graduates should the diploma programs be decommissioned. Only four university degree

programs had entered into formal discussions with CHRA by 2000 and the expected graduate numbers did not match the estimated workforce demand. Therefore, in 2002, the entry-to-practice in HIM in Canada remained a diploma level although undergraduate degree programs continued to be supported (CHRA, 2002). The focus of the association's work related to education changed from advancing the profession to damage control related to academic program relations.

The decision to reverse the entry-to-practice qualification of an undergraduate degree could have been avoided. Rather than discontinuing the diploma programs, a plan to revise their admission requirements would have kept the intent of a degree entry-to-practice level. By transitioning the HIM diploma programs to post-diploma or post-degree programs (i.e., requirement of a possession of a post-secondary credential for admission) and changing the diploma level content to match the undergraduate learning content, the entry-to-practice level could have been raised and the plan to advance the profession would have continued. The timeline around the transition should have been a longer period, given the magnitude of the change, with the CHRA taking a more active role in supporting articulation and partnership agreements between colleges and universities. In 1995, one province had changed its legislation to allow colleges to bestow degrees with consideration by at least two others starting fairly soon after (Skolnik, 2004). By 2003, three provinces had allowed colleges to begin degree-granting.

In 1994, the federal government created the Information Highway Advisory Council to investigate the information infrastructure in Canada. The final report called for the creation of a national advisory council specific to new health information

technology. An *Advisory Council on Health Infostructure* was established in 1997, as was the *Office of Health and the Information Highway* under the auspices of Health Canada. Recommendations from these groups were instrumental to the creation of Canada Health Infoway (Infoway) following the 2000 First Ministers' agreement (Health Canada, 2012). Infoway's mandate was to promote and grow effective and interoperable electronic health information systems in Canada.

In 2002, the *Report of the Royal Commission on the Future of Health Care in Canada*, or the Romanow Report as it is more commonly known, was published (Commission on the Future of Health Care in Canada, 2002). The Romanow Report addressed a broad range of healthcare issues including sustainability of the system, Canada's health information technology infrastructure, health human resource concerns, primary and preventive care, and access to care improvement and quality care evaluation. The CHRA provided a submission outlining the concerns of the professional organization including the shortage of HIM professionals, the need for a national minimum data set for data collection, and asked that the Commission highlight health information as a national priority (CHRA, 2002). The Romanow Report is credited with the creation of the Health Council of Canada, which was set up in 2003 to establish common health indicators, and report on quality factors, such as access and wait times, Aboriginal health, and electronic health records (Health Council of Canada, n.d.). Although the Health Council was dismantled in 2014, Quality Health Councils are still active in many provinces. The Romanow Report was strongly supportive of the implementation of electronic health records and supported Infoway in its mandate to develop a pan-Canadian interoperative electronic record.

In 2003, following worldwide trends, the health record profession and association were rebranded as the HIM profession and the Canadian Health Information Management Association respectively; in 2006, the associated college was renamed the Canadian College of Health Information Management (CCHIM). Once more, the profession chose to change its name to reflect the broadening scope of practice from the static record to the dynamic use and flow of the information throughout the healthcare system. The accreditation of HIM programs and certification of HIM professionals continues today in Canada by CCHIM. In the United States, program accreditation is the responsibility of the Commission on Accreditation of Health Informatics and Information Management (CAHIIM), while the learning content and professional certification is overseen by the American Health Information Management Association (AHIMA) (Crook et al., 2103; Johns, 2011).

### **3.7. 2006 to present**

The collection and use of health information has exploded in the past 10 to 15 years. CIHI now houses and maintains 28 pan-Canadian databases allowing for analysis and comparison of health data across Canada (CIHI, 2013). The Discharge Abstract Database (DAD), National Ambulatory Care Reporting System (NACRS), Hospital Morbidity Database (HMDB), Hospital Mental Health Database (MHMD) Metadata, National Rehabilitation Reporting System (NRS) Metadata, and other databases within the CIHI auspices receive and store data that have been coded by HIM professionals. The role of the HIM professional in data collection, retrieval, analysis, and presentation has expanded dramatically since the incorporation of CIHI and the corresponding increased use of health information across Canada. The data collected and organized by

CIHI into its databases are now used for health system planning, patient safety review, utilization review, hospital funding, assessment of hospital clinical practice, and support for the transition of care delivery from acute care to community care (Stationwala, 2014). In contrast to the beginning of the data collection process when hospital administrators did not understand the importance of the data, the hospital accountability frameworks now in place by the provincial/territorial Ministries of Health have highlighted this valuable resource.

Good quality health data are required to successfully manage the healthcare system. The amount of health data collected – and the information derived from it – will continue to grow in relation to the increase in electronic systems. The health system use of data will continue to support planning, clinical decision-making, population and public health policy development, and research. Four factors have been identified as drivers of change that make it imperative to work toward a sustainable plan for health system data use including: (a) performance improvement and health system sustainability, (b) expectations of Canadians about their healthcare and information needs, (c) increased availability of electronic data, and (d) cost effective and easier to use technologies (CIHI, 2013).

Activity based funding (ABF) – also called patient-focused funding – is the provision of funding based on case mix and type of patient seen. Case mix refers to the type of cases treated at a healthcare facility that are then grouped into like categories, for example, all normal appendicitis cases would be grouped into one case mix (CIHI, 2011). Many countries around the world have introduced ABF including the United States, New Zealand, Norway, and Australia. Canada is slowly beginning to follow suit. The

majority of provincial/territorial/governmental jurisdictions in Canada use a global funding approach; however, a shift toward ABF is starting to occur (CIHI, 2010). Global or block funding is based on past service provision and is not tied to better service provision or innovation and thus provides no incentive to improve performance (Brophy, 2012). In 2010, British Columbia introduced ABF in 23 of its largest hospitals, representing a move away from the global funding model previously employed (Ministry of Health Services, 2010). Alberta started using ABF in 2010 for long-term care funding with the plan for acute and other care levels to follow (Mazurkewich, 2010). In January 2012, Ontario introduced their equivalence of ABF with funding reform in hospitals, community care access centres, and long-term care (Ontario Ministry of Health and Long-Term Care, 2013). Other provinces are following suit with New Brunswick and Quebec conducting investigations into ABF (Canadian Agency for Drugs and Technologies in Health [CADTH], 2009).

ABF is heavily dependent on the coded and abstracted data collected by HIM professionals in health facilities. The role of the HIM profession is important in the data collection, coding, and quality improvement aspects of ABF and in the new and developing roles of case costing and clinical documentation improvement. Case costing is an activity-based costing model that records the full cost of care by capturing all direct and indirect costs associated with each patient care episode (CIHI, 2011). Case costing is considered an accounting function and it has introduced an additional competency requirement for the HIM professional. In fact, HIMs with an interest in this area are acquiring accounting or business credentials to advance into these roles. Notably, job descriptions for case costing positions generally do not specify HIM credentials but rather

they are seeking applicants with business, accounting, or related university degrees. Case costing analysis builds on HIM expertise in coding classification and case mix group methodology (State of Victoria, 2011). To be viewed as competitive for these new roles, HIM professionals must continue their career development in the case costing and ABF skill set requirements. To date, the literature that focuses on ABF in Canada makes no mention of the HIM professional's role (CADTH, 2009; CIHI, 2010; Mazurkewich, 2010).

Saskatchewan has two Acts that pertain to personal health information protection and access. The *Freedom of Information and Protection of Privacy Act* (FIPPA) was enacted in 1990-91 and it provides for privacy rules surrounding the collection, use, retention, and access of personal information. Personal information is defined as identifiable information recorded in any format that relates to an individual (Government of Saskatchewan, 2012a). The *Health Information Protection Act* (HIPA) was proclaimed in 2003 with attendant regulations confirmed in 2005. HIPA was enacted to protect the privacy of personal health information in any format and to enable access for those who need it, for example, care providers and Saskatchewan Health. Personal health information is defined as identifiable information relating to an individual's health or health services received during or incidental to the provision of healthcare (Government of Saskatchewan, 2012b). As these two acts are not considered substantially similar to the federal privacy acts, the provincial acts must be considered along with the federal acts when developing policy to ensure compliance.

The introduction of privacy and access legislation has had a major influence on the HIM profession. In most federal and provincial acts, a custodian or trustee of

personal information and/or personal health information must be appointed. Every province's legislation is unique and must be referred to separately to determine the rules per province as well as between the private and public sectors (Frelick, 2013). As the HIM professional is considered the custodian of the health record in public hospitals, the role of privacy officer is often assigned to the Director of HIM (MacDonald et al., 2013).

The HIM professional must manage the many aspects of privacy, security, and confidentiality of personal health information. Federal, provincial, and territorial legislation; guidelines laid out by regulated health professions; and organizational policies and procedures all affect the way health information is treated. Personal health information legislation is based on fair principles of practice or fair information principles, which are now laid out in the *Canadian Standards Association's Model Code for the Protection of Personal Information*. The code spells out ten fair practice principles. These include (a) accountability; (b) identifying purposes; (c) consent; (d) limiting collection; (e) limiting use, disclosure, and retention; (f) accuracy; (g) safeguards; (h) openness; (i) individual access; and (j), challenging compliance (Consumer Measures Committee, 2011).

Prior to the privacy and access legislation, HIM professionals released personal health information in very limited circumstances and rarely to patients themselves. While the HIM professional's role had been to maintain the privacy, confidentiality, and security of personal health information, the introduction of EHRs, data-sharing, patient access, and the ability to correct personal information all served to increase both the workload and skill set requirements. HIM professionals are experts in the foundational policy and information standards used for the confidential and secure exchange of

personal information, whether paper, hybrid, or electronic. The span of HIM expertise extends beyond the acute care hospital setting as the rules, regulations, and guidelines are applicable to both private and public healthcare settings (MacDonald et al., 2013).

The increased importance of privacy for personal information has led to competition for the position of privacy officer and other related roles within healthcare organizations. A number of organizations exist within and outside Canada that provide certification in privacy (e.g., AHIMA, 2013; Canadian Health Information and Privacy Registry Board, n.d.; *Compliance Certification Board, 2103*; International Association of Privacy Professionals, n.d.). HIM professionals must continue to upgrade their knowledge of privacy and confidentiality as well as the increasingly complex area of health information security. Acquiring an additional credential in privacy and security is an asset to HIM professionals who select a privacy career path. Security of the patient record has expanded from the simplicity of a paper security system – for example, a locked file room and chart tracking log – to a much more sophisticated system that incorporates an electronic tracking system, assignment and maintenance of role-based information access, implementation of an auditing system and process, firewalls, and information breach reporting.

While higher-level roles such as privacy or compliance officer have been elevated in the organizational charts of healthcare organizations, the performance of the daily tasks related to privacy legislation, such as release of information, is increasingly assigned to clerical staff. Due to the complexity of release of personal health information, particularly when released for legal or third party reasons, the reassignment

of responsibility for these tasks from HIM professionals to clerical level staffing is troubling.

A further area of concern is third party information requests. These requests are from individuals or organizations outside the direct circle of care such as insurance companies or family members. Third party information may also be included within a patient record. Most privacy legislation requires the redaction of third party information before any release is allowed requiring a line-by-line review of the contents prior to release of a record. Third party information is information that is about someone other than the patient, but has been included on the patient record. For example, information about a child or spouse may be recorded in a patient's record. While the information may or may not have relevance to the patient's care (e.g., issues with a child that may cause stress to the patient such as an unwanted teen pregnancy), the information relating to the child would be considered third party information. The reassignment of release of information from trained HIM professionals to clerical staff may increase the risk that third party information will be inappropriately released as clerical staff may lack the training and knowledge of the relevant legislation.

Advanced career development in health system data use, population health, data analytics, privacy and security of data, and standards will become increasingly important for HIM professionals as the transition of data collection moves from a person-centric approach to one that is increasingly electronic and at the point-of-care. An advanced certification in decision support or data analysis is planned by CHIMA; however, confusion regarding the term *decision support* and its meaning in relation to the administrative and clinical databases has caused delays in the business case development.

CHIMA must move forward with this initiative in a timely fashion as the increasing use of the coded data requires a solid understanding of the coding standards, quality challenges inherent in data collection, and how changes over time can affect the interpretation of the data. Given their expertise, the HIM professional should be a member of any decision support team responsible for the collection, utilization, or interpretation of health data.

In Canada, HIM professionals are trained in six core competency areas that include: (a) biomedical sciences; (b) healthcare systems in Canada; (c) health information; (d) information systems and technology; (e) management aspects; and (f) ethics and professional practice (CHIMA, 2010). The HIM skill set covers records management; diagnosis and intervention coding classification; data analysis, interpretation, and presentation; personal health information confidentiality, privacy, and aspects of security; data quality analysis; and electronic health information management. The introduction and rapidly growing implementation of EHIS in Canada has led to a need for an updated skill set that includes knowledge and experience with terminology standards and mapping, privacy and security controls, decision support, and business intelligence.

The HIM learning content is separated into two levels, one that is taught in a diploma program and one in a baccalaureate program. HIM training in Canada continues to be completed predominantly through diploma programs offered at community colleges, institutes of technology, and private post-secondary institutions. In addition to 15 diploma level training programs, one accredited HIM undergraduate program and one affiliated HIM undergraduate degree completion program exist (CHIMA, 2014). As

education regarding management functions is mainly reflected in the undergraduate program content, the majority of HIM professionals in Canada today did not receive management or leadership training within their core program.

To date, no CCHIM accredited Master's or Doctoral level HIM programs exist in Canada. EHealth, Health Information Science, and Health Informatics Master's and Doctoral programs do exist and HIM professionals who seek to advance their education in the HIM area may apply to these programs; however, graduates are not eligible to challenge the CCHIM national certification examination. The Master's and PhD Health Information Sciences program at Western University in Ontario allows for a focus specific to HIM with a certified HIM professional as supervisor (Faculty of Information and Media Studies, n.d.). A pilot project is underway to develop CCHIM-accredited Master's HIM programs at Western University and at the University of Regina. It is anticipated that the earliest these programs would be ready to accept students is September 2017.

In the United States, HIM education leading to a credential is available at the associate degree level for the Registered Health Information Technician (RHIT) and the undergraduate and graduate degree levels for the Registered Health Information Administrator (RHIA). No matter the level of credential, the learning content domains include biomedical sciences, data content structure and standards; health law; informatics, analytics, and data use; revenue management; compliance; and leadership (AHIMA Foundation, 2014). In the American curricula, biomedical sciences are considered a supportive body of knowledge and the individual learning content items are not detailed within the curriculum map.

In Canada, the implementation of the EHR involves cooperation among the federal, provincial, and territorial governments; Canada Health Infoway (Infoway); and healthcare delivery organizations across the various levels of care (Office of the Auditor General of Canada, 2010). Over the past two decades, many governmental agencies have been created to support the implementation and advancement of the EHR including Infoway and provincial eHealth departments such as eHealth Saskatchewan. Infoway is funded by the federal government and is a strategic investor of funds in provincial and territorial eHealth projects (Canada Health Infoway, 2012). EHR implementations, although slow to gather speed during the 1980s and 1990s, have now reached a point where approximately 75% of 653 reporting Canadian hospitals have a minimum installation of the laboratory, pharmacy, and radiology systems (Gibson et al., 2013). The creation of eHealth ministries has opened another avenue for careers for HIM professionals.

The EHR has progressed from siloed systems to the technology of today that includes integrated systems with linkages to evidence-based knowledge databases, decision support systems, and alert systems that flag for potential adverse events such as medication interactions. The common term that describes the entire system of electronic technology in healthcare is electronic health information system (EHIS). The term eHealth is used to describe the intersection of health, public health, and business that involves information and service delivery through the use of health information technology and related products (Gibson et al., 2013).

EHIS implementation has had a dramatic influence on the practice of HIM and on career opportunities for HIM professionals in Canada and the United States. The

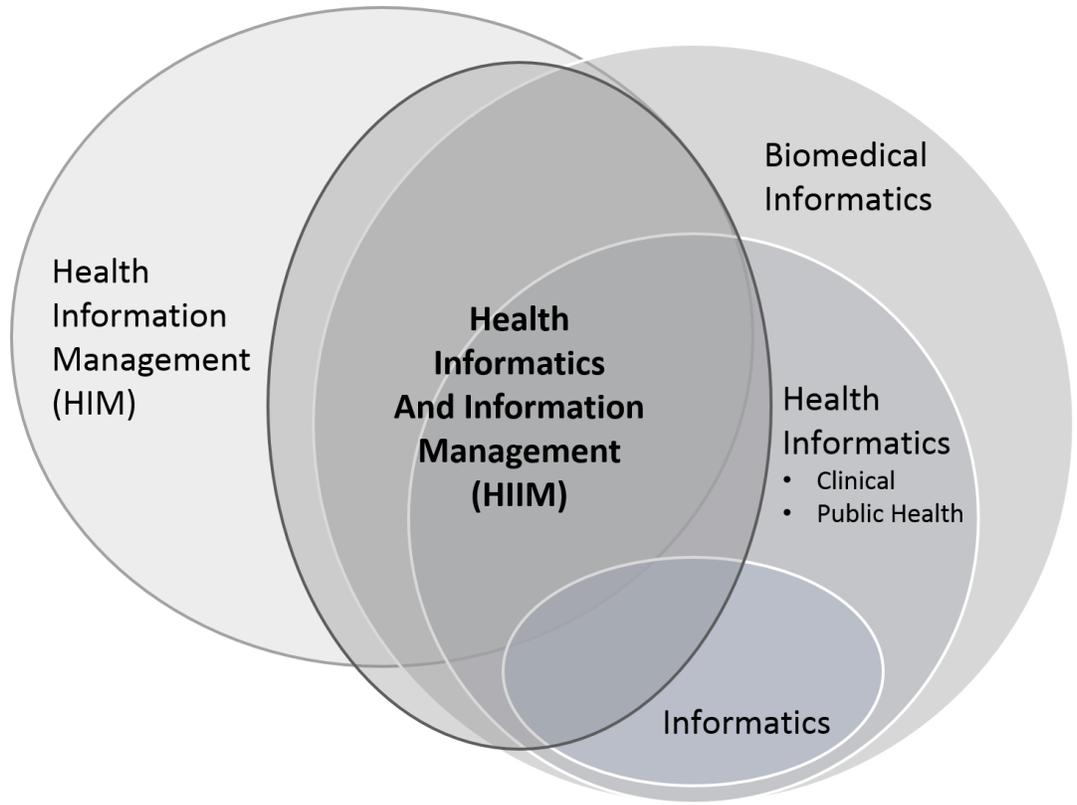
traditional roles of coding classification and records management, including early electronic document management, have expanded to include terminology standards mapping; electronic content management, the process of controlling structured and unstructured data within the EHIS; process improvement engineering; risk management; and information privacy coordination (CHIMA, 2013b). Although career development and skills updating are required to move into these positions, the core HIM education and skill set facilitates this transition. Records management principles are essentially similar across the paper, hybrid, and electronic records; although the complexities introduced by the EHIS add additional educational requirements (e.g., information governance, enterprise information management).

HIM training in diagnosis and intervention coding classification prepares HIM professionals for a smooth transition to terminology standards work. The International Health Standards Development Organization's (IHTSDO) Standard Nomenclature of Medicine – Clinical Terms (SNOMED-CT) is the base clinical terminology selected by Infoway to be the standard for the EHR in Canada and is the common clinical standard adopted throughout the United States (IHTSDO, 2014). A classification system is an organized structure of concepts grouped into categories within a specific domain, whereas a terminology is a collection of concepts and terms that represent specific domains, descriptions, and relationships. The in-depth knowledge the HIM professional has in relation to standards, versioning, mapping, and other aspects of classification management are directly transferrable to terminology management.

The introduction of EHIS into the healthcare arena has also presented challenges for the HIM profession. While health records management, statistical reporting, data

collection, and privacy were the domains of the HIM professionals in the paper record world, the introduction of electronic systems has led to the development of a new profession known as health informatics (HI). Health informatics is considered a subset of biomedical informatics (Kulikowski et al., 2012), and within the Canadian HI association's education and competency document, HIM is considered a central subset of health informatics (COACH, 2012). Figure 2 provides a visual depiction of the inter-relationship of HI, HIM, and the overlap of what is now being called Health Informatics and Information Management (HIIM; Gibson et al., 2015).

Figure 2. Relationship of Informatics and Health Information Management.  
(Gibson, Dixon, & Abrams, 2015).



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While the HI and HIM professions have similar competencies and education content, distinct differences in detail and focus exist. For example, while an HI professional will need to *understand* how and why ICD-10-CA and CCI are used in Canada, an HIM professional would be expected to *use* the classifications systems and CIHI coding standards. Another example of the similarities and differences in HI and HIM relates to the privacy realm. The HI professional may develop and implement the architecture for an electronic healthcare security system, while the HIM professional is concerned with the legislative and regulatory framework of privacy and confidentiality of personal health information (Gibson et al., 2015).

Most, if not all, EHRs in Canada are a combination of paper and electronic documents, which means both systems must be maintained according to the best practice guidelines applicable to each of them. Quantitative and qualitative analysis of the record content is important in both systems to ensure the completeness, accuracy, and timeliness of the information. Quantitative analysis is the assessment of completeness of the record; for example, do all laboratory tests ordered during a patient's visit have a corresponding test result attached to the record? Qualitative analysis is an assessment of the quality and accuracy of the record; for example, has the physician clearly and thoroughly described all diagnoses and complexities relevant to the patient stay? Information technology is only a tool or platform to host the records and cannot evaluate the dimensions of data quality. Managers who come from HI or business backgrounds have eliminated or decreased the quantitative and qualitative analysis of the record in the mistaken belief that the electronic system, with its system checks and edits, will be sufficient to maintain the quality of the record content.

A clearer understanding of the distinct roles of the HI and HIM professions is required to decrease confusion surrounding the two professions and to maintain the integrity of the EHR. Individuals can become certified in HI without any formal HI education (COACH, 2014). Whereas *certified HIM professional* is a protected title, anyone can call themselves an HI professional with or without the credential, and with or without formal HI education. Individuals from a business background hired into healthcare roles routinely call themselves HI professionals and they are increasingly hired into the position of Director of HIM. The roles that would typically have been considered the domain of HIM in the paper and hybrid world (e.g., security of records, records management, data analysis) are increasingly being assumed by HI professionals (e.g., security of electronic record systems, decision support).

In 2008, CHIMA undertook a long-range scenario planning (LRSP) process to contemplate different possible future scenarios involving the HIM profession. LRSP differs from strategic planning in that it is a tool used prior to the strategic planning process to examine alternative future states. These possible future states are then considered during strategic planning and help to drive the final strategic directions (Abrams & Crook, 2011). Prior to this formal LRSP process, a research and publication agenda regarding advanced HIM education and middle to advanced career advancement in Canada had not been established. The same does not hold true in other countries where advanced education, research, and career development initiatives are ongoing. The United States and Australia are examples of two countries that have HIM Master's programs, advanced certifications, career development plans, and peer-reviewed academic journals (Watzlaf et al., 2009; Watson, 2012).

In 2009, a HI and HIM human resource sector study was commissioned by CHIMA, COACH, CIHI, Infoway, the Information Technology Association of Canada – Health, and the Information and Communications Technology Council of Canada, to investigate the necessary human resources and skills development required in Canada (O'Grady, 2009). A follow up study was released in June 2014 (Prism Economics & Analysis, 2014). The 2009 sector study document provided the impetus to more closely examine the current and future state of HIM in Canada and the 2014 study continued to support the HIM drivers for change.

An HIM transition roadmap was developed in 2009 as a first attempt at documenting and clarifying the many pathways for Canadian HIM career progression. Following the creation of the roadmap, an HIM workforce transformation project was initiated. The learning content for the HIM programs was significantly revised to include a stronger focus on EHIS and to more explicitly discuss levels of care outside the acute care arena (CHIMA, 2013b). An HIM career matrix is under development to support the transition roadmap and to provide a graphical representation of the entry, intermediate, advanced, and mastery roles available in HIM. The career matrix will provide direction to those entering the HIM field who seek to learn what opportunities for advancement exist, as well as support career advancement for those already within the field. The inclusion of the advanced/mastery levels will provide evidence of real jobs available to HIM professionals at the senior executive level of health organizations. For those who are in advanced roles that would benefit from HIM training, the matrix will provide information on how and where to acquire the additional skills.

Another workforce transformation project that arose out of the strategic planning process was a major review of the role of the CCHIM. A team of key internal and external stakeholders from across Canada completed an assessment of the current and future role of the college (CHIMA, 2012). The objectives of the “Evolve the College” project were to provide for the future generation of HIM professionals, identify future certification requirements and opportunities, and formalize strategic alliances appropriate to meeting future objectives. The strategy to meet the objectives of the project included a plan to develop strategic alliances with selected national and international organizations essential to the future of HIM, to define certification levels within HIM, to develop the Canadian HIM life cycle and attendant HIM standards, and to create specialty HIM designations. The final report from the Evolve the College committee recommended the development of four priority advanced certifications to support the advancement of the profession. The four specialization areas include decision support, clinical documentation improvement, coding classification, and terminology standards.

The development of a terminology standards advanced certification was identified as the top emerging priority due to the serious shortage of skilled individuals to support EHR implementation across Canada (O'Grady, 2009; Prism Economics & Analysis, 2014). Terminology standards, such as SNOMED CT, are a set of standardized terms or definitions that enable users of an electronic medical record to communicate in an understandable and consistent fashion (IHTSDO, 2014). In the context of the increased use of eHealth solutions using SNOMED CT, new and expanding roles in terminology standards are emerging. Examples of these roles include mapping specialist, data conversion analyst, interface analyst, data modeler, and terminologist. Employers in

Canada need to be able to hire workers with the confidence that they possess the appropriate skill set for the job. Those who seek to advance their careers into terminology standards require the education and skills upgrading to do so, the ability to receive the education in a format that is easily accessible, and the confidence that the program of study is nationally recognized as excellent.

A business need exists in the Canadian healthcare sector to address the current gap of trained and experienced human resources in the use of terminology standards, specifically SNOMED CT, to support the implementation and maintenance of e-health solutions. Investment in health information technologies and the resource skill requirement of adopting these technologies are identified as two key demand drivers in the HI and HIM sector study (O'Grady, 2009). According to O'Grady, the occupational group of HIM Standards was specifically identified as a high priority area requiring growth in terms of numbers of employees and skills broadening. A lack of skilled employees within the terminology roles has delayed the implementation of EHIS across Canada and a formal program of study specifically addressing terminologies is expected to provide a steady stream of skilled individuals. The business case for an advanced certification in terminology standards was approved in early 2014 by the CHIMA Board of Directors and Infoway senior executives. The development of the learning content items required for a Terminology Standards advanced certification is now underway.

Three other advanced certifications are proposed in coding classification, clinical documentation improvement, and decision support. The coding classification certification is expected to provide support, education, and mentorship to new HIM graduates as they enter their first coding position, and to support HIM professionals who

want to return to coding practice following an absence. The increased complexity of the ICD-10-CA/CCI classification systems, along with tighter timelines and deadline penalties imposed by the provincial/territorial Ministries of Health, and the lack of practicum placements for coding practice has resulted in an inability to train a new coder to the level required by acute care facilities in Canada.

Clinical documentation improvement (CDI) certification will expand upon the core HIM skill set and educate individuals to support physicians and other clinicians in their documentation practices. A timely and accurate description of a patient's hospital stay must be recorded to support patient care and to reflect the complexity of the case management (Jamal & Grant, 2014). Health providers are not trained to document care to support the secondary uses of data related to hospital reporting accountability and ABF with the result that the required level of detail is often missing. CDI is an emerging specialty with nurses, other clinicians, and HIM professionals claiming expertise.

The decision support certification will require an initial investigation into what exactly is meant by an HIM decision support role. Decision support systems are used to support administrative and clinical healthcare decisions, and so it may seem incongruous that CHIMA has been tasked with the creation of a decision support certification. Decision support analysis, although used in healthcare to diagnose and determine treatment pathways, also includes data analysis in administrative accountability reporting and in healthcare planning. An HIM decision support certification may encompass some or all of these factors but that has not yet been determined. The HIM professional should be included within the decision support department when that department is tasked with analyzing financial, clinical, and administrative data. A significant barrier to the creation

of the four advanced certifications and the Canadian HIM Lifecycle Standards is the limited resources available. Limited financial and human resources at CHIMA hinder the ability to make progress in these areas of HIM expertise. Without a substantial external source of funding to support the progress that has been made, it is unlikely that these projects will be completed.

### **3.8. Summary**

Many developments and milestones have marked the HIM profession since the 1912 inaugural meeting of the Club of Medical Record Clerks. The period between 1910 and 1930 saw the establishment of the Association of Record Librarians of North America, creating a formal mechanism for HIM professionals to work closely with the American College of Surgeons and the American Hospital Association through participation on high-level policy committees. The development and refinement of international classification systems and nomenclatures created the opportunity for HIM professionals to support data capture, research, and statistical analysis within the hospital setting.

Formal hospital accreditation was introduced during the period of 1931 to 1946. The accreditation records management standards highlighted the importance of clinical documentation and the need for accurate, timely, and complete health records. The first MRL accredited programs and standardized curriculum set out the education and certification required for the MRL to be considered the records management expert and hospital statistician.

During the period of 1947-1970, medical records became useful as a legal tool because of the improved record keeping and records management practices supported by

the experts in medical record science. The many changes to the health delivery system, including the creation of HMRI and the beginning of computerization of medical records, foreshadowed the need for data analysts and leaders in change management. Since most MRL directors were positioned at the senior leadership level and reported directly to the hospital CEO, a skill set that included training in management, business, and leadership was becoming increasingly important.

The need for advanced HIM education was later introduced by the CHRA Aims and Means Committee in 1970; however, the recommendations in the report appear to have been disregarded. The implementation of the Aims and Means report recommendations would have provided HIM professionals with the skill set to participate more fully in the rapid growth of EHR systems, to maintain and increase their leadership capabilities, and to strengthen their statistical and analytical abilities. Instead, it appears that concerns raised by the membership forestalled the implementation of the recommended changes and an opportunity was missed. Had the leadership of the time implemented the Committee's recommendations and continued the association's historical strengthening of HIM education and professional practice, then development of the five academic programs (i.e., certificate technician, diploma MRL I and II, bachelor, Master's, and Doctoral levels) would have been implemented over the next two decades. Compounding this missed opportunity, changes to hospital accreditation standards in 1996 discontinued the requirement that HIM Directors be certified HIM professionals. The new accreditation emphasis on administrative and care-related skill sets rather than a narrowly defined credential (i.e., HRA), had the effect of displacing HIM professionals in favour of others with advanced educational backgrounds. This trend arguably may never

have developed had the Aims and Means Committee recommendations been implemented in the early 1970s. Had the training recommendations been established, HIM professionals would have acquired the education and skills necessary to remain positioned as the most qualified candidates for these key roles.

Many opportunities existed for experienced HIM professionals to step into leadership roles between 1991 and 2005. In 1994, CIHI was created to provide timely information to improve the health of Canadians. Its mandate has continued to mature over the past two decades and CIHI now supports policy development and health system improvement through the storage, retrieval, and use of comprehensive and integrated health information. A national strategy for the electronic health record was also introduced in 1994. The pre-cursor to Canada Health Infoway was conceived based on the recommendations of the Information Highway Advisory Council. Privacy legislation to support the access, use, and protection of personal health information was enacted into provincial legislation in varying degrees during the 1990s and 2000s. These key national initiatives presented numerous new opportunities for HIM professionals that included: a) transitioning from data collection to information analysis and presentation, b) leading electronic health record process changes and workflow improvements, and c) education of senior leadership regarding the importance of information privacy and security.

The CHRA recognized the implications for HIM professionals – given their current diploma level education – and a plan was developed in 1995 to transition to an undergraduate level of entry-to-practice. This direction was consistent with what was occurring in many other health professions during the 1990s. Several health professions increased their entry-to-practice qualification requirements with some moving from a

diploma to an undergraduate degree (e.g., nursing), and others moving from an undergraduate to a Master's degree (e.g., Speech Language Pathologists, Occupational Therapist, Physiotherapists). Master's level degrees in business and health administration for senior health leadership members were also becoming increasingly common. Unfortunately, the implementation of new HIM undergraduate programs did not proceed according to plan; academic institutions were slow to develop and implement these programs within the 10-year timeframe and the decision to move from a diploma to an undergraduate degree entry-to-practice requirement was reversed in 2002. The result of these events was that HIM professionals became increasingly uncompetitive for healthcare leadership roles. The evolution in HIM education that started out so strongly in the 1930s, had now stumbled at its second major hurdle.

HIM practice has progressed from a strictly paper-based records management focus to include information technology, electronic data capture and analysis, privacy and security of personal health information, and HIM standards. The creation of a national association and federal college, with the inclusion of accreditation and certification, have shaped today's HIM professional. Legislative and technological changes have increased the pace with which HIM professionals must transform beyond the core diploma level skill set to stay current and relevant in today's workforce.

The increasing demand for high quality data to support activity based funding, case costing, and population health analyses require professionals with advanced skills and knowledge. Intermediate and advanced HIM roles require advanced education, an increased skill set and work experience, as well as leadership attributes. A focus on career management and career development is increasingly important for the HIM

professional of today to lead new initiatives, create innovation, and stay relevant in today's fast changing electronic world. It is imperative that advanced education become a priority for HIM professional development, as it will open doors to leadership opportunities and move the HIM professional from relative obscurity into decision-making roles.

While opportunities to advance the HIM profession have been missed, many inroads have been made and new initiatives abound. Three advanced certifications for HIM professionals are now under consideration, and one advanced certification learning content document is under development. Two HIM Master's level education pilot projects are currently underway. An advanced standing option for individuals with an undergraduate degree and HIM work-related experience has been introduced by CHIMA, providing an alternate route for professional certification.

It has been 13 years since the CHRA made the decision to maintain the diploma level as the entry-to-practice qualification. With the increasing use of health information, increasing technological change, and the need for senior HIM and advanced level HIM skill sets, it is imperative that the HIM profession thoroughly investigate the options for HIM education and entry-to-practice requirements in Canada. An understanding of the history of the HIM profession should inform future initiatives toward the advanced level of HIM practice required in Canada today and into the future.

## CHAPTER 4: RESEARCH DESIGN

### 4.1. Research Methodology

A mixed methods research design was selected for this investigation. Mixed methods are used when a single method is deemed insufficient to gather the required data, or when the problems under investigation require different methods to answer the questions. The mixed methods research design allows for the use of quantitative and qualitative methodology to obtain the best mix of the strengths of each approach while minimizing their perceived weaknesses (Johnson & Onwuegbuzie, 2004). In other words, a mixed methods research design is a procedure for collecting, analyzing, and ‘mixing’ both quantitative and qualitative data to understand the research problem. Despite frequent disagreements between researchers who prefer quantitative or qualitative approaches, the different methods are on a continuum and can be complementary (DeCuir-Gunby, 2008; Johnson & Onwuegbuzie, 2004). Indeed, the pluralism of mixed methods research often leads to higher quality research relative to using one method only (Johnson & Onwuegbuzie, 2004).

**4.1.1. Mixed methods.** Although there are approximately forty different research designs available in mixed methods research, six major strategies have been identified (Tashakkori & Teddlie, 2003). These strategies are: (a) sequential explanatory, (b) sequential exploratory, (c) sequential transformative, (d) concurrent triangulation, (e) concurrent embedded, and (f) concurrent transformative (Creswell, 2009). Among the strategies, a sequential explanatory mixed methods approach was determined to fit well with the purpose of this study. The sequential explanatory method allows for the mixing of the data wherein initial quantitative results inform the subsequent collection of

qualitative data, making the method popular among researchers of social and behavioral sciences (Creswell, 2009; Ivankova, Creswell, & Stick, 2006; Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2003).

The sequential explanatory strategy is used to explain and interpret quantitative results by collecting and analyzing follow-up qualitative data, but the order does not imply a methodological hierarchy (Creswell, Klassen, Plano Clark, & Smith, 2011). The strategy can be challenging to implement despite being popular among researchers (Ivankova et al., 2006). Decisions must be made regarding the priority of data collection, as well as how and when to connect the two data collection phases. The strengths of the sequential explanatory strategy are that the method is straightforward and facilitates a more detailed examination of the quantitative data. The limitations of the sequential explanatory strategy are that it is time consuming and resource-intensive in that both quantitative and qualitative data must be collected and analyzed.

For this study, quantitative data were gathered to characterize HIM professionals based on demographic characteristics, length of employment, level of education, and categorical opinions related to career development and leadership. Qualitative interview data involving the use of GT were gathered to obtain further information regarding attitudes, underlying assumptions, as well as to elicit recommendations to support HIM professional leadership progression. In addition to characterizing Canadian HIM professionals, an overarching goal of this investigation was to explore the factors that influence the leadership development of HIM professionals and to develop theory to explain the perceived pathways and barriers to HIM leadership advancement. A sequential explanatory mixed methods design was felt to strike a balance between the

relatively efficient collection of quantitative data with the more labour intensive qualitative data gathering and analyses. The quantitative data were gathered to characterize HIM professionals whereas the qualitative interviews were conducted to acquire richer detail concerning both the HIM experience and the perceptions of the HIM profession among senior health leaders.

## **4.2. Research Design**

**4.2.1. Research purpose and questions.** This study was designed to explore the factors that influence leadership development of certified HIM professionals in Canada. Three bodies of literature were reviewed for the study, and they were the HIM organizational environment, societal factors, which included gender issues, and the individual characteristics of HIM professionals.

Four questions were investigated in the study:

1. In what ways do the individual characteristics of HIM professionals influence leadership development?
2. How does gender influence the leadership development of HIM professionals?
3. In what ways do organizational and societal factors influence the leadership development of HIM professionals?
4. What suggestions can participants offer to foster leadership development of HIM professionals?

**4.2.2. Data collection methods and procedures.** A sequential explanatory mixed methods approach was selected for this investigation. The current study was intended to include responses from a broad array of participants. To accomplish this objective, quantitative measures were used first, followed by qualitative interviews,

which were informed by the quantitative data and intended to further explore the factors influencing the leadership development of HIM professionals (Johnson & Onwuegbuzie, 2004).

**4.2.2.1. Quantitative data collection and measures.** Three instruments were used to gather the quantitative data. These measures included: 1) a questionnaire developed by the researcher for the purposes of this investigation (see Appendix A), 2) the HEXACO Personality Inventory-60 item scale (HEXACO-60; Ashton & Lee, 2007; Ashton & Lee, 2009; Lee & Ashton, 2004; see Appendix B), and 3) the Multifactor Leadership Questionnaire 5X (MLQ-5X) for Research (Avolio & Bass, 2004; not appended for copyright reasons). The measures were administered via FluidSurveys™, a web-based survey tool. Web-based data collection has been demonstrated to be a valid approach for questionnaire research (Gosling, Vazire, Srivastava, & John, 2004). Survey completion was expected to take between 30 and 45 minutes in total; therefore, the questionnaire sequence was ordered with the highest priority data in mind in the event that participants only completed part of the survey.

*HIM leadership questionnaire.* The questionnaire for HIM professionals and HIM students was developed by the researcher as no previous data collection tool of this nature existed. Straightforward questions rather than reverse-worded questions were used as increasing evidence suggests that reverse-worded items, rather than addressing response bias, result in respondent inattention and confusion (van Sonderen, Sanderman, & Coyne, 2013). The HIM Leadership Questionnaire (HIM-LQ) consisted of 39 questions for HIM professionals and 29 for HIM students. Question response options were a combination of Yes/No, 5-point Likert Scale, drop-down menu of categories, and

open-ended text responses. Provided response options were created to support standardized data capture, while open-ended responses were included in specific areas to capture information that the researcher may not have been aware of or considered. Information gathered included HIM professionals' demographic data, employment settings, educational backgrounds, views on continuing and advanced education, career aspirations, and the educational backgrounds of students entering the HIM profession. Four individuals who did not belong to the HIM profession trialed the questionnaire to determine the approximate completion time and to ensure that the electronic delivery was error-free. Following that initial testing, two HIM professionals completed the questionnaires and provided feedback regarding comprehension and suitability of the HIM-LQ items.

*HEXACO Personality Inventory 60 item scale (HEXACO-60).* The HEXACO-60 (Ashton & Lee, 2009; Lee & Ashton, 2004) was selected to capture data concerning HIM professionals' personality traits. As reviewed in Chapter 2, leadership traits that make explicit the implicit leadership theory used by researchers are commonly used to describe our experience of others and ourselves, and have been consistently linked to leader emergence and leader effectiveness (Bono & Judge, 2004; McCrae & John, 1992). The HEXACO-60 is a self-report measure that corresponds to the six personality dimensions identified in the HEXACO model (Lee & Ashton, 2004). The dimensions assessed include *Honesty-Humility*, *Emotionality*, *Extraversion*, *Agreeableness* (versus Anger), *Conscientiousness*, and *Openness to experience*.

Each of the six HEXACO-60 personality dimensions has four facets. The facets of Honesty-Humility include *Sincerity*, *Fairness*, *Greed Avoidance*, and *Modesty*.

Emotionality facets are *Fearfulness, Anxiety, Dependence, and Sentimentality*. Extraversion facets include *Social Self-esteem, Social Boldness, Sociability, and Liveliness*. Facets of Agreeableness include *Forgiveness, Gentleness, Flexibility, and Patience*. Conscientiousness facets are *Organization, Diligence, Perfectionism, and Prudence*; and the facets for Openness to experience are *Aesthetic Appreciation, Inquisitiveness, Creativity, and Unconventionality* (Ashton & Lee, 2009; Lee & Ashton, 2004).

Items (e.g., *People sometimes tell me that I am too critical of others*) are endorsed on a Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The HEXACO-60 is psychometrically sound, with good internal consistency in college and community samples ( $\alpha$ s range from .73 to .80), inter-item correlations ranging from .17 to .25, and convergent validity with other measures of personality (Ashton & Lee, 2009). The HEXACO-60 provided information used to identify individual personality characteristics, some of which have been previously linked to leadership attributes and leadership styles (Bass & Bass, 2008; Judge & Bono, 2000; Schyns & Schilling, 2011).

*Multi-factor Leadership Questionnaire 5X (MLQ-5X) for Research*. The MLQ-5X for Research (Avolio & Bass, 2004) is a 45-item questionnaire widely used to assess leadership behaviours associated with transactional, transformational, passive/avoidant, and the full range model of leadership. The MLQ-5X short form self-report (Bass & Avolio, 2004) was used to assess HIM leadership styles. The MLQ assesses leadership styles ranging from less desirable leadership styles (e.g., *laissez faire*) to those considered ideal (e.g., *transformational*), and outcomes of leadership. Items (e.g., *I am absent when needed, I spend time teaching and coaching*) are endorsed on a Likert scale ranging from

0 (*not at all*) to 4 (*frequently, if not always*) (Avolio & Bass, 2004; Lowe et al., 1996).

The MLQ has been demonstrated to be a reliable, valid, and psychometrically sound measure (Avolio & Bass, 2004; Muenjohn & Armstrong, 2008; Hemsworth, Muterera, & Baregheh, 2013).

Twelve constructs are assessed on MLQ-5X scales. Nine of the constructs assess leadership style and three of the constructs measure the outcomes of leadership behaviour. Five key aspects of transformational leadership style are assessed using the MLQ-5X including *Idealized Influence*, whereby leaders inspire trust and confidence and followers identify with the leader and his/her vision. *Idealized influence* is separated into *Attributed*, for influence that is an attribution by followers, versus *Behaviour*, which is behaviour-based. *Inspirational Motivation* is said to describe when a leader articulates an important goal and common understanding of what is right. Positive expectations of what is to be done are provided, how the task is to be completed, and what the result will be. *Intellectual Stimulation* is the ability of the leader to stimulate followers' values and ideas, and to increase their awareness of challenges and identify potential solutions. *Idealized Consideration* is the ability to understand and share in others' concerns and needs, while attempting to develop followers to their full potential. *Contingent Reward* is considered linked with a transactional leadership style. *Management-by-Exception (Active)*, *Management-by-Exception (Passive)*, and *Laissez-faire* leadership styles complete the leadership style measure. *Cascading Effect* is the ability of a leader to reach performance goals, increase productivity, and develop others into transformational leaders. The MLQ-5X measures cascading effect, or the outcome of leadership

behaviours, through the scales of *Extra Effort*, *Effectiveness*, and *Satisfaction*. (Avolio & Bass, 2004).

**4.2.2.2. Qualitative data collection and analysis.** Grounded theory is considered one of the most widely used approaches to qualitative research (Charmaz, 2014; Corbin & Holt, 2005; Glaser, 2007; Higginbottom & Lauridsen, 2014). GT has been described as “the discovery of theory from data” (Glaser & Strauss, 1967, p. 1), as “a *general methodology* for developing theory that is grounded in data systematically gathered and analyzed” (Strauss & Corbin, 1994, p. 273), and as “systematic, yet flexible guidelines for collecting and analyzing qualitative data to construct theories from the data themselves” (Charmaz, 2014, p. 1). GT provides the researcher with the opportunity to produce a hypothesis from the data being reported on, and to interpret and clarify the data in a broad manner. The goal of GT is to create codes, concepts, and categories from data and, through constant comparison, to follow patterns of behaviour to develop theory to explain issues of relevance to those involved (Glaser, 1978; Charmaz, 2014). Glaser and Strauss (1967) posited that when knowledge is found through the gathering of facts, it could be expected to have precision, uniformity, and other characteristics likely to lead to theory that is more useful.

GT follows a rigorous process and is concerned with developing new theories rather than using existing theories to interpret data (Adolph, Hall, & Kruchten, 2011; Charmaz, 2014; Glaser & Strauss, 1967; Strauss & Corbin, 1994). GT was selected for this study to better understand the issues relevant to HIM professionals as well as for its potential to generate theory for HIM. GT appealed to me because limited theory exists on HIM-related leadership and career progression, and GT facilitates the development of

substantive theory to explain participant behaviour through hypothesis creation (Adolph et al., 2011, p. 490). It was reasoned that a GT approach would facilitate the development of theory to explain factors that influence the leadership development of HIM professionals.

Very few HIM professionals attain senior health leadership positions, a fact which suggests the existence of factors limiting their advancement into these roles. One objective of the health leader interviews was to learn how their career trajectories differed from the paths taken by HIM professionals. It was anticipated that this information would highlight possible factors that currently limit HIM leadership advancement.

GT appears impenetrable and confusing to many, myself included (Adolph et al., 2011; Breckenridge, 2009; Charmaz, 2008; Draucker, Martsolf, Ross, & Rusk, 2007). It was difficult to come to terms with the many discrepancies, not only among the three main GT schools, but also within the schools themselves. Although there are other second-generation grounded theorists, for example, Richards and Morse (2007) who advocate dimensional analysis and situational analysis, the following discussion is limited to what many consider the three main GT schools. Contradictions abound in the literature (Bryant & Charmaz, 2007; Charmaz, 2014; Corbin & Strauss, 2008; Glaser, 1998; Glaser, 2014; Glaser & Strauss, 1967; Strauss & Corbin, 1990) and my decision on which GT school to use was based upon the epistemological stance of the GT School rather than an interpretation of the actual methods.

Glaserian GT, often referred to as Classic GT, is based on the seminal text written by Glaser and Strauss (1967). Classic GT consists of a cyclical, constant comparative approach whereby data are collected, for example, by interview; the data are coded; and

analysis occurs by a constant comparison of interview cases, and to the theoretical categories created from the coding (Hood, 2007). As theoretical categories emerge, theoretical sampling is undertaken. Pre-conceived ideas are not forced onto the coding and analysis of the data (Glaser, 2015; Hood, 2007). Sampling size is determined by category saturation and is not concerned with numbers of participants, geographic or other types of representation, or generalizability. The researcher must be "sufficiently theoretically sensitive" (Glaser & Strauss, 1967, p.46) to develop theory from the emerging data. Glaser considers that the researcher can bring to the research his or her experience, personality, and temperament, and he operates from a post-positivist critical realist perspective (Annells, 1997; Bryant & Charmaz, 2007; Charmaz, 2000; MacDonald & Schreiber, 2001). The post-positivist critical realist stance posits that, while facts exist in the world whether or not we discover them, human observation is fallible, and therefore, all theory is alterable (Baggini & Fosl, 2003, p. 164; Trochim, W. M. K., 2006). While I am sympathetic to many of Glaser's ideas regarding GT, a post-positivist approach does not resonate with me as I disagree with the philosophy that a researcher can conduct GT without imposing their own construction of meaning onto the interpretation and conceptualization of the data.

Strauss and Corbin (1990, 1998; Corbin & Strauss, 2008) modified Classic GT by introducing axial coding, and taking a deduction and verification stance. Strauss and Corbin conduct GT from a relativist perspective (1998; Corbin & Strauss, 2008); the philosophical viewpoint that thought, experience, or a person's viewpoint is relative to or dependent upon something else (Swoyer, 2014). A relativistic viewpoint fits with Strauss and Corbin's (1990, 1998) method of deduction and verification used in their

interpretation of GT. Deduction is based on the philosophy that if the principle or argument is true, then the conclusion reached must also be true (Baggini & Fosl, 2003, p. 6). Verification is the process of confirming what is true through direct perception (DeGroot, 2015) which I consider problematic, as it is impossible to empirically verify everything.

Charmaz's GT method is similar to Classic GT in that she employs similar processes in coding, constant comparison, memo writing, theoretical sampling, and the use of induction when completing initial coding (Charmaz, 2014). In GT, induction is the process of conceptual category formation created through extrapolation of patterns taken from a variety of individual cases or data sets. The main and important difference between the approaches of Glaser and Charmaz is that Charmaz advocates a constructivist approach to GT. Constructivism is the epistemological stance that representations are socially constructed and the entities themselves to which these representations refer are socially constructed (Goldman, 2010, para. 24). Basically, we construct our interpretation of the world through our beliefs. Charmaz (2014) chose to call her perspective "...'constructivist' to acknowledge subjectivity and the researcher's involvement in the construction and interpretation of data" (p. 14). My philosophical stance aligns most closely with Charmaz in that I believe that I bring everything I have learned, and I am learning, to the process of GT, including my experience and familiarity with HIM and it would be impossible for me to separate myself from data interpretation.

As I delved deeper into the three most common approaches of GT (i.e., Glaser [Classic GT], Strauss and Corbin, and Charmaz), the contradictions in the literature provoked increasing anxiety and confusion over which path to choose. Ultimately, the

choice came down to my comfort with the constructivist epistemological stance and my understanding of the similarities, differences, and characteristics of each approach (see Table 1). Glaser (2014) speaks to overcoming doubts about one's ability to do GT and so I decided to stop further readings at this point, take his advice, and "just do it" (p. 19).

Table 1. Comparison of the Three Common GT Schools

	<b>Glaser (Classic Grounded Theory)</b>	<b>Strauss and Corbin</b>	<b>Charmaz</b>
<b>Main Principles</b>	Induction (Glaser, 1998). Theory emerges from the data (Bryant & Charmaz, 2007; Cooney, 2010; Glaser, 1998; Glaser & Strauss, 1967). Alternatively called a positivist (Bryant & Charmaz, 2007), post-positivist (Bryant & Charmaz, 2007; Charmaz, 2000), or realist stance (Anells, 1997; MacDonald & Schreiber, 2001)	Deduction & verification (Bryant & Charmaz, 2007; Corbin & Strauss, 2008; Heath & Cowley, 2004;). Theory emerges from data and researcher interpretation of data (Cooney, 2010). Alternatively called a post positivist (Charmaz, 2000) or relativist stance (Bryant & Charmaz, 2007).	Construction (Charmaz, 2014). Theory emerges with "the researcher's involvement in the construction and interpretation of data..." (Charmaz, 2014, p. 14). Called a constructivist stance (Charmaz, 2014; Glaser, 1998).
<b>Coding</b>	Concept/indicator coding Categorization Theoretical sampling	Open coding Axial coding Selective coding Theoretical sampling	Initial coding Focused coding Categorization Theoretical sampling
<b>Similarities</b>	Theoretical sampling Memo writing Constant comparison	Theoretical sampling Memo writing Constant comparison	Theoretical sampling Memo writing Constant comparison
<b>Major Differences</b>	Theory emergences from data, all is data - critical realist perspective (Heath & Cowley, 2004)	Researcher and research co-create theory - relativist perspective (Strauss & Corbin, 1998)	Theory constructed by researcher from data - constructivist perspective (Cooney, 2010)

My decision to use Charmaz's (2014) GT approach was made for the following reasons. The approach taken by Charmaz produces a theory based on all data and uses a straightforward (to me), inductive approach. I want the data to speak for itself as much as possible, to trust in the emergence of the categories, and not to purposefully interpose myself into the interpretation of the interview data; at the same time, I must remain mindful that I am intimately involved in the research topic and so will interpret data according to my own embeddedness. A review of my memos written over the course of this project confirms my changing thoughts, increasing uncertainty, and finally a letting go of my preconceived ideas. The memos have been used throughout the qualitative data collection and analysis phase of the research and the Charmazian approach encourages the consideration and inclusion of my thoughts and interpretation through memoing, constant comparison, and the belief that *all* truly is data. I appreciate the Classic GT inductive approach that Glaser (1978, 1998, 2007) advocates and Charmaz utilizes a similar approach. The following paragraph is taken from the memos I kept during my research and illustrates my internal struggle and final decision over my choice of GT approach.

*March 1, 2015: I am not sure why I have been trying to force myself into a positivist head space when I am definitely a constructivist. Interesting that I didn't see this before. I have been directed to investigate the two methods - Glaserian versus Charmazian – but did that literally by examining each step of the process rather than looking at the epistemological stance behind each. Without thoroughly investigating and analyzing my epistemological stance - my world view - I couldn't move forward. I started to investigate just what the epistemological differences between Glaser, Strauss,*

*and Charmaz were and from there realized that it was crazy to squeeze myself into a model that didn't fit my beliefs. Once I had that understanding, I was able to see more clearly that the Glaser and Charmaz processes are similar, but with the constructivist stance advocated by Charmaz, I am able to marry my beliefs with my preferred method.*

At times, my inexperience with GT seemed to get in the way of my ability to move forward with my research and I was concerned that I had taken on too complex a research approach. I was comforted and encouraged by Glaser's words as he states that neophytes are perfectly capable of completing GT despite "minus mentoring" (1998, p. 5). Minus mentoring is the lack of a mentor with knowledge and experience in GT. Glaser considers that for a large part of the GT process "other people are not needed" (p. 6) and, in fact, can get in the way.

GT is not a qualitative method, *per se*; rather it is the approach I have adopted to analyze the qualitative interview data. Quantitative data gathered during the initial phase of this project has influenced the creation and direction of my interview questions and my categorization. I was reassured by Glaser's statement that, "grounded theory requires a tolerance for feeling out of control" (1998, p. 11), as I certainly did feel out of control on many occasions during the process.

**4.2.2.3. University of Regina ethics approval process.** Prior to proceeding with data collection, Research Ethics approval was obtained. Please see Appendix C for documentation of Research Ethics Board Certificate Approval.

**4.2.2.4. Participant recruitment.** Study participants for the quantitative data collection were recruited from CHIMA-certified HIM professionals and students currently registered in CHIMA accredited HIM programs. CHIMA has a research

mandate and cooperates in similar fashion with other researchers. The quantitative data were intended, in part, to characterize the current population of HIM professionals and HIM students. Accordingly, an invitation to participate was sent to all certified HIM professionals and HIM students registered in the CHIMA database (see Appendix D). The HIM profession is relatively small in Canada with 4291 certified HIM professionals as of July 2014, and approximately 675 HIM students as of September 2014. The exact number of HIM students cannot be determined as membership numbers fluctuate, particularly in September when most HIM programs begin.

The web-based survey began with an introductory page describing the research and explaining the role of the participants, potential benefits of the research, potential risks, and provisions to ensure confidentiality. Details of ethics approval and contact information for both the University of Regina Research Ethics Board and the research investigator and the research supervisor were provided. Participants were informed that their consent was implied by their continued participation (Appendix E). As the survey was both confidential and anonymous, withdrawal from the study following provision of responses was not available; however, the participants could discontinue the questionnaire series at any time.

The invitation to participate in the quantitative data collection for the study was circulated via three emails to the CHIMA membership sent on July 22, August 12, and September 9, 2014. The second and third invitations elicited a smaller number of responses and by the last two weeks that the survey was open, responses had dropped to less than one per day. The survey was made available starting July 18, 2014, and was closed on October 2, 2014.

Certified HIM professionals or current health leaders were all eligible to participate in the semi-structured interviews that were the qualitative data collection tools for the current study. The invitation for HIM professionals to participate in the qualitative data collection for the study was circulated via CHIMA to all certified HIM professionals in the membership database. The invitation for current health leaders to participate was sent to the Canadian College of Health Leaders (CCHL) and COACH: Canada's Health Informatics Association. CCHL posted the invitation on their website and advertised the invitation via their blog newsletter. COACH circulated the invitation via their COACH *Connection* e-newsletter, and by posting the information on their website and in their members-only section.

The invitations included a copy of the consent form describing the research and explained the role of the participants, the potential benefits, potential risks, procedures to ensure confidentiality, and the right to withdraw from the study. Details of ethics approval and contact information for the University of Regina Research Ethics Board, the research investigator, and the research supervisor were provided. Finally, participants were asked to indicate their consent to undertake the study (Appendix F). If they declined to provide consent, an interview was not scheduled.

The decision to include HIM professionals from across Canada was based on a number of factors. Given the provincial differences in HIM legislation, professional responsibilities, union environments, funding formulae, and wage rates, the inclusion of participants from across Canada provided access to a broader experience within the HIM profession. The interviewing of HIM professionals from across Canada was expected to enable the capture of nuances that may exist among the various health jurisdictions in

Canada. The only requirement for participation in the interview for the HIM professional is that the person was currently certified and working in the HIM field in Canada. The intent of the research was to gather information based on experience working in health and HIM in Canada; therefore, HIM students were not considered to have enough experience to participate in interviews for the study. HIM professionals in senior health leadership positions would be interviewed as HIM professionals rather than health leaders because their knowledge of HIM was prioritized over their broader knowledge of health leadership.

For the health leader group, selection criteria included that they must be currently working in a leadership position in a health-related setting in Canada. For the purposes of this study, a health leader was defined as a person working in a position of senior decision-making authority in a health-related setting. Eligibility to participate in the interview was based on their job title, position on the organizational structure, and their decision-making responsibilities.

**4.2.2.5. Quantitative analyses.** Data analysis for the quantitative measures was completed using the Statistical Package for the Social Sciences version 20 (SPSS), a data analytics software package. Descriptive statistics are reported for the total sample including means, standard deviations, skew, and internal consistencies (i.e., scale alphas where applicable).

**Sample characteristics.** The final sample consisted of 431 individuals including 381 certified HIM professional participants (93.7% female) and 50 HIM students (80% female). There were 110 participants who began the questionnaires but did not continue. Three participants were excluded from the sample as they indicated they were residing in

the United States and, therefore, did not meet the criteria of working in Canada. Excluded questionnaires were removed from the database prior to data analysis.

Sex differences. A series of independent *t*-tests were conducted to assess for possible sex differences in mean scores on MLQ-5X and HEXACO-60 subscale scores. Women reported statistically significantly higher scores on the HEXACO-60 *Emotionality* subscale,  $t(1, 376) = 2.419, p = .016, M$  difference = .247,  $r^2 = .02$ . In contrast, but consistent with the findings of Eagly and colleagues (2003), men reported higher scores on the *MLQ-5X Management-by-Exception: Active* subscale,  $t(1, 352) = 2.064, p = .04, M$  difference = .354,  $r^2 = .01$ . No other statistically significant differences between women and men were found on any of the other MLQ and HEXACO-60 self-reported scores (i.e., all  $ps > .05, r^2s < .01$ ).

Analyses of variance (ANOVAs) were performed to assess for statistically significant and substantive differences among HEXACO and MLQ subscales based on sex, age categories, and length of time in field. All other comparisons were found to be statistically non-significant (i.e., all  $ps > .05$ ). The effect sizes were considered negligible and the sexes were collapsed together for all subsequent analyses. Correlational analyses were conducted to determine if there are statistically significant associations among HIM professionals' attitudes toward leadership, continuing education, career advancement, and their HEXACO-60 personality characteristics.

**4.2.2.6. Qualitative analyses.** Participant interviews were conducted via telephone and were recorded using a digital recorder.

*Sample characteristics.* Fourteen HIM professionals were interviewed beginning on January 19, 2015, and concluding on April 22, 2015 (Appendix G). The HIM

professional interview participants represented HIM practice in coding into the CIHI DAD and NACRS databases, management of HIM-related departments, decision support and business intelligence, and privacy. They worked in acute care, community care, government, and national organizations. The HIM professional years of practice ranged from three years to over 45 years. Initial HIM education included one-year certificate programs (5 participants), two-year diploma programs (7 participants), and undergraduate degrees (2 participants). Education post-HIM certification included one diploma, one undergraduate degree, two participants were currently enrolled in undergraduate programs, one participant was enrolled in a professional certification program, and two participants had completed Master's degrees. The HIM professionals interviewed were located in BC (2 person), AB (1), SK (1), MB (1), ON (7), NS (1), and NB (1). Sixty-seven HIM professionals responded to the invitation to participate in interviews, 17 people were approached to complete consent forms; three of the participants chose not to participate following initial contact.

Seven health leaders were interviewed beginning on March 22, 2015, and concluding on June 30, 2015. The health leaders were from BC (1), ON (5), and the Atlantic provinces (1). The health leaders worked in acute care, government, consulting company, national organizations, and public health agencies; and length of practice ranged from 15 years to 42 years. Five of the health leaders had Master's degrees, and two of these were registered nurses. Two health leaders had an undergraduate degree; both health leaders with undergraduate degrees held specialty certifications and one had a post-graduate diploma.

For the health leaders, all interested participants completed the consent forms and participated in the interviews. Four health leaders responded to the call for participation and three health leaders were recruited based on their positions and their experience working with HIM professionals. In GT, it is not the number of participants that is important, rather the number of interviews is determined by the amount of data required to reach saturation (Charmaz, 2014; Glaser & Strauss, 1967). As no new categories emerged during the final interviews of HIM professionals and health leaders, it was concluded that saturation had been reached.

*Interviews.* The interviews were conducted via telephone and audio-recorded using an Olympus Digital Voice Recorder. Audio files were transcribed using a transcription company, Rev.com. Rev.com securely stores and transmits audio files and transcripts using 128-bit SSL encryption, the highest level of security available. Rev.com assures clients that they will never share the files or personal information. A confidentiality agreement from Rev.com was requested, signed, and received prior to the submission of any recordings. Files were visible only to the transcription professionals assigned to the file, all of whom have signed strict confidentiality agreements. Demographic and identifying data were collected prior to the start of the recording and no names were used once the recording was underway. Upon completion of transcription, all audio files were destroyed by Rev.com upon my written request.

Transcripts were reviewed for accuracy and then sent to the participants for confirmation and final approval. Three audio files were unable to be transcribed due to poor quality recording or interviewee accent. Permission was requested of the interviewees to use the audio file and permission was received. The audio files were then

coded accordingly. Consistent with GT, data collection and analysis occurred concurrently.

While I have chosen to follow a social constructivist approach, readings from all three schools have informed my work. For example, my first interview included the question: "How do you think issues of gender influence the profession?" Upon further reading, I discovered the admonition, "To ask what is the influence of gender or social class on a phenomenon is forcing" (Glaser, 1998, p. 84). Although I do not completely agree with Glaser's view on this point, I decided to wait until the end of the interviews prior to introducing the question of gender, and only to raise the question if the participants had not raised the issue themselves.

To illustrate, when I reviewed the transcript from my first interview, I realized that the direct question had not been necessary. In the early part of the interview, HIM#1 had stated that early career goals and continuing education were not a priority for her as, at that time, she was about to become a single parent solely responsible for two young children. The statement regarding single and sole parenthood is gender-related in and of itself. At the time single parenthood was introduced into the discussion, I might have asked for further clarification regarding how she felt her role as a single parent had influenced her ability to pursue her education and career plans. Had I sought clarification at the time, my later question regarding gender, although it elicited further dialogue regarding limitations to continuing education and career advancement, would not have been necessary and gender as a concept would have arisen naturally in the conversation. My interview skills improved over the course of my study. In my first interview, I gathered less information than I had hoped. As my interview skills improved, the

interactions became richer and I followed the trail of inquiry indicated by the interviewee responses.

The interviews were semi-structured and the interview guides (Appendix H and I) were constructed based on my supervisor's recommendations and they were informed by the quantitative data. The interview was composed of main questions and follow-up questions to explore more fully the meaning behind the responses. The same basic interview questionnaire was implemented with each participant group; however, each interview differed according to the lines of inquiry followed. Consistent with theoretical sampling (Charmaz, 2014; Corbin & Strauss, 2008), each interview was also slightly different in that certain questions became more focused as categories were further developed. Theoretical sampling is critical to theoretical saturation (Charmaz, 2014; Glaser, 1978). Data gathering and specific questions grew more purposeful as a result, and interviews taking place later had slightly richer and fuller descriptions (Glaser, 1998).

The HIM interviewees were selected initially on a first-come, first-selected model. As the interviews progressed, I selected interviewees based on location by province to determine if any different issues would arise based on location, and then job title. Once the themes started to arise, I moved into theoretical sampling. The health leader interviews were used to move into theoretical sampling to further develop the emerging theory. The purpose in moving from HIM professionals to health leaders was to determine if gaps in the emerging theory could be addressed from perspectives outside of the HIM profession.

*Coding and categorization.* Preliminary coding was completed on the first interview. I initially tried to code using gerund codes; however, the coding style did not

fit with the discussion. Rather, I felt that I was forcing the data and not capturing the fundamental nature of the dialogue. I then coded using *in vivo* codes to capture as closely as possible what the participant was saying. I found that by using *in vivo* codes, I was able to better grasp the essence of the conversation and immerse myself in the data. One transcript was coded and categorized by an individual experienced in qualitative research but uninvolved in this project to assess the correspondence of identified codes. As noted earlier, the transcripts contained no identifying information. Strong inter-rater consistency was found between the codes and categories identified.

Line-by-line coding was initially used; however, the data did not always support this coding approach. I then used a combination of line-by-line coding where multiple codes arose within a section of discussion and incident-by-incident coding where they did not (Charmaz, 2014, p. 124). I decided against word-by-word coding as I felt it did not work for the type of research I was completing; for example, I was not using a phenomenological approach nor was I concerned about the structure, flow, or imagery captured by temporary writings (Saldaña, 2013). As the style of coding changed, earlier transcripts were re-coded to maintain consistency. During coding, constant comparison was made among the interview data, the codes and categories or themes that arose, and memos. Following the coding of the second interview, data analysis was initiated. The codes were organized into meaningful groups and a thematic label that reflected their common, defining feature was assigned to each group. This process was repeated for each interview. General categories such as *education* and *perceptions* initially arose.

To continue the categorization process, I cut the codes up into individual pieces of paper and placed them into general categories, adding more categories as necessary. As

the codes were now individual pieces of paper and not linked to any specific question or discussion, I was curious to see if the discovered categories or themes would be different compared to when I categorized them within their context. Similar categories arose; however, they began to take on a deeper meaning. As categories were developed, I returned to the interviews and transcripts to confirm and constantly compare them to the codes, memos, and concepts. No code or category was unique to one data source suggesting a common experience.

As the data were analyzed and some codes began to appear more frequently than others (e.g., limited ability to continue education due to family obligations, frustration with invisibility of the profession, personality characteristics of HIM professionals) focused coding was initiated (Charmaz, 2014). As Charmaz (2014) describes, focused coding "condenses and sharpens what you have already done because it highlights what you find to be important in your emerging analysis" (p. 138). The focused coding was used to produce larger data segments and identify patterns as they arose.

As I continued reading Charmaz (2014) to support my coding, categorization, constant comparison, and theming, I came across the following sentence: "Delineating links between views and actions is one way of sharpening your ideas" (p. 212). I found the statement interesting in that my participants' words and perspectives frequently differed. For example, some interviewees maintained that being a female-dominated profession was not an issue because HIM professionals work in health care, which is female-dominated. During the same interview where these statements were made, comments would arise about men rising further and faster in their careers than women, men not wanting to code and wanting to go on to "bigger and better", and women taking

time out to have children, which ultimately affected their ability or desire to progress in their career. The apparent differences in views and action led to a decision to re-assess all codes and categories by interview group rather than by considering the codes and categories as a cohesive whole.

*Theoretical saturation.* As I moved further into theoretical sampling, I arranged all the codes from the HIM professional and health leader interviews into two columns to assess ways the perspectives differed. Although the themes were similar, the divergences in attitude were marked when viewed side-by-side. According to Glaser and Strauss (1967), an individual can increase the generalizability and explanatory power of the categories “by comparing where the facts are similar or different” (p. 24).

In the final stage of analysis, I reviewed all data once again and asked myself questions. What is the participant talking about and does it fit into the category? Does the theory account for the category? Does the data relate to the study questions or is the participant talking about something different? Does the theory fit and does the theory work? At this point, no new codes, categories, or themes arose.

*Rigour.* The "validity of an interpretation is always in relation to some person, and criteria for assessing validity depend on who that person is (e.g., reader, investigator, research participant)" (Stiles, 1999). Sample size in GT is not based on representation of a larger population but rather on the quality of the sample and the data derived from that sample (Charmaz, 2014; Glaser & Strauss, 1967). Composition of the sample is informed by the emerging theory. To maintain rigour and as outlined by Stiles, I have clearly stated the research questions, justified the selection of research participants and tools, and described the methods for gathering and analyzing data.

Qualitative research is considered "to have an especially rich heritage in the quality stakes" although it appears there is no consistent answer as to what constitutes quality and how it might be gauged (Emden & Sandelowski, 1998, p. 206). When discussing reliability and validity of qualitative research in general and GT in particular, the concepts are considered epistemologically different. Constant comparative analysis is vitally important for rigour in GT (Bowen, 2008). As well, by using the participants own words as much as possible when coding, I sought to guard against forcing my own view on the data.

Throughout the research project, I have described my decision-making processes and, where relevant, I have included that discussion in the study. I have acknowledged that my role as a certified HIM professional affected data collection as my viewpoint comes from that perspective and some participants identified me in my professional role versus my student role. Some of the comments provided in both the quantitative and qualitative phases of the study, particularly around education and the visibility of the profession, may have been provided with the intent of speaking to the national association versus speaking to me as a researcher. Does this perspective make the data less relevant? I do not believe so and, in fact, it may contribute to the validity of the data if the participants perceived that the information provided might lead to action.

Consultation was held with a colleague who has experience in qualitative analysis to offer input regarding the accuracy of the themes. For example, the subtheme *education* was originally an independent theme; however, after consultation with colleagues, it was subsumed under the theme *career lifecycle*. Education was viewed from three perspectives: a) entry or initial HIM education, b) continuing education to

support practice, and c) advanced education to support career advancement. Similarly, *career pathway* and *career development* as separate themes were subsumed under *career lifecycle*. After consultation with another independent researcher and a participant, and upon incorporation of feedback, the themes were finalized. Following the feedback, a theory was conceptualized and constructed to explain the interrelationships among the themes.

In this chapter I have outlined the methodology and research design of this study. I have provided rationale for research decisions beginning with selection of research methodology, defending the choice of GT approach, and describing data collection and analysis. I have worked to situate myself, as the researcher, in the study. The next chapter presents the results of the study.

## CHAPTER 5: RESULTS

### 5.1. Research Purpose and Questions

This research was designed to explore the factors that influence the leadership development of certified HIM professionals in Canada. Four broad areas were examined including 1) the HIM organizational environment, 2) gender issues, 3) societal factors and 4) the individual characteristics of HIM professionals. In addition, four questions were investigated in the study, namely:

1. In what ways do individual characteristics of HIM professionals influence leadership development?
2. How does gender influence the leadership development of HIM professionals?
3. In what ways do organizational and societal factors influence the leadership development of HIM professionals?
4. What suggestions can participants offer to foster leadership development of HIM professionals?

### 5.2. Quantitative Results

As data for the study were collected in two separate or distinct phases, the findings of the quantitative data are presented first, followed by the findings of the qualitative data. Data from the quantitative and qualitative phases of the study are then combined in the discussion of the findings of the study.

**5.2.1. Participants.** The participant sample comprised 431 participants including 381 certified HIM professionals (93.7% women) and 50 HIM students (80.0% women). Details of the participant age range could not be determined as age was requested via groupings of five-year periods. Broadly speaking, participant ages ranged from the first

age grouping of 18 to 24 years of age (i.e., younger professionals and students) to persons 65 years and over. Age ranges are commonly queried in this manner when exact age is not required (Bailey, 1994). Data regarding ethnic background were not gathered.

Participants reported they were married/cohabitating (71.0%), single (15.8%), divorced/separated (11.4%), or widowed (1.9%). More than a third of participants (i.e., 39.7%) reported being a primary caregiver to a child, disabled adult child, or elderly parent (40.7% of HIM professionals; 32.0% of HIM students). Among respondents, 47 (46 F/1 M) indicated they were the primary caregiver for a young child (0-5 years); 120 (115 F/5M) for an older child/adolescent (6-17 years); 3 (3 F) were caring for a disabled adult child; and 29 (29 F) were caring for an elderly parent; 259 (230 F/29 M) indicated they were not a primary caregiver.

Participants reported work settings that included acute care (60.1%), cancer care (7.6%), community care (3.7%), Government/Ministry (6.0%), chronic care (1.0%), population health (1.6%), vendor (0.8%), residential care (1.0%), CIHI (1.8%), mental or forensic health (2.9%), regional/local health information network (LHIN) settings (3.4%), an academic setting (3.4%), or other (6.0%). The employment category *Other* was a free-fill format and example responses included: Veterinarian's office, self-employed, police, consultant, Telemedicine, pharmaceutical industry, physician's office, and research. Most participants reported working full-time (82.9%) or part-time (12.3%), with fewer participants working on a casual basis (2.1%), being retired (1.6%), or currently on disability leave (0.3%).

The participants' province of residence is provided in Table 2 below. The HIM professionals' current job title or area of specialization is described in Table 3. Table 4

provides data regarding the number of years participants have worked in the HIM profession.

Table 2. HIM Participants by Province or Territory.

<b>Province</b>	<b>HIM Professionals</b>	<b>HIM Students</b>	<b>Total</b>
AB	56 (14.7%)	7 (14.0%)	<b>63 (14.6%)</b>
BC	38 (10.0%)	4 (8.0%)	<b>42 (9.7%)</b>
MB	22 (5.8%)	3 (6.0%)	<b>25 (5.8%)</b>
NB	14 (3.7%)	3 (6.0%)	<b>17 (3.9%)</b>
NL	10 (2.6%)	1 (2.0%)	<b>11 (2.6%)</b>
NS	22 (5.8%)	5 (10.0%)	<b>27 (6.3%)</b>
NT	3 (0.8%)	0	<b>3 (0.8%)</b>
NV	0	0	<b>0</b>
ON	155 (40.7%)	20 (40.0%)	<b>175 (40.6%)</b>
PE	3 (0.8%)	0	<b>3 (0.8%)</b>
QC	7 (1.8%)	4 (8.0%)	<b>11 (2.6%)</b>
SK	51 (13.4%)	3 (6.0%)	<b>54 (12.5%)</b>
YK	0	0	<b>0</b>
<b>Total</b>	<b>381 (88.4%)</b>	<b>50 (11.6%)</b>	<b>431 (100%)</b>

*Note:* AB = Alberta; BC = British Columbia; MB = Manitoba; NB = New Brunswick; NL = Newfoundland; NS = Nova Scotia; NT = Northwest Territories; NV = Nunavut; ON = Ontario; PE = Prince Edward Island; QC; Quebec; SK = Saskatchewan; YK = Yukon

Table 3. HIM Professionals Reported Current Job Title or Area of Specialization.

<b>Job Title</b>	<b>Frequency</b>	<b>%</b>
Coding specialist	89	23.4
Manager/coordinator	74	19.4
Data analyst	38	9.9
Other	38	9.9
Director*	25	6.5
HIM generalist	25	6.5
Supervisor/team lead	19	5.0
ROI specialist	14	3.7
Not working in HIM†	13	3.4
Decision support analyst	12	3.1
Education	12	3.1
Research	10	2.6
Business analyst	7	1.8
Executive level	4	1.0
Terminology standards	1	0.3
<b>Total</b>	<b>381</b>	<b>100</b>

*Note.* \* 4 Directors were also Privacy Officers. These respondents were categorized as Directors; † e.g., administrative assistants, laboratory technologists, transcription, nursing.

Table 4. Reported Number of Years Working in HIM Field.

<b>Years in HIM field</b>	<b>Frequency</b>	<b>%</b>
< 1	17	4.0
1-4	56	13.0
5-9	59	13.7
10-14	42	9.8
15-19	49	11.4
20-24	43	10.0
25-29	51	11.9
30-34	27	6.3
35-39	24	5.6
40-44	10	2.3
45-49	2	0.5
≥ 50	1	0.2
Total	381	88.6

*Note.* Cumulative percentage does not sum to 100% as HIM students were not included in these frequency data.

**5.2.2. Education.** Almost two thirds of participants reported completing some form of post-secondary education prior to entering the HIM profession (74.2%), with close to one fifth reporting a minimum of a baccalaureate degree (15.7% of certified HIM professionals; 44.0% of HIM students; 19.5% overall). With respect to initial HIM education, 30.7% reported earning a certificate, 65.9% a diploma, and 2.1% an undergraduate or Master's Degree in HIM. Over half of respondents (58.6%) reported they were not planning to complete further education within the next five years; however, 39.8% of these respondents had already completed some form of formal education post-HIM certification. A majority of HIM participants agreed or strongly agreed that continuing education was important to their professional development (91.6%) and career advancement (79.4%). A comparatively much smaller proportion of the sample (6.7%) agreed or strongly agreed that continuing education was not important to their professional development or career advancement.

**5.2.3. Organizational factors.** Union affiliation for HIM professionals included such diverse groups as health professional unions, clerical unions, United Food and Commercial Workers, Teamsters, and teaching unions. The majority of respondents identified as being located in a health profession's union (26.4%), a non-unionized environment (22.1%), or out-of-scope (19.0%). Out-of-scope employees were employed in management level positions.

When asked if their job description accurately reflected their current role and responsibility level, 78.9% agreed that it did. Of those that agreed their job description accurately reflected their current role and responsibility level, 25.0% reported feeling that they were underemployed (not utilizing their full skill set/knowledge); 69.3 % reported

that they were employed at the appropriate level for their skill/education level, and 13.3% reported that they were challenged beyond their current skill level. For those 21.1% that reported that their job description did not accurately reflect their current role and responsibility level; 50.0% reported feeling that they were underemployed; 38.8% reported that they were employed at the appropriate level for their skill/education level; and 11.3% reported that they were challenged beyond their current skill level. When the two groups are combined, 30.2% reported feeling underemployed, 62.7% reported feeling employed at the appropriate skill/education level, and 6.8% reported that they were challenged beyond their skill level. As reported by Whittington and colleagues (2004), job design has a direct affect on job enrichment, goal setting, and motivation. Both under- and over-employment are posited to have a negative influence on performance and work satisfaction and can result in a skewed view of an employee's real potential (Judge, Thoresen, Bono, & Patton, 2001).

Participants were asked to provide the direct reporting relationship of their departmental director according to the setting's organizational chart. The organizational reporting relationships are outlined in Table 5. Some participants included their supervisor's reporting relationship to the departmental director versus the director's reporting lines, while other respondents stated they did not know the reporting relationship.

Table 5. Organizational Reporting Relationships of Department where HIM Professionals Work.

<b>Organizational Report</b>	<b>Frequency</b>	<b>%</b>
CIO/CMIO	65	17.1
Finance	59	15.5
Clinical Director/Service	59	15.5
CEO/President/COO	47	12.3
Other HIM-related <sup>1</sup>	47	12.3
Other/Unspecified <sup>2</sup>	41	10.7
Other/Unspecified Executive Suite Level <sup>3</sup>	31	8.1
IT	26	6.8
Academic	6	1.6
<b>Total</b>	<b>381</b>	<b>100.00</b>

*Note.* CIO = Chief Information Officer, CMIO = Chief Medical Information Officer; IT = Information Technology; CEO = Chief Executive Officer, COO = Chief Operating Officer. <sup>1</sup>Other HIM-related departments include planning, research, decision support, HIM. <sup>2</sup>Other/Unspecified includes those reporting routes identified as manager or supervisor of HIM with no clearly defined departmental reporting relationship provided; or others such as unknown, business owner, or sales department. <sup>3</sup>Other/Unspecified Executive Suite Level includes direct reports identified as Vice President, Site Administrator, or Board, without further identifying information.

#### **5.2.4. Individual characteristics.**

**5.2.4.1. Attitudes and behaviours.** Regarding participants' attitudes towards leadership, 313 (72.8%) reported that they aspire to be leaders in their job, while 83 (19.3%) reported no desire to be a leader in their job; 35 (7.9%) did not respond to the question. Overall, 54.9% aspire to advance in their career to a higher level of formal leadership. Most respondents (80.0%) reported that they considered their work as a career.

The majority of respondents (78.4%) reported keeping their resumes up-to-date. When asked what percentage of skills, ability, and/or education must be met before they would apply for a position of interest, 54.0% of participants reported that they would not apply for a position unless they met at least 80.0% of the job requirements. There were no statistically significant differences ( $p > .10$ ) found using Chi square analyses; the proportion of men and women reporting this pattern were essentially the same. Given that the majority of the HIM-LQ respondents were women (93%), the result is in keeping with Desvaux and colleagues' (2008) findings that women were less likely to apply for a position if they did not meet most if not all of the qualifications. A lack of confidence may inhibit women from attaining leadership positions simply because they do not apply for the positions (Coffman & Neuenfeldt, 2014). No differences were identified among all response options for men versus women or for leaders (i.e., participants who reported working in management positions) versus front-line workers (i.e., participants who reported working in non-management positions); all Chi-square results were non-significant ( $ps > .10$ ).

Participants were asked about their attitudes regarding the HIM profession, initiative, education, and concerning their behaviour related to attendance at continuing education sessions. The results are detailed in Table 6 below. Overall, the results suggested that the HIM professionals in the current sample strongly endorsed pride in the profession, that they aspire to initiate change, seek out opportunities at work, and have positive attitudes toward continuing education and training.

Table 6. Participant Mean Scores for Items Querying HIM Attitudes and Behaviours; Response Options Ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

<i>Item</i>	<i>M</i>	<i>SD</i>	<i>n</i>
I am proud to be an HIM professional.	4.43	.83	395
I strive to initiate change in workplace.	4.18	.84	395
I seek out new opportunities to use my skills in the workplace.	4.21	.81	395
Continuing education is important to my professional development.	4.41	.79	403
Continuing education is important to my career advancement.	4.16	.99	403
I attend workshops/seminars/conferences as often as possible.	4.12	.95	403

Overall, 41.7% of participants indicated that continuing education was mainly their own responsibility, 56.3% felt it was a joint responsibility between themselves and their employer, and 2.0% reported that their continuing education was solely the employer's responsibility. When asked who benefitted from their participation in continuing education, 77.7% of HIM professionals and 77.6% of students responded that they were the main beneficiary.

**5.2.4.2. HEXACO-60.** Descriptive statistics for the HEXACO-60 are presented in Table 7 below. Response distributions were all relatively normal and all scale alpha values were greater than .7 suggesting satisfactory internal consistency (Cohen, 1988).

Table 7. HEXACO-60 Descriptive Statistics for HIM Sample.

<b>HEXACO-60 Scale</b>	<b><i>n</i></b>	<b><i>M</i></b>	<b><i>SD</i></b>	<b>skew</b>	<b>kurtosis</b>	<b><i>α</i></b>
Honesty-Humility	378	3.91	0.50	-.50	.25	.72
Emotionality	378	3.10	0.53	.26	-.07	.71
Extraversion	379	3.50	0.55	-.49	.31	.79
Agreeableness	379	3.35	0.51	-.34	.00	.73
Conscientiousness	379	4.03	0.43	-.23	-.21	.71
Openness to Experience	379	3.53	0.62	-.42	.20	.79

A series of *t*-tests were conducted to assess whether there were significant and substantive differences between HIM participants and a community sample of women (derived from Ashton and Lee, 2009). Due to the number of comparisons made the more stringent *p* value of .01 was applied to reduce the probability of Type 1 error. Statistically significant (i.e.,  $ps < .01$ ) differences were found for HEXACO-60 Emotionality, Extraversion, and Conscientiousness scales with HIM participants scoring higher on these scales than Ashton and Lee's (2009) sample of community women (see Table 8). The corresponding effect sizes were small for Emotionality and Extraversion scales and medium in magnitude for the Conscientiousness scale (Cohen, 1988).

Table 8. *T*-Tests Comparing HEXACO-60 Scale Scores of HIM Participants and Sample of Community Women\*.

<b>HEXACO-60 Scale</b>	<i>t</i>	<i>df</i>	<i>p</i>	<i>M<sub>D</sub></i>	<i>r</i> <sup>2</sup>
Honesty-Humility (HIM > community ♀)	1.97	789	.049 (NS)	.07	.005
Emotionality (community ♀ > HIM)	7.09	789	< .01	.20	.06
Extraversion (HIM > community ♀)	4.19	790	< .01	.18	.02
Agreeableness (NS)	.80	790	.42 (NS)	.03	.00
Conscientiousness (HIM > community ♀)	8.91	790	< .01	.30	.09
Openness to Experience (NS)	1.33	790	.19 (NS)	.06	.00

*Note:* \*Community women sample results derived from Ashton & Lee (2009).

*HEXACO-60 and age differences.* A one-way ANOVA was performed to assess whether there were any significant differences in HEXACO personality scale mean scores across participant age groups. Age categories were as follows: Category 1 included participants between the ages of 18 to 29 years; category 2 included those between 30 and 39 years; category 3 included those between 40 to 49 years; category 4 included those between 50 and 59 years; and category 5 included those who reported being 60 years of age and older. Due to the high number of comparisons and related Type 1 error risk, the more conservative significance criterion of .01 was used. Effect sizes were interpreted following Cohen (1988). Statistically significant mean differences with small to medium effect sizes were found as follows:

*Honesty/Humility:*  $F(4, 373) = 8.01, p < .001, \eta^2 = .08$ . Pairwise comparisons revealed that age category 4 mean scores were significantly higher than categories 1 ( $M_D = 0.37$ ) and 2 ( $M_D = 0.34$ ). The results suggested that, relative to the youngest participants in the sample, participants aged 50 to 59 years perceived themselves as possessing a modestly higher degree of traits associated with the HEXACO-60 Honesty/Humility scale.

*Extraversion:*  $F(4, 374) = 8.48, p < .001, \eta^2 = .08$ . Pairwise comparisons revealed that age category 1 mean scores were significantly lower than categories 3 ( $M_D = 0.39$ ) and 4 ( $M_D = 0.49$ ). Age category 2 mean scores were significantly lower than category 4 ( $M_D = 0.31$ ). In general, the results suggested that older participants perceived themselves as somewhat more extraverted than younger participants.

The omnibus ANOVA for *Openness to Experience* was statistically significant,  $F(4, 374) = 4.40, p = 0.002, \eta^2 = .05$ ; however, no significant difference were found for

any of the pairwise comparisons. Similarly, the omnibus ANOVA for *Agreeableness* was statistically significant,  $F(4, 374) = 3.526, p = .008, \eta^2 = .036$ , but no significant differences were found for the pairwise comparisons. No statistically significant differences were found for *Conscientiousness*,  $p = .534$ , and *Emotionality*:  $p = .023$ .

*MLQ-5X and age differences.* A similar series of ANOVAs were conducted to determine whether there were statistically significant differences in MLQ-5X scale means across the five age categories. Again, the more conservative criterion of .01 was applied to reduce the likelihood of a Type 1 error. Statistically significant differences were found as follows:

Idealized Influence (Behavior):  $F(4, 344) = 4.77, p = .001, \eta^2 = .05$ . Pairwise comparisons revealed that age category 4 mean scores were significantly higher than age category 1 ( $M_D = 0.56$ ). The results suggested that participants aged 50-59 years of age perceived themselves as possessing a modestly higher degree of the attitudes and behaviours assessed by II(B) than the youngest participants in the sample.

Contingent Reward:  $F(4, 351) = 4.29, p = .002, \eta^2 = .05$ . Pairwise comparisons revealed that age category 4 mean scores were significantly higher than category 1 ( $M_D = 0.59$ ). No other comparisons differed significantly. The results suggested that participants aged 50-59 perceived themselves as possessing a greater degree of the attributes tapped by the Contingent Reward scale.

The omnibus ANOVAs were significant for both the Laissez-Faire  $F(4, 350) = 3.35, p = .002, \eta^2 = .04$ , and Inspirational Motivation subscales,  $F(4, 344) = 4.69, p = .001, \eta^2 = .05$ ; however, none of the pairwise analyses exhibited any significant

differences. Analyses for all other MLQ-5X scales did not reach significance at the .01 level.

**5.2.4.3. MLQ-5X.** Descriptive statistics for the MLQ-5X are presented in Table 9 below. Scale reliabilities ranged from .499 to .821 for the HIM sample. A series of *t*-tests were used to compare HIM participant MLQ-5X scores with normative data ( $n = 3375$ ; US participants from Avolio and Bass, 2004) available in the MLQ-5X manual (Avolio & Bass, 2004). HIM participants scored significantly higher on all scales (all  $ps < .01$ ; see Table 10 below); however, there was substantial variability in associated effect sizes (Cohen, 1988). Results revealed small effect sizes for Idealized Influence (Attributed), Idealized Influence (Behavior), Contingent Reward, and Extra Effort. Medium effect sizes were found for Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Management-by-Exception (Active), Management-by-Exception (Passive), Effectiveness, and Satisfaction. A medium to large effect size was revealed for Laissez-Faire. The results suggest participants perceived themselves as having a variety of MLQ-5X leadership attributes, but also perceived themselves as highly passive based on the Laissez-Faire scale.

Table 9. MLQ-5X Descriptive Statistics for HIM Sample.

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>skew</i>	<i>kurtosis</i>	<i>α</i>
MLQ-5X II(A)	348	3.39	0.94	-1.03	1.19	0.64
MLQ-5X II(B)	349	3.56	0.90	-1.12	1.39	0.65
MLQ-5X IM	349	3.72	0.89	-0.90	0.65	0.82
MLQ-5X IS	355	3.67	0.89	-1.13	1.18	0.74
MLQ-5X IC	345	3.89	0.82	-1.38	2.89	0.62
MLQ-5X CR	356	3.35	1.06	-0.86	0.25	0.64
MLQ-5X ME(A)	354	2.68	0.98	-0.17	-0.47	0.70
MLQ-5X ME(P)	354	1.84	0.66	0.62	0.75	0.63
MLQ-5X LF	355	1.56	0.55	0.52	0.11	0.50
MLQ-5X EE	322	3.45	0.93	-0.58	0.32	0.80
MLQ-5X EFF	331	3.79	0.89	-0.98	0.81	0.77
MLQ-5X SAT	333	3.92	0.87	-0.93	0.28	0.54

*Notes.* MLQ-5X = Multifactor Leadership Questionnaire 5X short form. II(A) = Idealized Influence (Attributed), II(B) = Idealized Influence (Behavior), IM = Inspirational Motivation, IS = Intellectual Stimulation, IC = Individualized Consideration, CR = Contingent Reward, LF = Laissez-Faire, EE = Extra Effort, EFF = Effectiveness, SAT = Satisfaction.

Table 10. Results of *T*-Test Comparisons Between HIM Participants and MLQ-5X Normative Data Reported in MLQ Manual.

MLQ-5X scale	<i>t</i>	<i>df</i>	<i>M<sub>D</sub></i>	<i>r</i> <sup>2</sup>
II(A)	13.46	3721	.44	.05
II(B)	16.21	3722	.54	.07
IM	19.37	3722	.68	.09
IS	22.50	3728	.71	.12
IC	22.29	3718	.73	.12
CR	10.57	3729	.36	.03
ME(A)	24.31	3727	1.1	.14
ME(P)	22.09	3727	.77	.12
LF	32.56	3728	.95	.22
EE	17.57	3695	.66	.08
EFF	20.35	3704	.65	.10
SAT	24.67	3706	.83	.14

*Notes.*

- a) All reported results were significant at the .001 level
- b) For all comparisons HIM sample mean scores were significantly higher than the corresponding MLQ normative sample self-report means ( $n = 3375$ ) reported in the MLQ manual
- c) II(A) = Idealized Influence (Attributed), II(B) = Idealized Influence (Behavior), IM = Inspirational Motivation, IS = Intellectual Stimulation, IC = Individualized Consideration, CR = Contingent Reward, ME(A) = Management-by-Exception (Active), ME(P) = Management-by-Exception (Passive), LF = Laissez-Faire, EE = Extra Effort, EFF = Effectiveness, SAT = Satisfaction.

#### 5.2.4.4. *HEXACO-60 and MLQ-5X.*

*HEXACO-60 and MLQ-5X sex differences.* As reported in Chapter 4, a series of independent *t*-tests were conducted to assess for possible sex differences in mean scores on MLQ-5X and HEXACO-60 subscale scores. Women reported statistically significantly higher scores on the HEXACO-60 *Emotionality* subscale,  $t(376) = 2.419$ ,  $p = .016$ ,  $M_D = .247$ ,  $r^2 = .02$ . The *Emotionality* subscale measures Fearfulness, Anxiety, Dependence, and Sentimentality. The result was consistent with results reported for college and community samples in the Ashton and Lee (2009) study. In contrast, but consistent with the findings of Eagly and colleagues (2003), men reported higher scores on the *MLQ-5X Management-by-Exception: Active* subscale,  $t(352) = 2.064$ ,  $p = .04$ ,  $M_D = .354$ ,  $r^2 = .01$ . The *Management-by-Exception: Active* subscale assesses behaviours wherein supervisors actively seek out mistakes, reinforcing procedures and rules that keep employees on task (Yukl, 2013). No other statistically significant differences between women and men were found on any of the other MLQ and HEXACO-60 self-reported scores (i.e., all  $ps > .05$ ,  $r^2s < .01$ ).

#### *HEXACO-60 and MLQ-5X scale mean scores across years worked in HIM.*

Many changes have occurred in the HIM profession over the past few decades; accordingly, the profession may now be attracting people with different personality and leadership attributes. A series of one-way ANOVAs were conducted to assess whether there were significant and substantive differences on HEXACO-60 and MLQ-5 scale scores across four categories of years employed in the HIM profession. The *years employed in HIM* categories were as follows: Category 1 included those reporting less than 1 year to 9 years employed in HIM; category 2 included those employed for 10-19

years in HIM; category 3 included those employed for 20-29 years in HIM; and category 4 included those employed for 30 and more years in HIM. Due the high number of multiple comparisons involved in these analyses, the decision was made to apply the more conservative  $p$  value significance criterion of .01.

*HEXACO-60 and years of HIM employment.* Results indicated significant differences across *years employed in HIM* categories for HEXACO-60 scales as follows: *Extraversion*,  $F(3, 338) = 8.249, p < .001, \eta^2 = .07$  (medium effect size; Cohen, 1988), and *Agreeableness*,  $F(3, 338) = 4.809, p = .003, \eta^2 = .04$  (small effect size; Cohen, 1988). Results were non-significant for HEXACO-60 *Honesty-Humility* ( $p = .027$ ), *Emotionality* ( $p = .475$ ), *Conscientiousness* ( $p = .967$ ), and *Openness to Experience* ( $p = .100$ ).

Pairwise comparisons for the *Extraversion* scale indicated that category 1 mean scores were significantly lower than categories 2 ( $M_D = .25$ ), 3 ( $M_D = .27$ ), and 4 ( $M_D = .37$ ). No other significant mean differences were found. The differences in extraversion may be due to HIM years of experience, personality changes across the life-span (Roberts, Walton, & Viechtbauer, 2006), or a combination of these factors. Pairwise comparisons for the *Agreeableness* scale revealed that category 1 mean scores were significantly lower than category 2 ( $M_D = .22$ ) and category 4 ( $M_D = .25$ ). No other statistically significant mean differences were found.

*MLQ-5X and years of HIM employment.* Significant mean differences were found for the MLQ-5X Contingent Reward,  $F(3, 315) = 4.269, p < .01, \eta^2 = .039$ , and Extra Effort,  $F(3, 283) = 3.785, p = .011, \eta^2 = .038$ , scales. Pairwise comparisons for the Contingent Reward scale revealed that category 2 mean scores were significantly lower than category 3 ( $M_D = .429$ ). No other significant differences were found. Pairwise

comparisons for the Extra Effort scale revealed that category 1 mean scores were significantly lower than category 4 ( $M_D = .444$ ). No other significant differences were found and the effect sizes were small (Cohen, 1988).

*HIM professionals' attitudes to leadership and education.* Correlational analyses were conducted to determine whether there were statistically significant associations among HIM professionals' attitudes toward leadership, continuing education, professional development, and HEXACO-60 personality characteristics. Two composite variables were created for the purposes of these analyses. One variable represented attitudes and behaviours regarding continuing education/professional development and contained the following items: *Please indicate the extent to which you agree or disagree with the following statements regarding continuing education: a) Continuing education is important to my professional development; b) Continuing education is important to my career advancement; and c) I attend workshops/seminars/conferences as often as possible.* The second variable represented attitudes and behaviours regarding leadership and contained the following items: *Please indicate the extent to which you agree or disagree with the following statements regarding leadership: a) I am proud to be a certified HIM professional; b) I strive to initiate change in my workplace, particularly in relation to my role as an HIM professional; and c) I seek out new opportunities to use my skill set at work.* These variables were felt to reflect attitudes and behaviours characteristic of commitment to, and involvement in, activities that support the educational and leadership development of HIM professionals. These two composite variables were used in correlational analyses to assess the nature of associations with the HEXACO-60 and MLQ-5X scales respectively. Results of these analyses are presented

in Tables 11 and 12 below. For the HEXACO-60 analyses, small correlations were observed between the composite *Education Attitudes* variable and HEXACO-60 Extraversion, Conscientiousness, and Openness to Experience scales.

The HIM Education Attitudes (HIM-EA) variable was positively correlated, albeit with small effect sizes, with most MLQ-5X subscales; however, a small significant negative association was found with the Management by Exception-Passive scale. The HIM Leadership Attitudes (HIM-LA) variable was also positively correlated with most MLQ-5X subscales; again, small significant negative associations were found for Management by Exception-Passive scale and the Laissez-Faire scales.

Table 11. Pearson Two-Tailed Bivariate Correlations Among HIM Leadership and Education Attitudes Composite Variables and HEXACO-60 Scales.

		<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>1. HIM-EA</b>	<i>r</i>	.42**	.03	-.06	.16**	.08	.17**	.16**
	<i>p</i>	.000	.532	.245	.001	.140	.001	.002
<b>2. HIM-LA</b>	<i>r</i>		.09	-.07	.37**	.15**	.24**	.17**
	<i>p</i>		.092	.164	.000	.003	.000	.001
<b>3. Honesty - Humility</b>	<i>r</i>			-.11*	.01	.20**	.23**	.10
	<i>p</i>			.042	.852	.000	.000	.057
<b>4. Emotionality</b>	<i>r</i>				-.25**	-.12*	-.04	-.17*
	<i>p</i>				.000	.023	.443	.039
<b>5. Extraversion</b>	<i>r</i>					.20**	.23**	.13*
	<i>p</i>					.000	.000	.010
<b>6. Agreeableness</b>	<i>r</i>						.04	.06
	<i>p</i>						.464	.287
<b>7. Conscientiousness</b>	<i>r</i>							.14**
	<i>p</i>							.009
<b>8. Openness to Experience</b>								

*Notes.*

- a) \*\* = significant at .01 level; \* = significant at .05 level
- b) HIM-EA = HIM Education Attitudes; HIM-LA = HIM Leadership Attitudes
- c) *ns* ranged between 378 and 395

Table 12. Pearson Two-Tailed Bivariate Correlations Among MLQ-5X Scales and HIM Leadership and Education Attitudes.

		II-A	II-B	IM	IS	IC	CR	ME-A	ME-P	LF	EE	EFF	SAT
HIM-EA	<i>r</i>	<b>.18**</b>	<b>.24**</b>	<b>.27**</b>	<b>.30**</b>	<b>.28**</b>	<b>.22**</b>	.085	<b>-.14*</b>	-.08	<b>.18**</b>	<b>.18**</b>	<b>.12*</b>
	<i>p</i>	.001	.000	.000	.000	.000	.000	.112	.011	.156	.001	.001	.036
HIM-LA	<i>r</i>	<b>.37**</b>	<b>.43**</b>	<b>.51**</b>	<b>.47**</b>	<b>.46**</b>	<b>.33**</b>	.08	<b>-.21**</b>	<b>-.27**</b>	<b>.42**</b>	<b>.38**</b>	<b>.31**</b>
	<i>p</i>	.000	.000	.000	.000	.000	.000	.156	.000	.000	.000	.000	.000

## Notes:

- Significant correlations in bold font; \*\* significant at .01 level; \* significant at .05 level
- HIM-EA = HIM Education Attitudes; HIM-LA = HIM Leadership Attitudes; II(A) = Idealized Influence (Attributed); II(B) = Idealized Influence (Behaviour); IM = Inspirational Motivation; IS = Intellectual Stimulation; IC = Individualized Consideration; CR = Contingent Reward; LF = Laissez-Faire; EE = Extra Effort; EFF = Effectiveness; SAT = Satisfaction
- ns* for correlations ranged between 322 to 356

*Regression models assessing HEXACO-60 and MLQ-5X subscale scores as predictors of Education and Leadership attitudes.* A series of multiple regression analyses were performed to assess the variance accounted for in HIM education and leadership attitude mean scores by HEXACO-60 and MLQ-5X scale scores. The composite variables HIM-EA and HIM-LA were the dependents whereas HEXACO-60 and MLQ-5X subscales that were positively correlated with the dependents were used as the predictor variables. For all analyses, assumptions were assessed and met (i.e., multicollinearity, normality, linearity, homoscedasticity, independence of residuals).

The first regression analysis assessed the variance accounted for by HEXACO-60 Extraversion, Conscientiousness, and Openness to Experience in HIM-EA mean scores. The predictor variables were entered together and resulted in a significant model,  $F(3, 375) = 7.924, p < .001$ , that accounted for 5% of the variance in HIM-EA scores (adjusted  $R^2 = .052$ ). Extraversion ( $\beta = .119, p = .022, r^2 = .013$ ), Conscientiousness ( $\beta = .121, p = .020, r^2 = .014$ ), and Openness to Experience ( $\beta = .126, p = .013, r^2 = .015$ ), all accounted for statistically significant variance in HIM-EA scores.

The second regression analysis assessed the variance accounted for by HEXACO-60 Extraversion, Agreeableness, Conscientiousness, and Openness to Experience in HIM-LA mean scores. The predictor variables were entered together and resulted in a significant model,  $F(4, 374) = 20.172, p < .001$ , that accounted for 17% of the variance in HIM-LA scores (adjusted  $R^2 = .169$ ). Significant predictors in the model were Extraversion ( $\beta = .302, p < .001, r^2 = .082$ ), Conscientiousness ( $\beta = .153, p = .002, r^2 = .022$ ), and Openness to Experience ( $\beta = .104, p = .029, r^2 = .013$ ).

The third regression analysis assessed the variance accounted for by MLQ-5X Idealized Influence (Attributed), Idealized Influence (Behavior), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Extra Effort, and Effectiveness in HIM-EA mean scores. The predictor variables were entered together and resulted in a significant model,  $F(8, 313) = 5.113, p < .001$ , that accounted for 9% of the variance in HIM-EA scores (adjusted  $R^2 = .093$ ). The only significant predictor in the model was Intellectual Stimulation ( $\beta = .170, p = .037, r^2 = .013$ ).

The fourth regression analysis assessed the variance accounted for by MLQ-5X Idealized Influence (Attributed), Idealized Influence (Behavior), Intellectual Stimulation, Contingent Reward, Extra Effort, and Effectiveness, and Satisfaction in mean scores for the composite variable HIM-LA. The predictor variables were entered together and resulted in a significant model,  $F(7, 314) = 16.536, p < .001$ , that accounted for 25% of the variance in HIM-LA scores (adjusted  $R^2 = .253$ ). Both Intellectual Stimulation ( $\beta = .284, p < .001, r^2 = .039$ ) and Idealized Influence (Behavior) ( $\beta = .161, p = .027, r^2 = .011$ ) accounted for statistically significant variance in HIM-LA scores.

A final pair of regression analyses was performed using a combined model of HEXACO-60 and MLQ-5X predictors found to be significant in the previous analyses. The first of these models assessed the variance accounted for in HIM-EA by predictors that included HEXACO-60 Extraversion, Conscientiousness, and Openness to Experience together with MLQ-5X Intellectual Stimulation. The predictors were entered together and resulted in a significant model,  $F(4, 350) = 9.86, p < .001$ , that accounted for 9% of the variance in HIM-EA mean scores (adjusted  $R^2 = .09$ ). The MLQ-5X

Intellectual Stimulation scale was the only significant predictor in the model,  $p < .001$ ,  $r^2 = .04$ .

The second of these analyses assessed the variance accounted for by HEXACO-60 Extraversion, Conscientiousness, Openness to Experience together with MLQ-5X Intellectual Stimulation and Idealized Influence (Behaviour) – the predictors that were found significant in the previous analyses. The variables were entered together and results in a significant model,  $F(5, 343) = 72.53$ ,  $p < .001$ , that accounted for 27% of the variance in HIM-LA mean scores (adjusted  $R^2 = .27$ ). Significant predictors included Extraversion,  $p < .001$ ,  $r^2 = .03$ , Intellectual Stimulation,  $p < .001$ ,  $r^2 = .05$ , and Idealized Influence (Behaviour),  $p = .012$ ,  $r^2 = .01$ . Intellectual Stimulation was the strongest independent predictor in the model followed by Extraversion and Idealized Influence (Behaviour). Interpretation of the results of these final two regression models suggests that, for the current sample, the combination of extraverted personality traits and the desire for intellectual challenge may be the most important attributes underlying leadership aspirations.

*HIM leaders versus HIM front-line employees.* A series of  $t$ -tests were performed to assess whether there were statistically significant differences in HEXACO-60 and MLQ-5X scale scores between HIM professionals designated as functioning in leadership/management roles versus those in front-line positions. The HIM professionals were categorized into leadership/management or front-line roles based on the nature of their self-reported currently held job (see Table 3). The categorization may not have captured all individuals who might be viewed as functioning as leaders; however, the approach produced sufficiently distinct groups for the current analyses.

HIM professionals employed in leadership/management roles were found to score statistically significantly lower than HIM professionals in front-line roles on the HEXACO-60 Emotionality scale,  $t(339) = 2.843$ ,  $p = .005$ ,  $M_D = .17$ ,  $r^2 = .02$ . HIM leaders were also found to score statistically significantly higher than front-line role HIM professionals on the HEXACO-60 Extraversion scale,  $t(340) = 3.611$ ,  $p < .001$ ,  $M_D = .22$ ,  $r^2 = .04$ . The small effect sizes suggest the differences may not be robust or influential.

On MLQ-5X scales, statistically significant differences between HIM leaders and front-line employees' scores were found for ten of the twelve MLQ-5X scales. For simplicity of presentation these results are reported in Table 13 below. Effect sizes ranged from small to medium (Cohen, 1988) with the largest differences found for Intellectual Stimulation, Individualized Consideration, and Effectiveness. The results indicate HIM leaders differ from front-line workers on MLQ-5X leadership constructs. Effective leaders might be expected to demonstrate the perspectives and behaviours associated with transformational leadership. The results were also consistent with regression analyses assessing relationships between MLQ-5X scales and the composite HIM-LA variable.

Table 13. Results of *T*-Test Comparisons of MLQ-5X Scores for HIM Leaders and Front-Line Employees.

MLQ-5X scales	<i>t</i>	<i>df</i>	<i>M<sub>D</sub></i>	<i>r</i> <sup>2</sup>
II(A)	4.37	276.72	0.35	.07
II(B)	4.58	270.79	0.35	.07
IM	4.95	263.86	0.38	.08
IS	4.97	259.38	0.34	.09
IC	5.78	277.68	0.39	.11
CR	5.01	276.24	0.44	.08
LF*	-3.64	272.01	0.21	.05
EE	4.90	285.00	0.49	.08
EFF	5.62	278.51	0.41	.10
†SAT	3.80	295.00	0.29	.05

*Notes.*

- a) All comparisons significant at the .001 level.
- b) II(A) = Idealized Influence (Attributed), II(B) = Idealized Influence (Behavior), IM = Inspirational Motivation, IS = Intellectual Stimulation, IC = Individualized Consideration, CR = Contingent Reward, LF = Laissez-Faire, EE = Extra Effort, EFF = Effectiveness, SAT = Satisfaction
- c) Levene's test for equality of variance was significant for all analyses except EE and SAT; adjusted degrees of freedom are reported for these results
- d) Scores for HIM leaders and front-line employees did not differ significantly on MLQ-5X Management-by-Exception (Active) and Management-by-Exception (Passive)ME(A) and ME(P) scales (*ps* > .10)
- e) \*LF was the only scale on which HIM front-line workers scored significantly higher than those in leadership positions. For all other analyses, those in leadership positions scored statistically significantly higher than those in front-line positions.

### 5.3. Qualitative Results and Themes

**5.3.1. Sample characteristics.** In total, 21 individuals were interviewed including 14 HIM professionals (5 managers and 9 staff) and 7 health leaders. Following data analyses, four themes were formulated based on participants' accounts. The four themes reflected participant responses to questions relating to the HIM profession in Canada. The themes related to *invisible but important*, *career lifecycle*, *leadership*, and *gender* and had significant overlap relative to organizational, societal, gender, and individual factors influencing HIM leadership development. The participants were also asked what suggestions they had for individual HIM professionals to advance their career and leadership development, and to advance the HIM profession as a whole, and these suggestions conclude the chapter.

**5.3.2. Invisible but important.** Thoughts about the invisibility of the profession were evident in all of the 21 interviews. For the HIM professionals, the invisibility was a matter of frustration. A lack of recognition for HIM professionals' contributions provoked strong emotion from HIM participants. For example, these comments from some of the participants were typical: "No one knows who we are or what we do"; "My family doesn't even understand what I do. I've given up trying to explain"; "Has everyone lost the energy to keep fighting or does it just not make any difference anyway?"; and, "Maybe if, every day, people told you that you were insignificant, you'd start to think that way. That seems to be the way. People are enthusiastic when they graduate, and within a year they're already feeling beaten."

For the health leaders, the invisibility was both a fact and a curious phenomenon, "There's the standing joke about the health records departments always being in the

basement". One participant reported, "It's so interesting to me, because the product that the profession delivers is such an integral one for the system. It does seem funny that, now that I think about it, it's invisible work, right?" Yet another participant stated, "Let's face it, the HIM profession is not something you hear on the street, or your high school guidance counselor would potentially know anything about." One health leader echoed similar thoughts and went on to describe why the invisibility was a factor:

They are invisible... It was HIM Week a couple of weeks ago I think so we had an event and there is a better appreciation but they are invisible because their leadership doesn't profile them and the only way their leadership is going to profile them is if you have strong leaders who start to position their relevance...

Although the HIM professionals interviewed expressed frustration at the invisibility of the profession, their actions appeared to reinforce this invisibility. Many of them described helping the decision support or business intelligence people to find and interpret data quickly and correctly and were happy to do so without any form of recognition. One participant described the situation at her workplace: "The people doing the data analysis are not HIMs. I get called in to help interpret the data because of my HIM background." When asked if she was able to share in the credit for the final product, she stated no, "but that's okay because we're getting called in to help".

In contrast to the HIM professionals' perspective that helping was enough, one health leader interview participant stated:

People that I see successful in leadership take every opportunity to get on a committee, to co-lead a project either in their organization or as part of their organization to be able to demonstrate their leadership in a meaningful way.

Ideally it's not just that you participated in a group, [it's] that you actually were able to achieve some kind of an outcome. I think that leaders in today's culture, it's not okay just to show up, you've got to actually produce outcome.

Several of the HIM professionals interviewed stated that their professional association was not doing enough to promote the profession. When asked about their individual role in promotion of the profession, most of the interviewees felt it was someone else's responsibility. They did not ascribe their individual behaviour as having an influence on the profession's profile.

The health leader interview participants described the HIM profession as important but unrecognized and organizational reporting relationships were described as a factor in this invisibility. One health leader stated, "Coding influences future years [but] it was never positioned that way". Another health leader stated, "The product the profession delivers is integral for the system yet it's invisible work". One health leader described the HIM professionals, in general, as being structurally "far removed...from the people that make the decisions".

The perception from HIM professionals and health leaders is that the profession and its role is important: "It's an integral role" and HIM professionals are "...key to the work in my setting, because...their information drives best practice". Another health leader stated, "We know how important the information is; however, that information is nothing until it gets into the hands of people that can make it into actionable business intelligence". The discussion about why the profession is largely invisible or under-appreciated, and what must be done to improve the situation was quite different between the two groups and leads into the next theme.

**5.3.3. Career lifecycle.** The career lifecycle for the HIM profession appears dependent on career pathway and development, education, and gender. The traditional HIM career pathway was described as graduating, getting a good-paying "9 to 5" job, raising a family, and being promoted based on seniority. The new reality in the workplace, including higher education requirements for management and leadership positions, is seen as having an influence on the HIM career lifecycle.

**5.3.3.1. Career pathway and development.** The perception by both participant groups is that most HIM professionals saw their work as a job and not a career. An HIM participant described the profession as attractive to those looking for a secure job:

I think they see it as absolutely a secure position. It's a secure job. It's as secure as nursing is going to be, because it will be a long, long time before computers take our places, but I think it tends to be women who just want to make a decent buck at a nice little eight to five job.

The perspective of HIM as a job and not a career was felt to limit potential for advancement. One health leader commented:

I would suggest that we need to have people that are on a track to become executives and/or managers or directors within the health system. Those people need to know a bit more about what that particular profession does, but I don't think [the HIM] profession has an easy springboard to the broader management of the health system.

When asked to expand upon this statement, he went on to add:

Because [HIM is] just not designed to do that, currently. I mean, like I said, it's a diploma, and their exposure to managing human resources, their exposure to

managing a business, their exposure to managing the politics, the whole stakeholder environment, that's nowhere near that current curriculum. I mean, that current curriculum is very focused on what I would suggest is more of a technical function of certain areas of health information management.

The technical nature of the HIM diploma education was not considered conducive or consistent with a leadership role.

*Mentorship.* The perception that HIM professionals see their work as a job versus a career appears to have a negative effect on mentorship practices, even from within the profession. HIM managers perceive HIM staff as lacking initiative and HIM staff view the HIM managers as lacking the ability to lead. Despite previous statements about the importance of mentorship for HIM career advancement, mentorship was under-emphasized in practice. The HIM professionals in management positions were asked if they were mentoring any of the HIM professionals in their departments to fill their role when they retired or changed positions. One HIM manager stated, "There isn't one single person in [removed name of health region] that I would even recommend to step into my position"; while another manager commented, "It's hard to find someone smart enough and dedicated enough" to consider for succession planning. Yet another HIM manager stated, "not one person in [the] department has the leadership skills to move up into management". One HIM professional who worked as a clinical coder described having "only two good managers" over her almost 30-year career; she described the rest as being "quite detrimental to the staff and the position" and noted that "people are enthusiastic when they graduate, and within a year they're already feeling beaten." One HIM

professional interviewed reported "anti-mentoring", wherein recent HIM graduates are asked why they would consider getting a degree when they already have jobs.

Two health leaders reported informally mentoring HIM professionals within their organizations by profiling their expertise or placing them on important committees to position them to take on a leadership role. One of these two health leaders spoke of the initiative taken by HIM professionals in her organization. She stated that the HIM professionals "chose to volunteer in my department on their time off so that they could really fully understand the context, and they found that they were able to practice [HIM] in a way that was much more meaningful for them."

*Career advancement.* HIM professionals tended to attribute career advancement to "good luck" or being in the right place at the right time and career advancement was not seriously considered. One health leader described her perception of why HIM professionals have not considered senior leadership as a career pathway:

They haven't seen it. If you're working in an environment where nobody aspires to be a leader and there are no role models, then you're not going to necessarily feel like you have the skills. You're not going to be confident in moving forward - you've got nowhere to move.

The consensus from both groups is that this view of HIM, that it is a job versus a career, is changing. Many of the participants described the HIM profession as having three "segments of the membership", meaning that there were three distinct groupings within the current HIM population. The first segment or group includes those who are new to the career, are taught an updated curriculum, usually enter with previous education or work experience, and are excited about their career prospects. As one health

leader stated, the new graduates are like "young plants with the right foundational knowledge but needing investment in time and energy to help them grow".

The second group of HIM professionals are those in the midst of their career, who are motivated and yet frustrated, and who want to improve their skill set and move into more challenging positions. A lack of mentoring and role models were identified as barriers to the leadership development HIM professionals and their ability to progress and to identify new and exciting opportunities. As one HIM professional stated, "If someone with more experience takes on someone with less experience, they will step up. If they feel they're on their own, it's not as likely."

The third segment of the membership represents HIM professionals who are retiring or "just tired". Some of the interviewees identified the aging and retiring demographic as the reason HIM professionals were "not putting themselves out there". The "just tired" HIM professionals were described as "single mothers" and "women who just want to make a decent buck in a 9 to 5 job", and then go home to raise their families.

Only two of the 14 HIM professionals interviewed described any initial career planning. When asked about their current and future career goals, the same two participants indicated they have career goals; both of these participants possess Master's degrees. One HIM survey participant commented in writing, "There needs to be more direction available on continuing education options with descriptions of what successful completion of the education will do to help you in your career".

Individuals working in senior HIM roles in health organizations were described as coming from other backgrounds, such as business, health administration, or clinical professions. When I asked one health leader participant about the ability of an HIM

professional to move into a senior leadership role in his organization, he bluntly stated: "They're not qualified." It appears a significant disconnect exists between CHIMA's characterization of the profession and the viewpoint of senior health leaders regarding who HIM professionals are and where they belong in the health organizational hierarchy. This same health leader described the associations' description of the HIM profession as limited in scope and consistent with a lower-level employee. He went on to describe his view of HIM:

I [have] difficulty looking at the HIM profession as defined by CHIMA as being health information management professionals at the higher level. I really do have a struggle with that... To me, the health information management professional is not well defined in this country...What we're looking at with health information management, from the perspective of somebody who works at the senior level in the health system in this province, we need people to understand more what information is out there that's needed to better manage not only the operations of hospital systems, hospitals as a whole, or regional health authorities. We also need people who understand how that information can come together, and how it needs to be standardized, collated, used, analyzed, from a big picture point of view, beyond the operations of an institution. That's my definition of health information management. It's managing the health system, using the information provided by the health system.

When asked if there was a profession in healthcare today that met these needs, he said no.

The HIM profession does not have a clear pathway to senior leadership. When asked to describe senior leadership positions that they or other HIM professions could

expect to progress into, almost all the HIM professionals stopped at a director position; only the two HIM professionals with Master's degrees spontaneously described HIM professionals in the C-suite (e.g., Chief Executive Officer, Chief Information Officer). As one HIM professional commented: "I've never considered an HIM as a chief anything, in all honesty". Another stated, "I don't know why I never considered it [HIM in senior leadership]. That's very sad." General agreement exists amongst the participants that most HIM professionals in the workforce did not know the career options available in senior leadership but that moving up the corporate ladder, or transitioning into the new roles available, required planning and education.

**5.3.3.2. Education.** Opinions differed between the two groups regarding the importance of continuing or advanced education for senior leadership positions; however, a consistent opinion was held regarding the current HIM entry-to-practice education requirement. All HIM participants expressed doubt that the current diploma level education was practical enough to allow the graduates to "hit the ground running". Most of the participants, both HIM professionals and health leaders, felt that a change to entry-to-practice education requirement was necessary to advance HIM leadership.

The health leaders focused on the limitations of a two-year diploma. One health leader participant stated, "It is the very nature if you are in these circles [the HIM profession], whether they know it or not, you are seen as the lesser trained and educated." Another health leader commented that diploma level graduates are at a disadvantage if they want to move to a Master's degree as the pathway is longer for those without an undergraduate degree, and more difficult to pursue once individuals are working and raising a family. The health leaders also discussed the type of student attracted to a

shorter program of study, and whether a diploma program was effective in meeting industry needs. As one health leader commented:

It might be unfair for me to say this but traditionally, if I look at some of the students I have interacted with, a lot of them are just looking for a job that's stable, that will give them decent pay, good health benefits, good CPP, and to get all that kind of stuff and they can be finished the program in a year or two years. That's great, but the [education] program and the industry should not be designed around those goals.

Suggestions provided by interview participants on the educational requirements needed by HIM professionals in order to move into advanced decision support and EHIS roles included "business intelligence", "finance", and "technology". One HIM professional participant described "strategy and leadership" as being uncommon within the HIM profession; she went on to question whether this practice was related to the profession or related to people who entered the profession. She stated, "Colleges and universities attract different types of people".

Another health leader participant spoke of how he was initially introduced to the HIM profession and the wealth of data collected within the HIM department. He described being able to identify the value of the data and understand how to utilize and present the information because of his education. He stated:

We became that interface and probably took advantage of a situation where no one had ever seen [the data] so we were seen as the great genius when we really didn't do that much, to be honest. We presented the information differently than how they [senior leadership] had seen it but I would have argued even back then

that if there had been greater training for HIM professionals, many of them could have risen right out of those departments to be in the kinds of roles that now exist.

In contrast, responses from HIM professionals regarding educational requirements for senior leadership were more diverse. Most HIM professionals identified mentoring, acquisition of practical job skills, and management training as requirements to move up the career ladder. One HIM professional commented that experience is often taken into account for higher level positions, and so she did not necessarily consider advanced education as a requirement to move into a senior leadership role. Another HIM professional in a management position stated, "We didn't have to take all kinds of university courses and everything to get where we are."

**5.3.4. Leadership.** In general, the leadership involved three subthemes, including *defining leadership, characteristics of a leader, and who gets to be a leader.*

**5.3.4.1. Defining leadership.** In general, HIM professionals and health leaders defined leadership differently. Most HIM professionals considered themselves leaders within their own role, and did not consider an HIM professional rising to an organizational position above that of manager or director of an HIM department. For some HIM professionals, management and leadership were often conflated; management as a role was considered leadership. For example, when asked about career plans regarding leadership, some HIM participants expressed that they "would like to move up to manager". Health leaders equated leadership with responsibility and authority, an advanced education and experience, and a vision. For health leaders, management was considered a skill set to be used in a formal leadership position, for example, "managing of the health system as a whole" and "change management".

**5.3.4.2. Characteristics of a leader.** Stark contrast was found when reviewing the articulated characteristics of a leader versus the characteristics of an HIM professional. Characteristics attributed to leaders included "big picture thinking", decision-making abilities, conceptual thinking, confidence, assertiveness, extraversion, and "being able to speak the same language" as other senior level leaders. HIM professionals' characteristics were described as "detail-oriented", introverted, "not willing to put themselves out there", and too busy and focused on completing their daily work to think outside their job.

The HIM profession was described by one HIM professional participant as "a safe choice. You get to sit and do your job and not interact with other people." As a group, HIM professionals were described by both interview participant groups as "having the same personality" and as "introverts with the odd extravert." Career advancement into leadership roles was considered "too challenging", and there was "almost a fear" as "we're just HIM people". One HIM professional acknowledged that her "view of a successful HIM doesn't relate to a successful leadership role". As one health leader participant stated:

I guess what's interesting is that there are certain stereotypes of different types of people in terms of what kind of role they do. The typical person that I've had the pleasure of working with in health records and in [identifiable demographic information removed], that type of area; they tend to be ones that stick to their knitting. They're very clever people, and they really are focused on what they're doing, but...

The concept of a stereotype of HIM professionals arose in a number of conversations.

Another health leader participant described HIM professionals as:

Forty-year-old women who need a job - 9 to 5 - and are not interested; they do their heads down stuff and go home at the end of the day. [They're] not necessarily interested in moving up and moving forward.

Health leaders ascribed their own successes to an internal locus of control. For example, one leader described that he "took advantage of a situation where no one had ever seen it". Another talked about initiative: "I went back to [school to] get a master's because I knew I was limited by an undergrad". Most of the HIM professionals interviewed expressed an external locus of control for both positive and negative events. For example, problems in the workplace or lack of career advancement were attributed to "bad managers" and job promotions were attributed to "good luck".

**5.3.4.3. *Who gets to be a leader?*** The health leader participants described advanced education in the form of a Master's degree as a mandatory requirement to become a health leader in today's health workplace environment. When speaking about health leadership positions, one leader stated, "There is no doubt that there is a massive stigma and arrogance around university versus college education"; while a different health leader participant stated, "The reality is everybody's education level has only gone up to work in healthcare". Another health leader interview participant commented that:

As an organization, we're a health information management organization, but there's not a whole lot of HIM people that we're looking for to put up into management, director type positions, because they just don't have the educational background. They're not strong in the areas that you would need to push forward.

Most of the health leaders spoke about technical expertise versus strategic thinking when describing leadership. As one health leader commented:

At some point you get high enough in the organization where it's more about being strategic and leading others and all of that stuff than it is about the contacts. Closer to the worker you need to be expert in the field, but as you move away, the CEO doesn't need to know how to code or need to know how to look after a patient, they need to know how to be a CEO.

Two health leaders identified that it was easier for HIM professionals to be leaders within their own profession than to move outside their core area or department to become organizational leaders.

Higher education in the form of a Master's degree was not the answer in and of itself. The degree was seen as a mandatory minimum requirement to be considered as a job candidate in a senior role, but experience and visibility were seen as central to acquiring the position. One health leader participant stated:

Your education, and I've always thought this, your education ...gets you in the door, but you've got to develop and demonstrate your work in some way that others recognize it's valuable. ...there is a go/no-go requirement [for health leader positions] based on some level, whatever that level is, for entry-to-practice.

Other factors were identified for HIM professionals in relation to who gets to be a leader. Many of the HIM participants had not ever considered leadership positions, and many felt that management and moving up the corporate ladder was "hard work" that would interfere with their family life. A crisis of confidence by the HIM professionals about their own ability to lead and to move up the corporate ladder was evident. As one

HIM professional reported, "we lack the skills" to be a senior leader. This lack of confidence appeared to inhibit HIM professionals from "putting themselves forward". One health leader stated, "HIMs don't need a conduit to take their output and pitch it to senior teams. They need to *be* the conduit" (emphasis in interview).

One of the HIM professionals with a Master's degree, and who had unsuccessfully applied for C-suite positions, felt that her HIM credential was limiting her opportunities for advancement:

I thought when I got my Master's I would be seen as a legitimate candidate... The focus in some way is on my HIM training and not my Master's...The HIM training appears to devalue my Master's education...It doesn't matter what I've done, it's what I've been.

Another HIM professional described how she did not identify herself as an HIM professional when working with those with advanced degrees (i.e., Master's, Doctoral degrees). She explained that "it's awkward participating at that level with only a diploma" and "in some circles, the HIM designation detracts". From these viewpoints, it appears that the HIM credential is not considered a respected skill set but, rather, a detraction to other qualifications.

Organizational choices regarding reporting relationships and human resource requirements may influence who gets to be a leader. Most of the health leaders stated that HIM was not reporting in the right way or to the right people, for example, one health leader stated, "I think that [reporting relationship] has also been a big issue with HIM; it just hasn't always reported in the right way into the leadership". The increase of individuals without an HIM educational background now hired as HIM directors was

seen as limiting the ability for HIM professionals to present themselves as candidates for promotion or mentoring. One HIM participant stated, "Directors are hired for leadership but they don't understand the profession... bringing in someone outside HIM to lead the department causes a lack of HIM mentoring." For example, a non-HIM-educated director may not understand the contribution that the HIM professionals can make, their education and skill set and, therefore, would not consider mentoring or supporting them in roles of increasing importance. None of the HIM professionals interviewed had been mentored by a senior leader, formally or informally, while all of the health leaders interviewed had some form of mentoring and sponsoring relationship with a senior or influential person.

Outsourcing of HIM professional resources was noted as becoming more common and an organizational impediment for HIM leadership opportunities. When the HIM resource is located outside the organizational structure itself, the ability of the HIM professional to participate on committees, and the opportunity to be showcased as a valuable employee and future leader, is removed. One health leader in particular voiced his concern regarding the ability of HIM professionals to be seen as potential leaders when areas such as coding classification are contracted out: "The other thing, I think, that has been unfortunate and we [health leaders] are to blame for this too is...we have contracted out a lot of our health records work." Through contracting out, the health leader participant felt that the ability for the HIM professional to be recognized for "their knowledge and their understanding of the core of the hospital, how clinical services work", is removed from the health organization.

**5.3.5. Gender.** The issue of gender was interspersed throughout all themes and it arose naturally in most of the conversations with women. Most female HIM professionals and female health leaders introduced gendered factors that had a negative influence on the HIM profession, although they did not always identify or acknowledge them as such. Many of the female HIM professionals felt that the profession was perceived as clerical or secretarial.

One of the biggest hurdles to advancing in the profession was identified as family life or family obligations that prohibited or delayed the ability to pursue continuing education or more senior management positions. One HIM professional participant stated that she did not see herself pursuing a leadership position as she wanted a work/life balance and she stated that balance was not possible in a top leadership role. "I don't ever want to go back into management, that I do know... It doesn't interest me. Family life is important to me and to be close to home and to my family." Another HIM professional participant shared the belief that a management or senior leadership position would be detrimental to her family. "I was told I had great leadership skills but I was fearful of that world... Management positions aren't 9 to 5 so the time and energy needed would interfere with family life". One HIM professional participant stated she did not pursue a continuing education opportunity because, at the time, she was about to become the single parent of two young children. "Knowing I was going to be a single parent, it [time and money] wasn't available to take the second year through distance education at that time". One female health leader described her perception of the relative ability of men and women to assume leadership roles. She stated:

I do know, in nursing, it's primarily female too, like 95% to 98% of nurses when I was a nurse at the bedside were female. I did notice the males in my cohort, a significant portion of them, have gone on to be leaders, where lots of my female colleagues are still at the bedside. I don't know whether there's something in men that drives them to be leaders more than females, or if it has to do with work life and women. Primarily, they're still caregivers of their children.

The health leader participants did not discuss family responsibilities as a factor that limited their career choices. One of the female health leader participants who pursued her Master's degree while her children were young felt that the pursuit of advanced education was a worthwhile goal and that, although it affected her work/life balance for a period of time, it had positively influenced her children as "it has instilled a love of learning in them". She stated:

I love my kids, and want to be a good mother, but I'm not the mother that stays at home. I think that there are lots of women that are not like me, that want to really treasure more time or quality time with their children than I've been accustomed to.

Several HIM professional participants explained that their careers were affected by their husbands' transfers or promotions; often they had to start over in a new city or new organization. "From there [research analyst role] I went back into more traditional roles. What had happened is my husband got us transferred...It was, well, get a job doing whatever."

When asked why she felt the HIM profession was predominantly female, one HIM professional participant responded:

I don't think HIM is an environment that a lot of men would go into. Probably they wouldn't have a lot of challenges to move around. Women may plan our careers around the ages of our children whereas men don't have to do that.

During an interview with a female health leader participant, gender and confidence arose as a reason that women might not apply for more senior level positions:

I do think that if you take women and men, a woman will look at their experience and knowledge and education and everything, and always feel like they're not qualified for a job, and they probably have all the qualifications or more. A man will look at the same job, not have any of the experience or qualifications, and feel like absolutely they could do that job.

The issue of gender had to be raised with the men. When the interviewees were informed that the HIM professional membership was 95% female, most of the men did not think a female-dominated profession in healthcare was an issue. The male health leaders instead felt that the HIM professionals' perceptions of themselves needed to change for the perceptions of the profession to change. One health leader described HIM professionals, as a group, as "shy, in their corner doing their routine and their job, and the few males in the business seem to be the same". Another male health leader identified the profession's composition as an opportunity for growth; however, he did go on to state that the perception of the profession and the role needs to change if more men are to be attracted into the field.

Often an interviewee would state that gender was not an issue, and yet later in the interview a gendered statement would arise. Discussion highlighted how ingrained gender issues and stereotypes are within our societal consciousness. For example, one

health leader stated, "I don't think there's a doubt that it is a female dominated [profession]. I don't think that has an effect on anything". He spoke for a few more minutes and then stated, "There are misconceptions about this particular field that the males are just saying, 'well, I don't see myself doing this kind of job'...". One HIM professional interview participant stated: "If we can portray HIM as not just sitting and coding but as a skill set that can be developed across a variety of job opportunities, more men would enter the profession". Men were described as entering the profession with different career goals than women, and men appear to seek out management opportunities more often than women. Some participants described "genetics" as playing a role in why female HIM professionals did not pursue senior leadership positions, preferring instead to focus on family and home life.

**5.3.6. Suggestions from interview participants.** Each interview participant was asked what advice they would offer to HIM professionals to advance their career and leadership development, and what advice they would offer to advance the HIM profession as a whole. The advice to HIM professionals was fairly similar throughout and included statements such as "Show leadership initiative"; "Demonstrate your capability"; "You need to do a degree"; "Have confidence that you can do it"; "Speak out, be vocal, be helpful", and "Aspire to be something".

The health leader group provided more direct, actionable advice. As one health leader commented, "Successful people take every opportunity to get on a committee, co-lead a project, demonstrate their leadership in a meaningful way". Another health leader encouraged HIM professionals to advance their education and get a Master's degree in Business or Health Administration. He stated that HIM professionals need to understand

and "use the language of executives such as risk, patient care, market share, funding". He went on to explain:

HIM professionals need to understand what you do and how it impacts the hospital; get noticed through process improvement and clinical pathways, all driven by HIM data. Understand how what you do fits within the bigger initiative of the hospital. Have initiative to move outside the day-to-day operations; volunteer for projects. There are many opportunities now – Lean, process improvement and workflow, value-added data. Get noticed by showing off process improvements.

Another health leader offered three pieces of advice:

One, understand why you're doing what you are doing. Like, if it is for a pay cheque, understand that and make it known for yourself. Or, if it's for really being involved in the health sector because there's something in that sector that grabs you and there's this drive for you to give something back to the people, the community that you live in, integrate that passion. Two, keep your eyes open. Don't be afraid of looking at different angles of where you might fit in. Otherwise, you're going to continue to stay where you are. So, if you feel that you are able to be the next CEO of an organization you need to understand that just because you are in an entry-level HIM position, that position is not out of your reach. People who are there have also started from somewhere so don't limit yourself to where you are. Figure out how you're going to get there in an honest, value-driven, ethical manner...The third thing that I would say is, identify individuals who will help you get there and make your journey more meaningful.

All health leader participants reported a need for strong HIM professional leadership to profile and position their staff and to engage staff more fully in clinical programs and services. One health leader described the HIM programs as "[having] a very key role to play in [setting up mentorships by connecting students with the health community]".

The suggestions the participants offered to advance the HIM profession as a whole included discussion on increasing entry-to-practice education levels, developing professional pathways into Master's-level education programs, and marketing the changes within HIM in order to change the perception of the profession. One health leader summed up the requirement for advanced education by stating, "You are not going to find many managers now without advanced education. Even our nursing managers, I would say not many of them don't have a Master's degree".

When asked what the main challenges of the profession were, the perception of the HIM profession as an entry level, clerical, and "invisible" role was identified as a key factor that undermined HIM leadership. One health leader stated:

I think the first [thing] that comes to my mind is...the perception of the graduate out in the industry. I think it would be interesting to know what others think about this but what do you think of when you come across a resume that has an HIM grad?... I think that is a key challenge.

He went on to discuss the changes within the profession, the changes to the educational content, and the messaging of the changes. He stated:

If it [communication regarding workforce transformation] is being done, it may be that I'm not aware of it but that also talks about that if the message isn't getting out

to a mass of people, is there something broken in how the message is being delivered or where [it] is being delivered.

In this chapter I have described the findings of this study by outlining the quantitative results and explaining the GT theoretical categories. I have provided data to demonstrate the categories and identified the relationships between the categories. In the following chapter I will discuss the theory in light of the extant, pertinent literature and present further discussion and analysis of these key findings.

## CHAPTER 6: DISCUSSION

You have to look at leadership through the eyes of the followers and you have to live the message. What I have learned is that people become motivated when you guide them to the source of their own power and when you make heroes out of employees who personify what you want to see in the organization.

Anita Roddick (1942-2007), English entrepreneur. From *Body and Soul*, Ch. 10, 1991

This quote reflects the duty that leaders have to encourage and mentor staff to realize their own potential and to support the attainment of organizational goals, as well as the responsibility of the follower to engage in personal exploration. As outlined in Chapter 2, career advancement and leadership development are contingent on a number of factors. This study explored factors that influence the leadership development of certified HIM professionals in Canada. Four bodies of literature were reviewed for the study. These were the HIM organizational environment, relevant societal and gender factors, and the individual characteristics of HIM professionals. Four questions were investigated in the study. First, in what ways do the individual characteristics of HIM professionals influence their leadership development? Second, what role does gender play in the leadership development of HIM professionals? Third, in what ways do organizational and societal factors influence leadership development of HIM professionals? Finally, what suggestions can the participants provide to foster leadership development among HIM professionals? It was with these goals in mind that the investigation was undertaken.

Quantitative and qualitative methods of data collection were employed to address the research questions. The quantitative phase of the study involved the collection of survey data concerning the demographics, attitudes, and behaviours of HIM professionals. The quantitative analyses provided descriptive data that characterized the

respondents and their beliefs regarding the research problem, including leadership issues and the implications for the HIM profession. The respondents also completed standardized measures of personality and leadership attributes, the results of which were submitted to inferential statistical procedures (e.g., correlation and regression analyses). The quantitative data collection phase of the study was complemented by qualitative interviews that elicited information from HIM professionals and health leaders about their views regarding the HIM profession and its members, the factors that influence leadership development of HIM professionals, and suggestions to foster leadership development of HIM professionals. Grounded theory methods were used to analyze the qualitative interview data and the findings resulted in identification of four key themes emerged from the data. The themes were: 1) invisible but important, 2) career lifecycle issues, 3) leadership, and 4) gender.

The following discussion provides a review and synthesis of the quantitative and qualitative results, situating the findings in the context of the extant literature, and presenting the implications for future HIM leadership development. This chapter has been organized around the four research questions with a section dedicated to each. Throughout these sections, the GT themes derived from the qualitative interviews were used to emphasize discussion of the individual, organizational and societal, and gender factors influencing leadership development.

## **6.1. Individual Characteristics of HIM Professionals Influencing Leadership Development**

**6.1.1. Leadership.** As described in Chapter 2, individual characteristics influencing leadership can be considered within the two distinct categories of leadership

traits and personality characteristics. Leadership traits are considered important to leadership development because they have been consistently linked to leader emergence and leader effectiveness (Bono & Judge, 2004; McCrae & John, 1992). Specific personality characteristics such as motivation, integrity, confidence, and ambition have been linked to effective leadership (DuBrin, 2013; Yukl, 2013). When viewed through the lens of leadership emergence and ability, the personal characteristics of the individual are important factors in determining who will be a leader.

Health leader participants reported perceiving personality characteristics such as assertiveness, confidence, and initiative as instrumental in determining who became a leader. HIM professionals were generally described by both interview groups as complacent, lacking in initiative, and detail-oriented, whereas a requirement for leadership was characterized as ambition and "big picture thinking." The qualitative findings suggested an internalized self-image of HIM professionals as fearful followers rather than as courageous leaders. If HIM professionals select the profession because it is a 'safe' choice and they do not consider themselves 'leadership material', they may not possess the confidence required to feel deserving of a place at decision-making tables.

Countering the views expressed by interview participants, most respondents to the HIM professional and HIM student quantitative survey (80%) reported having attempted to initiate change in their workplace and seeking new opportunities to apply their HIM skill set (81%). Although the respondents who participated in the survey probably represented those more interested in leadership advancement, these results were encouraging to the extent that they pointed to initiative, confidence, and active participation by HIM professionals in promoting the profession and their skill set. The

contrast in the findings between the HIM survey respondents and those who participated in the interviews may also belie a change in the profession, wherein HIM professionals are beginning to better understand how their skills can be contextualized within the broader context of health leadership.

The characterization of HIM professionals as "heads down" and "detail-oriented" was corroborated by the quantitative results on the HEXACO-60, a measure of personality characteristics. Consistent with the interview findings, the HIM professionals scored significantly higher than a sample of community women on the HEXACO-60 scale assessing Conscientiousness. HIM respondents described themselves as organized, diligent, perfectionistic, and prudent - a self-characterization consistent with the interview reports; however, the interview data evidenced variability in how conscientiousness was perceived, for example, "clever" and "focused" but "stick to their knitting". Positive perceptions included concern for data quality and productivity, whereas negative perceptions made reference to being too narrowly focused and detail-oriented. The level of attention to detail and quality necessary for competent coding and release of information responsibilities may not equate with the 'big picture' and synthesis skills associated with leadership. Developing HIM professionals as leaders will require changing the culture from its current emphasis on conscientiousness at the micro-level toward being a conscientious leader at the macro-level.

HIM professionals responding to the MLQ-5X also reported significantly higher scores on all leadership scales than the measures norming sample. HIM participants' MLQ-5X responses suggested that their self-perception involved acting in a manner consistent with a transformational leadership style; however, they notably also reported

significantly more laissez-faire behaviour – a construct at odds with transformational leadership. As such, there may be a contradiction between the manner in which HIM respondents view themselves as leaders and how they behave. HIM respondents provided starkly differing perceptions of themselves relative to their characterizations of the profession as a whole. Consistent with the perspective of Avolio and Bass (1998), if HIM professionals view themselves as acting in a positive manner, they may be unmotivated to alter their behaviour, to learn how to change, and to apply that change in the workplace.

The survey results revealed that HIM professionals in the sample strongly endorsed pride in the profession and held positive attitudes toward continuing education and training. Most participants expressed responsibility for their continuing education; nevertheless, a significant minority (17.1% of HIM professionals and 8.2% of HIM students) responded that their employers were the main beneficiary. It is concerning that any HIM student would consider an employer the main beneficiary of his or her continuing education activities. Such an attitude may suggest immaturity or a lack of ambition or ambivalence about one's career direction.

**6.1.2. Invisible but important.** All HIM professionals interviewed indicated they loved and enjoyed their jobs; and yet they expressed frustration at the lack of visibility and the seeming inability to raise the profile of the profession. These sentiments belied the interview results of HIM professionals that they frequently helped decision-support or business intelligence personnel to obtain and interpret data and they were happy doing so without any form of recognition. The invisibility of the profession may be maintained from within, based on a desire to be kind and helpful – the *women are*

*wonderful effect* – described by Eagly and Mladinic (1994). Alternatively, the profession's invisibility may derive from a disregard for the consequences of making a substantive contribution without receiving recognition, acknowledgement, or authorship. The person who contributes *and* achieves an outcome is identified as possessing leadership capabilities; the person who contributes without acknowledgement – and, therefore, without an outcome – remains invisible.

Career development theories provide a lens with which to view the invisibility of the HIM profession. HIM professionals may find their career choice unsatisfactory after a period of working in obscurity or without recognition. Such dissatisfaction may lead to ongoing frustration with one's career trajectory, which may then lead to feelings of bitterness about their failure to advance (Super, 1992). Feelings of dissatisfaction and bitterness may in turn lead to disillusionment regarding career choice or consideration of the end of one career and exploration of another (Luzzo & Severy, 2009; Roe, 1957; Super, 1992). To better support health care, HIM professionals must become visible, begin to interact with and contribute to their organizations in a more meaningful and proactive manner, and transform their frustration into action that advances the visibility and recognition of their contribution.

### **6.1.3. Career lifecycle.** How do individuals make career choice selections?

Career development theories (e.g., Gottfredson, 2002; Holland, 1997; Super, 1992) suggest that career choice is influenced by one's personality, values, interests and abilities, and familial influence. Career development theory, if used in marketing the HIM programs and profession, can target a broader audience with messaging directed to specific groups such as mature students, second career applicants, and men. According to

Gottfredson (2002), adults reach a stage in their lives where the internal self is argued to be more important than the social self. This internal dissonance is posited to be an impetus for later life career change where it would not have been considered earlier. Gottfredson's perspective may aid in understanding why many HIM professionals are second career entrants. Those who might not have considered an HIM profession in their youth because of perceptions regarding the work, the absent prestige, or the gendered implications, may opt for the profession later in life.

Most of the HIM professionals interviewed reported having "lucked into" the profession. Several participants indicated that they wished they had learned of the profession earlier in their work life. Only a small number of interview participants reported knowledge of HIM undergraduate and Master's level educational competencies. If HIM is to become a career of choice, individuals must be aware of the many career paths available therein. To increase interest in HIM programs, the HIM profession must become a career of choice for high school graduates, those looking to expand or change careers, and individuals currently in senior leadership positions. The current state implies marketing of the profession has thus far been ineffective.

A career pathway is an important factor in moving forward into leadership positions. Most of the HIM professionals interviewed did not have a career goal or career plan in mind when they graduated from their HIM program, other than getting a "good paying job". Another consideration for career advancement is the ability to identify potential roles. If a job posting did not include the words *health information management* in the title, the HIM respondents reported they felt HIM professionals simply would not apply. Identifying a potential job from the viewpoint of the required

skill set rather than the job title was seen to impede HIM professionals from finding and applying for positions that may advance their careers. If HIM professionals are not able to articulate their skill set and are instead applying only for those jobs that meet their perceived view of an HIM position (i.e., job postings that request an HIM credential), they are vastly limiting their career options. As the new roles being developed in the eHealth environment tend to reflect the function and skill set required rather than a specific professional title, these self-imposed limitations will negatively affect the ability of HIM professionals to progress into these emerging careers.

**6.1.4. Education.** Consistent with Kleinman (2003), differences were found in the perception of the need for advanced education between the HIM professionals and health leaders, and between those with and without graduate degrees. For HIM professionals without formal post-certification education, work experience, seniority, and confidence were considered sufficient to move into advanced roles and leadership positions. Health leaders and HIM professionals with degrees identified advanced education, specifically a Master's degree, as critical to advancing into senior leadership positions in health care. Advanced education would provide both a greater understanding of the health system as a whole as well as the skills necessary to transform available data into usable information. Business intelligence, finance, and technology were identified by interview participants as areas for which HIM professionals required further education if they sought to move into advanced decision support and EHS roles.

HIM professionals were described as gathering data but not necessarily interpreting and presenting the data. Is the problem the inability of the HIM professional to translate data into actionable information or their inability to deliver such information?

The HIM professionals I interviewed were involved in the interpretation and transformation of data into actionable business intelligence; however, they rarely delivered the presentations or authored the reports. The skills acquired in a degree program (e.g., communication, writing, synthesis, critical thinking) can reasonably be expected to instill confidence in HIM professionals and position them for leadership advancement.

## **6.2. Gender Influences on Leadership Development of HIM Professionals**

Sexism remains an impediment to HIM professionals 'getting ahead' in the workplace: "...there is a disparity between the ideals espoused in policies and in theory and what is actually happening in the workplace" (Gatrell & Swan, 2008, p. 2). Women in Canada continue to assume primary responsibilities for parenting and domestic duties, spending an average of 50 hours per week on childcare compared to an average of 24 hours for men. When unpaid domestic work is considered, women spend an average of 14 hours per week compared to 8 hours per week for men (Milan, Keown, & Robles, 2011). This disparity becomes an important barrier to leadership in female-dominated professions, such as HIM. Family responsibilities, child bearing, and child rearing, particularly in single parent households, were identified by *all* female HIM professionals as influencing their leadership development, including their education and career opportunities. However, none of the male HIM professionals thought that was the case for them.

The perception that a woman must be "superwoman" or fit the "ideal worker image" to be successful as leaders appeared to exert an influence on the HIM professionals interviewed. Studies by Astin (1985), Coffman and Neuenfeldt (2014), and

Liff and Ward (2001) concluded that most female professionals rejected the organization of leadership work rather than the position itself. The findings of this study support that contention. HIM professionals were supportive of their colleagues striving to move into senior level positions, but they themselves did not aspire to a higher level due to the perceived increased time and commitment required.

A substantial body of research supports the view of gender inequality and the failure of women to advance in health-related leadership roles (American College of Healthcare Executives [ACHE], 2012; Lanz, 2008; McDonagh et al., 2014; Ragins, Townsend, & Mattis, 1998; Ryan & Haslam, 2005). Despite evidence to the contrary, almost all participants reported that being a woman working in a healthcare environment was "better" for leadership opportunities for women than most other workplace environments because "most people working in healthcare are women". This idea that women have equal opportunity to advance to leadership positions in the healthcare environment compared to men and, therefore, "all is well" may be particularly detrimental to the female-dominated HIM profession. If those responsible for filling senior leadership positions hold the view that all is fair and equal in the workplace they are arguably more likely to discriminate against women precisely *because* they believe that they are not biased (Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012). In the ACHE (2012) survey, only 42% of men compared to 79% of women supported efforts to increase the number of women in senior health executive roles. One of the reasons given against such support was the belief "that gender inequity in healthcare management is no longer an issue" (p. 4).

**6.2.1. Career lifecycle.** Career development theories concerned with women's career decisions include Betz and Hackett's (1986) self-efficacy theory that seeks to explain why most women choose traditional jobs and career paths; Gottfredson's theory (1981; 2002) that describes the methods by which women select socially appropriate career options; and Astin's (1984) theory that focuses on work motivation, work expectations, gender role socialization, and opportunity as factors that influence career choice and work behaviour. Gottfredson (2002) posited that it was easier for women to move into masculine roles than it was for men to select what is perceived to be a feminine role. Her theory resonates for the HIM profession. The HIM profession would be considered feminine in the context of Gottfredson's (2002) job *sextypes* – a perception that may, in part, explain why so few men enter the profession. Sextype is defined as an occupation consistent with the individual's own gender. As computer technology becomes more ubiquitous and HIM becomes increasingly linked with health informatics, a closely related but predominantly male sextype profession, we may then see a shift in perceptions regarding the profession with more men entering HIM at an earlier age.

Work values and personal interests are also important when choosing a career path (Crozier & Dorval, 2002; Super, 1992). The HIM profession represents an excellent choice for those who desire to work in a healthcare environment and contribute to quality care initiatives but do not seek involvement in hands-on patient care. Work values such as concern for others and being in a position of trust are consistent with the HIM profession and should attract individuals, particularly women, who consider these types of values important when making a career choice (Crozier & Dorval, 2002).

Career choice based on work values may aid in recruiting more women into the HIM profession; however, it may be necessary to target the recruitment of men differently. If Gottfredson's (2002) sextype theory is considered, occupational choice must be consistent with the individual's gender, that is, work values consistent with a more masculine prototype, such as financial prosperity and information as power, may attract more men to the profession (Fagenson, 1990). According to Fagenson, attributes associated with power, such as proximity to powerful people and resources, should be considered "upper level" (p. 209) attributes as they tend to be considered equally by men and women in higher level positions and by those with an advanced level of education. Targeted marketing of the HIM profession and career development literature employing messaging related to power may attract senior level executives, both male and female, to consider acquiring an HIM credential to enhance their careers.

Gender also influences career pathways and career advancement. As noted previously, if a job posting did not include the words *health information management*, HIM professionals reported that they felt HIM professionals would not apply. Moreover, HIM professionals may not apply for positions outside traditional HIM roles if they did not believe they possessed the requisite skill set (Betz & Hackett, 1986). The fact is that the more senior the position, the less likely it is that job requirements will include certification in HIM or the skill set associated with a conventional HIM role.

**6.2.2. Education.** Canadian statistics reflect significant disparities among gender, education, and positions of leadership (Catalyst, 2013). Consistent with the findings of Barbuto and colleagues (2007), it is arguable that a lack of advanced education significantly limits the opportunity for women HIM professionals to be seen as leaders.

Data from a 2011 report demonstrate that the gender breakdown of Canadian educational levels are changing with women between the ages of 25 and 34 years of age now earning 59% of the undergraduate degrees, 58% of the Master's degrees, 62% of the medical degrees, and 47% of the PhDs in Canada (Statistics Canada, 2011). As 61% of the certified HIM professionals in Canada during the 2014 CHIMA membership year were 45 years-of-age or older, a demographic shift toward higher education levels may be occurring in the profession. These statistics, viewed in conjunction with the HIM-LQ results, may signal a trend towards more highly educated HIM professionals, which, in turn, should equate with a professional membership more willing to embrace a change to entry-to-practice educational requirement.

**6.2.3. Leadership.** Results of a recent US gender parity survey (Coffman & Neuenfeldt, 2014;  $n = 1,009$ , 45% women) revealed that 43% of women and 34% of men participants with less than two years' experience reported a career aspiration to reach top management. In contrast, only 16% of women who were experienced employees or junior managers reported that they held a career aspiration to reach top management. Notably, the proportion of men aspiring to upper management remained unchanged at 34%. These results have relevance for the HIM profession as many of the HIM professionals interviewed commented on the initial enthusiasm of HIM graduates entering the workforce that, over time, changed to apathy or disinterest.

Women's confidence that they will be able to ascend to a senior position also decreased with the length of time in the job, falling from 27% for new employees to 13% for those with more than two years of work experience and rising to only 29% for those in senior level positions. Men's confidence levels dropped from 28% for new employees

to 25% for those participants with more than two years work experience and then rose to 55% for senior leaders. The drop in career aspiration reportedly was not related to marital status or to whether the respondents were parents. Coffman and Neuenfeldt (2014) interpreted these results as suggesting that early female career professionals believe that a C-suite position is attainable and desirable; however, as they acquire more experience they tended to downgrade both their aspirations and their expectations that they could achieve higher level positions. In stark contrast, men do not appear to similarly downgrade their desire or expectations of career progression with increased employment experience. As most HIM professionals do not possess the educational qualifications necessary to advance up the corporate ladder, and considering that it is more difficult for women to continue their education once child-rearing and family responsibilities are added to work-life, it is reasonable to posit that their leadership aspirations may also change.

### **6.3. Organizational and Societal Factors Influencing HIM Leadership Development**

**6.3.1. Education.** All interview participants agreed the current diploma level entry requirement for the HIM profession was no longer sufficient to meet health system needs. Not only does their education not prepare front-line HIM professionals to enter the workforce with an appropriate skill level, the diploma entry-to-practice education requirement was reportedly an impediment to HIM professionals being viewed as leadership material. The technical focus of the diploma program does not prepare HIM professionals for management and definitely does not prepare them for leadership. Over time, the educational requirement for senior level health positions has increased to a Master's degree. The caveat that "related experience will be taken into consideration" is reportedly being removed from job postings. HIM professionals, the majority of whom

do not possess an undergraduate degree, face a daunting commitment of both time and financial resources to attain the competitive credential of a Master's degree.

**6.3.2. Front-line managers.** A recent study found that the nature of an employee's relationship with front-line managers is one of three main influences that appear to affect the way employees, particularly women, aspire to higher-level positions and feel confident they will be successful (Coffman & Neuenfeldt, 2014). Coffman and Neuenfeldt found that front-line supervisors are seen as unsupportive, unaware of their staff's career aspirations, and, if they are aware and care, do not know how to support employees to advance their careers. The HIM professional managers I interviewed appear to echo these results, stating that front-line managers exert a significant influence on whether an employee is mentored, promoted, or encouraged. While health leader interview participants advocated for supporting and promoting HIM staff to participate on committees despite their workload, most of the HIM managers interviewed were unwilling to mentor their staff or support such participation.

Time spent on committees and task teams to highlight the role of the HIM professional was considered by some HIM professional interview participants as detracting from the work of the HIM department. With ongoing shortages and difficulty recruiting HIM professionals, the HIM managers interviewed described an unwillingness to give much thought to promoting the development and implementation of new HIM roles, such as clinical documentation improvement. The day-to-day activities of the HIM department appeared to be of paramount concern, leaving little to no time to undertake strategic planning.

In keeping with the findings of a recent survey regarding front-line managers, most HIM professional interviewees who were in management roles described being placed in the role without management education or experience (De Smet, McGurk, Vinson, 2010). The HIM managers interviewed did not appear to have the skill set to develop a business case in support of increasing their workforce to match growing workload, or to consider the long-term implications of non-participation on organizational committees, special projects, and task teams. HIM managers may not have the knowledge or experience in strategic thinking and planning to enable them to move beyond the day-to-day activities of the department or service and create a plan to support the organizations' needs related to technological advances and employee development.

The interview participants from both groups reported little to no mentoring from within the traditional HIM departments for a number of reasons. One reason reported was that HIM professional managers who came up "through the ranks" do not have the training to mentor and lead. These managers were described by HIM staff as detrimental to the HIM employees and department because of their inability to promote the HIM skills and capacities. Another suggested reason was that managers and directors who came from outside the HIM profession and were not certified do not appreciate HIM as a valuable skill set and so they do not mentor the HIM professional group. A further reason for lack of advancement was the nature of the reporting relationships within the organization.

**6.3.3. Reporting relationships.** Organizational reporting relationships impose structural obstacles to HIM professionals' leadership advancement (Johns, 2013). Johns

notes that the HIM skill set focuses primarily on information management rather than financial management, thereby instituting a barrier to direct line leadership advancement. As discussed in Chapter 1, given that the traditional career advancement pattern is via vertical pathways up the formal organizational chart, reporting to the finance or IT department may be detrimental to the HIM professional's leadership development. More than half (58%) of the current study's respondents reported to a department congruent with the HIM professional's skill set (e.g., CIO, HIM-related); however, 22% reported to Finance or Information Technology. One health leader interviewee described the HIM department reporting relationship to Finance as a "challenge" to HIM leadership potential, because the HIM professional would require a financial background to move into senior positions. The incongruity of the skill set between finance or information technology and HIM plausibly makes it more difficult for HIM professionals to pursue leadership development opportunities within this type of reporting structure. In addition, the contracting out of HIM roles, such as coding and abstracting, make it difficult for HIM professionals to be seen within the organization. If one of the key HIM professional roles is physically separated from the organization all together, the ability to be viewed as a potential leader may be correspondingly absent.

**6.3.4. Mentorship.** A lack of mentoring within health organizations was identified. Only two participants described a formal mentorship program within their organizations. As noted earlier, the HIM professional managers interviewed were less likely to mentor their own staff or support their participation in project work and on task teams or committees. The absence of mentorship for HIM professionals is alarming when we consider that mentorship has been linked to career development, job

satisfaction, salary and benefits attainment, promotion, and career success (Carter & Silva, 2010; Dreher & Cox, 1996; Ehrich, Hansford, & Tennent, 2004; Mertz, 2004).

HIM managers must examine their beliefs about their staff's ability and willingness to be promoted or entry level HIM professionals will continue to become disillusioned with their career choice. HIM professionals must actively seek mentors from outside the profession in order to gain knowledge of the broader organization and to meet those who can influence their career trajectory. Health leaders must move beyond merely advocating for HIM mentorship and become actively engaged in mentoring HIM professionals to support organizational HIM requirements at the senior level.

In summary, several factors appear to influence the leadership development of HIM professionals. Individual personality characteristics such as assertiveness, confidence, "big-picture thinking", and initiative are considered important in leadership development yet HIM professionals were generally described as complacent, lacking in initiative, and detail-oriented. Gender inequities such as women assuming the primary responsibility for care-giving and domestic duties may affect the HIM professionals' desire to consider career advancement or their ability to pursue continuing education. Limited education not only affects the individual HIM professional; the fact that HIM front-line managers also possess limited education represents an obstacle. Front-line managers who do not possess an understanding of steps and initiatives that could be taken to promote HIM professionals towards leadership positions, such as involvement on committees and projects, and mentorship, may unwittingly deter their staff from aspiring to higher-level positions (Coffman & Neuenfeldt, 2014). Yet HIM professionals, although frustrated by the invisibility of the profession, are beginning to better

understand how their skills can be contextualized within the broader context of health leadership. The next chapter will outline the implications, recommendations, and suggestions for future research.

## **CHAPTER 7: IMPLICATIONS, RECOMMENDATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH**

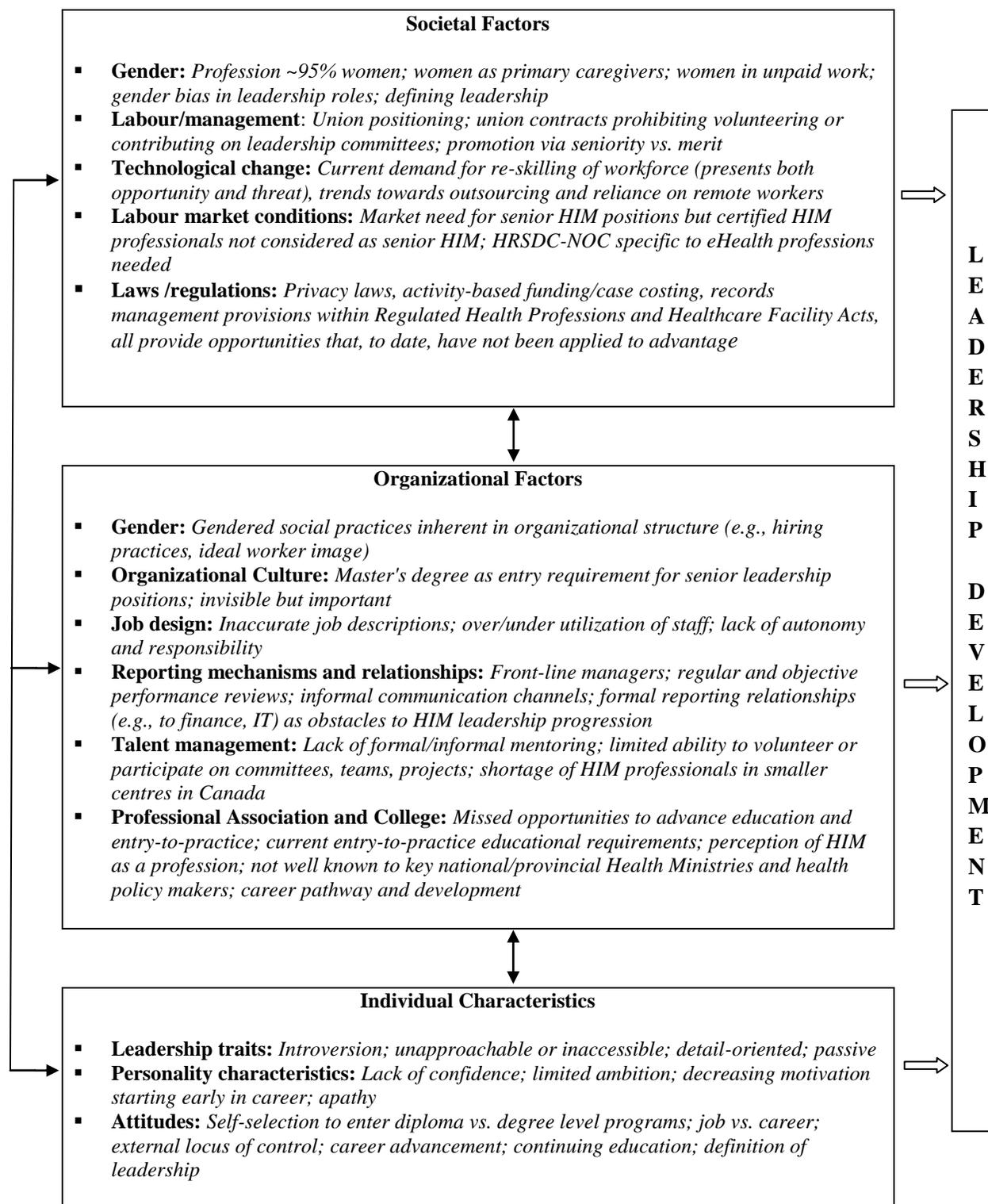
### **7.1. Implications**

Despite the noted limitations, the current study adds novel insights to a growing body of literature examining factors that influence HIM professional leadership opportunities. The purpose of this research was to explore the factors that influence the leadership development of certified HIM professionals in Canada. I sought to identify the factors that influence HIM leadership advancement, explore the reasons for limited leadership opportunities, and provide recommendations to address the barriers using a sequential explanatory mixed methods design. The significance of HIM professionals' contribution to health care is evident in the literature described throughout this dissertation. Revealing factors that influence leadership development in HIM is a fundamental step to inform action. Below I begin by presenting implications for theory development, practice, education, and policy; outline my recommendations; and provide suggestions for future research.

The findings of this study suggest that several interacting factors influence the leadership development and opportunities for HIM professionals. A multi-factorial theory may best explain the influences that maintain the status quo and, when taken together, may convincingly explain the leadership gap for HIM professionals (Figure 3. Summary Model of Factors Influencing HIM Leadership Progression). The factors influencing HIM leadership development in Canada are presented within a conceptual model for purposes of clarity, relevance, and structure. Candidate factors for such a model include (in no particular order): The individual characteristics of HIM

professionals, issues related to gender, education (i.e., the current entry-to-practice educational requirements), societal and organizational culture, and perceptions of HIM as a profession. The model is based on the study findings, the literature review, and my experience as an HIM professional.

Figure 3. Summary Model of Factors Influencing HIM Leadership Development\*.



\* Arrows suggest inter-relationships

Convincing evidence already exists in the literature to suggest a Masters' degree is considered the entry-to-practice educational requirement for leadership positions in health care. The current findings are consistent with these results. Therefore, the most significant barrier to HIM advancement is education; specifically, the diploma level entry requirement for *general* HIM practice, the limited availability of HIM undergraduate programs, and a complete lack of HIM Masters' level programs. The findings of this study corroborates and supports previous findings regarding advanced HIM education and the need for specialty certifications. While an HIM generalist education *must* start at the undergraduate level, shorter-term education specialty certifications in areas such as coding, clinical documentation improvement, terminology standards, and decision support are needed. The health leaders interviewed considered the incorporation of HIM educational content into other programs (e.g., Masters of Health Administration, Masters of Business Administration) as important for future health leaders to support an increased understanding and use of clinical and administrative data. An advanced level, condensed HIM program should be developed for senior health leaders responsible for information management, information systems, information technology, and finance areas. Additionally, course content related to HIM should be incorporated into Masters' programs as a course elective for those individuals who plan a career in health administration. The findings of this study underscore the urgency of addressing the education gap as the need for senior HIM expertise has long-term implications for health practice and policy related to electronic health information systems and technological advancement, funding and resource allocation, and the relevance of the HIM profession itself.

Confidence, initiative, and "big picture thinking" were all identified by interview participants as important personality characteristics and traits required for leadership. Information regarding HIM professionals' personality characteristics may help to identify the means by which to motivate current HIM professionals to promote themselves and their profession. HIM professionals require mentorship support, identifiable career pathways, and advanced education to change the perception that the HIM profession is a clerical or front-line position. HIM professionals individually must assume responsibility for their own professional development and advancement. If individuals choose, intentionally or unconsciously, to remain invisible by waiting for others to take action or make decisions for them, the profession will continue to be marginalized. Indeed, at times it appears – as many of the HIM interviewees commented and as I have heard throughout my career – that HIM professionals themselves "are the profession's own worst enemy".

A clear career pathway is required to inform HIM students, new graduates, practitioners, and senior leaders, of the integral roles that those with the HIM education and skill set can and should pursue. An HIM career matrix, which includes career pathways, is under development by CHIMA and should be available in early 2016. An effective strategic marketing plan is required if the career matrix is to be of use.

The lessons of the past suggest that an unflinching commitment is required to remove the barriers to HIM leadership development. If the HIM profession continues to be invisible, to be a diploma entry-to-practice with limited ability to pursue advanced HIM education, and fails to communicate and market itself effectively and efficiently, it

may well be subsumed under the broader HI profession and cease to exist as a unique and important profession in its own right.

## **7.2. Recommendations**

The ability to attract individuals into the HIM profession who are seeking a career rather than a job is central to changing the face of HIM in Canada. However, it is difficult to consider a career in the HIM profession if one has not heard of it or does not understand the career options and available advancement possibilities. In terms of career exploration during high school, the HIM profession has not been on the radar of most Saskatchewan career counselors. In discussions with Saskatchewan high school career counselors during my tenure as HIM program head at the Saskatchewan Institute of Applied Science and Technology (now Saskatchewan Polytechnic), very few had heard of the profession and fewer yet had recommended it to their students as a career option. Marketing of the HIM profession to new career entrants must include messaging to attract potential leaders and the messaging must become more widespread. More undergraduate HIM programs are needed in Canada. Marketing of the HIM undergraduate degree programming content to colleges and universities across Canada should become a priority for the CCHIM.

In the early years of the profession, the HIM association worked closely with health stakeholder associations such as the American College of Physicians and Surgeons and the American Hospital Association. Unfortunately, the HIM profession now has limited strategic relationships with provincial Ministries of Health and key national organizations such as Canada Health Infoway, CIHI, and COACH. For example, the three noted national organizations are conference hosts for the biggest and most

influential HI and HIM conference in Canada; yet CHIMA is not involved as a partner. The perception of the HIM profession has arguably been marginalized by its lack of visibility on the national health information stage. The CHIMA Board of Directors would be well advised to become actively involved in connecting the professional association's executive with key national strategic leaders, and to lobby the responsible organizations to include CHIMA as a partner in the annual eHealth conference.

CHIMA and the Canadian College of Health Leaders (CCHL) have a formal partnership agreement to support leadership and professional knowledge between the two organizations and their members. The CCHL is part of a collaborative partnership (along with Royal Roads University, the Canadian Health Leadership Network, and Dr. Graham Dickson) that has developed a leadership program called LEADS (Lead self, Engage others, Achieve results, Develop coalitions, and Systems transformation). The CHIMA and CCHL partnership could be used to leverage LEADS training for HIM professionals and to develop a mentorship program between CCHL members and CHIMA members.

Formal reporting structures within Canadian health organizations will require changes to support the advancement of HIM professionals. Health leaders must consider the consequences on human resource potential when contracting out services and developing reporting relationships. Reporting relationships conducive to supporting the organization to understand and utilize their HIM resources better are required. The creation of a Chief Information Governance Officer or Chief Information Management Officer role, a position that focuses specifically on the information assets of the organization versus the technical infrastructure, would support better use of health resources. It could be argued that many failed electronic health record implementations

could have been avoided or better outcomes realized had the HIM skill set been recognized and utilized. Senior health leaders must also support their front-line managers in developing leadership skills including coaching/mentoring, interpersonal communication, and customer service (De Smet et al., 2010).

Front-line managers must recognize the effect that their perceptions about and actions towards their HIM staff have on advancement opportunities. Employees who are not respected for their skills, abilities, and potential will begin to feel dissatisfied and bitter, promoting an environment where the resulting negative employee attitudes reinforce the front-line managers' expectations (Coffman & Neuenfeldt, 2014; Super, 1992). Being "too busy" can no longer be an excuse for the lack of promoting the department and its unique human resources. HIM managers require further education and mentoring to support the development of a business case for more staff and to educate them in workflow analysis to improve and reduce workflow redundancies, enabling the department or division to focus on the bigger picture issues, as the departments were originally intended to do. The resources used to gather the current load of health data are going to waste if the data are not being used or interpreted properly. HIM professionals can influence EHR implementation and maintenance, especially now with the focus shifting from the technical infrastructure to the content and documentation requirements. HIM professionals can support clinician engagement through clinical documentation improvement, not just to support coding and data capture but to also decrease the time spent on documentation and to improve patient care.

Information provided by HIM professionals and health leaders suggests that the learning content required for an entry-level generalist HIM professional can no longer be

acquired in a diploma-level program. All interview participants expressed doubt that the current diploma-level education was practical enough to allow the graduates to "hit the ground running". Not only does the current entry program of study not meet industry needs, it limits and inhibits HIM professionals' career pathways toward more senior leadership roles. Prior research has highlighted the importance of changing the entry to practice academic requirement for the generalist HIM practitioner. For example, the 1996 CHRA report on education reform outlined the reasons for the decision to move to an undergraduate entry-to-practice (Reece, 1996). Those reasons are still valid today and, it could be argued, are even more relevant given the increasing pace of technological change, ABF, and information governance issues. Shorter, specialized programs of study could be introduced to focus on coding and electronic data capture, and decision support or business intelligence. The CHIMA/CCHIM Board of Directors must recognize the importance of allocating funds towards an education reform initiative and make advancing the profession a priority before the HIM profession moves from "invisible but important" to simply "invisible".

### **7.3. Suggestions for Future Research**

In this study, leadership style and behaviours were assessed using self-report instruments rather than with a multi-rater method. Future research should consider using multi-rater comparisons or individual interviews to augment self-report measures. As the health leaders who participated in the interviews may be more likely to have a good understanding of the HIM profession than those who elected not to participate in this study, an expanded study of health leader perceptions of the HIM profession may identify further issues for consideration as well as increase the understanding of the profession.

Another future research direction may be to identify HIM professionals who have been successful in advancing their careers to that of senior health leadership positions and interview them to understand the steps they took to reach these positions.

The Summary Model of Factors Influencing HIM Leadership Development (Figure 3) is based on the study findings, the literature review, and my experience as an HIM professional. As noted earlier in this chapter, the model may be used in future research to generate testable hypotheses to refine our understanding of factors related to HIM leadership progression. For example, it may be possible to use statistical modeling to assess the relative contributions the identified variables contribute to limiting leadership progression of HIM professionals.

Limited information is available on students entering the HIM profession including why they enter the profession, how they are initially introduced to the profession, and what prior education or work experience they have. Research that better characterizes this population would inform academic marketing strategies as well as potentially provide policy direction for the professional accrediting body in regards to curricular and admission standards. Future research considerations may also include cross-jurisdictional studies with countries with similar HIM education and jobs such as Australia and the United States. Investigation into the leadership roles available to HIM professionals in those two countries may identify additional solutions to support leadership development and career advancement.

Research into Canadian health executives, similar to that of the ACHE surveys, is needed. The perception exists that all is fair and equal in the Canadian health executive career landscape; however, no solid data has been gathered. Research

comparing career attainment of men and women, including race comparisons, is necessary to confirm or discredit this increasingly common myth.

#### **7.4. Conclusion**

The changes over the past decades have led the profession to a decision point – will the profession continue to be an entry-level profession, wherein most HIM professionals remain at a similar level in an organization throughout their career? Will HIM professionals begin to plan their careers, advance their education, and climb the corporate leadership ladder? Will CHIMA make the decision to change the entry-to-practice to an undergraduate degree for generalist HIM professionals? I am cautiously optimistic that the responses to these questions will support a stronger profession.

Since beginning this research a little over three years ago, a number of positive changes have occurred. The CCHIM External Graduate program introduced in 2013 (intended for non-certified individuals who hold a minimum of an undergraduate degree and are currently working in the HIM field) is attracting increasing attention despite limited marketing. Two of the accredited HIM diploma programs are completing a needs analysis as the first step to introduce an undergraduate degree. One university has formally applied for accreditation candidacy for a Masters' program. CHIMA has engaged in direct talks with provincial Ministries of Health to increase the profile of the HIM profession and to advocate for funding to support HIM advancement.

As I reflect back on my research and findings, I believe that the profession will grow in visibility and recognition. The HIM professionals that participated in the interviews are passionate about the profession and many were considering new and advanced roles. While not all HIM professionals will seek to move into formal

leadership positions, it is vital that a critical mass embark on their career with plans that include achieving senior decision-making roles.

## REFERENCES

- Abrams, K. J., & Crook, G. (2011). The Canadian Health Information Management Association: Health information management in Canada. *HIM-Interchange, 1*, 17-21. Retrieved from [http://hima.org.au/members/journal/HIMI\\_1\\_1\\_2011/AbramsCrook\\_HIM\\_in\\_Canada.pdf](http://hima.org.au/members/journal/HIMI_1_1_2011/AbramsCrook_HIM_in_Canada.pdf)
- Accreditation Canada. (2013). *Our history*. Retrieved from <https://www.accreditation.ca/our-history>
- Adolph, S., Hall, W., & Kruchten, P. (2011). Using GT to study the experience of software development. *Empirical Software Engineering: An International Journal, 16*, 487–513. doi: 10.1007/s10664-010-9152-6
- Alberta Health Services. (2014, February). *Alberta Health Services action plan 2013-14: Supplement to health plan and business plan 2013-2016*. Retrieved from <http://www.albertahealthservices.ca/Publications/ahs-pub-action-plan-2013-14.pdf>
- Allen, T.D., & Eby, L.T. (2003). Relationship effectiveness for mentors: Factors associated with learning and quality. *Journal of Management, 29*, 469-486. doi: 10.1016/S0149-2063\_03\_00021-7
- Allen, T.D., Eby, L.T., & Lentz, E. (2006). Relationship effectiveness for mentors: Factors associated with learning and quality. *Journal of Management, 29*, 469-486. doi: 10.1016/S0149-2063\_03\_00021-7
- Allison, C.B. (1995). *Past and present: Essays for teachers in the history of education*. New York, NY: Peter Lang.

- American College of Healthcare Executives. (2006). *A comparison of the career attainments of men and women healthcare executives*. Retrieved from [http://www.ache.org/pubs/research/gender\\_study\\_full\\_report.pdf](http://www.ache.org/pubs/research/gender_study_full_report.pdf)
- American College of Healthcare Executives. (2012). *A comparison of the career attainments of men and women healthcare executives*. Retrieved from <https://www.ache.org/pubs/research/2012-Gender-ExecSummary.pdf>
- American College of Surgeons (1913). *American College of Surgeons: A list of fellows 1913*. Washington, DC: American College of Surgeons.
- American Health Information Management Association (AHIMA). (1998). Years of progress. *Journal of AHIMA*, 69, 61.
- American Health Information Management Association (AHIMA). (2010). *Pocket glossary of health information management & technology*. Chicago, IL: AHIMA.
- American Health Information Management Association (AHIMA). (2013). *Certified in healthcare privacy and security (CHPS®)*. Retrieved from <http://www.ahima.org/certification/chps.aspx>
- American Health Information Management Association (AHIMA). (2015). *Health information 101*. Retrieved from <http://www.ahima.org/careers/healthinfo>
- American Health Information Management Association & American Medical Informatics Association. (2006). *Building the work force for health information transformation*. Retrieved from [https://www.amia.org/sites/default/files/files\\_2/Workforce\\_2006.pdf](https://www.amia.org/sites/default/files/files_2/Workforce_2006.pdf)
- American Health Information Management Association (AHIMA) Foundation. (2014). *Side by side progression map of associate, baccalaureate, and graduate HIM*

*curricula*. Retrieved from

<http://www.ahimafoundation.org/education/curricula.aspx>

American Psychological Association. (2015). *Glossary of psychological terms*. Retrieved from <http://www.apa.org/research/action/glossary.aspx>

Anderson, R.K. (1989). Reinventing the medical librarian. *Bulletin of the Medical Librarian Association*, 77, 323-331. Retrieved from

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC227480/pdf/mlab00044-0017.pdf>

Anells, M. (1997). Grounded theory method, part 1: Within the five moments of qualitative research. *Nursing Inquiry*, 4, 120-129. doi: 10.1111/j.1440-1800.1997.tb00085.x

Antonakis, J. (2012). Transformational and charismatic leadership. In D. V. Day & J. Antonakis, *The Nature of Leadership*, (2nd ed.). New York, NY: Sage Publications.

Antonakis, J., Avolio, B.J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine full-range leadership theory using the multifactor leadership questionnaire. *Leadership Quarterly*, 14, 261-295. doi:10.1016/S1048-9843(03)00030-4

Arvey, R.D., Rotundo, M., Johnson, W., Zhang, Z., & McGue, M. (2006). The determinants of leadership role occupancy: Genetic and personality factors. *Leadership Quarterly*, 17, 1-20. doi:10.1016/j.leaqua.2005.10.009

Arvey, R.D., Zhang, Z., Avolio, B.J., & Krueger, R.F. (2007). Developmental and genetic determinants of leadership role occupancy among women. *Journal of Applied Psychology*, 92, 693-706. doi: 10.1037/0021-9010.92.3.693

- Ashton, M.C., & Lee, K. (2007). Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. *Personality and Social Psychology Review, 11*, 150-166. doi: 10.1177/1088868306294907
- Ashton, M.C., & Lee, K. (2009). The HEXACO-60: A short measure of the major dimensions of personality. *Journal of Personality Assessment, 91*, 340-345. doi: 10.1080/00223890902935878
- Ashton, M.C., Lee, K., Perugini, M., Szarota, P., De Vries, R.E., Di Blas, L., Boies, K., & De Raad, B. (2004). A six-factor structure of personality-descriptive adjectives: Solutions from psycholexical studies in seven languages. *Journal of Personality and Social Psychology, 86*, 356-366. doi: 10.1037/0022-3514.86.2.356
- Association of Record Librarians of North America (ARLNA). (1932, September 16). *Meeting of the ARLNA Executive Committee*. AHIMA Archives, Chicago, IL.
- Association of Record Librarians of North America (ARLNA). (1934, October 19). *Meeting of the executive committee*. AHIMA Archives, Chicago, IL.
- Astin, H.S. (1984). The meaning of work in women's lives: A sociopsychological model of career choice and work behavior. *The Counseling Psychologist, 12*, 117-126. doi: 10.1177/0011000084124002
- Australian Institute of Health and Welfare (AIHW). (2010). *The coding workforce shortfall*. Cat. no. HWL 46. Canberra, Australia: Author.
- Avolio, B.J., & Bass, B.M. (1991). *The full-range of leadership development*. Binghamton, NY: Center for Leadership Studies.
- Avolio, B.J., & Bass, B.M. (2004). *Multifactor leadership questionnaire* (3rd ed.). Redwood City, CA: Mind Garden, Inc.

- Avolio, B.J., Walumbwa, F.O., & Weber, T.J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60, 421-449. doi: 10.1146/annurev.psych.60.110707.163621
- Ayman, R., & Chemers, M.M. (1983). Relationship of supervisory behavior ratings to work group effectiveness and subordinate satisfaction among Iranian managers. *Journal of Applied Psychology*, 68, 338-341
- Baggini, J., & Fosl, P.S. (2003). *The philosopher's toolkit: A compendium of philosophical concepts and methods*. Oxford, UK: Blackwell Publishing.
- Bailey, K.D. (1994). *Methods of social research* (4rth ed.). New York, NY: The Free Press.
- Barbuto, J.E. Jr., Fritz, S.M., Matkin, G.S., & Marx, D.B. (2007). Effects of gender, education, and age upon leaders' use of influence tactics and full range leadership behaviors. *Sex Roles*, 56, 71–83. doi: 10.1007/s11199-006-9152-6
- Barling, J., Weber, T., & Kelloway, K.E. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, 81, 827-832. Retrieved from <http://www.rc.usf.edu/>
- Bass, B.M. (1960). *Leadership, psychology, and organizational behavior*. New York: Harper.
- Bass, B.M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B.M., & Avolio, B. J. (1995). *The multifactor leadership questionnaire (form R, revised)*. Palo Alto, CA: Mind Garden, Inc.

- Bass, B.M., & Bass, R. (2008). *The Bass handbook of leadership: Theory, research, & managerial applications*, (4th ed.). New York, NY: Free Press.
- Bennett, C.J. (1990). The formation of a Canadian privacy policy: The art and craft of lesson drawing. *Canadian Public Administration*, 33, 551-570. doi: 10.1111/j.1754-7121.1990.tb01417.x
- Berg, M., & Harterink, P. (2004). Embodying the patient: Records and bodies in early 20th-century US medical practice. *Body & Society*, 10, 13-41. doi: 10.1177/1357034X04042931
- Berner, E.S., Detmer, D.E., & Simborg, D. (2005). Will the wave finally break? A brief view of the adoption of electronic medical records in the United States. *Journal of the American Medical Informatics Association*, 12, 3-7. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC543824/pdf/3.pdf>
- Betz, N.E., & Hackett, G. (1986). Applications of self-efficacy theory to understanding career choice behavior. *Journal of Social & Clinical Psychology*, 4, 279-289. doi: 10.1521/jscp.1986.4.3.279
- Boan, J. (2009). A brief retrospective on the Royal Commission on Health Services. *Canadian Bulletin of Medical History*, 26, 541-545. Retrieved from <http://www.cbmh.ca/index.php/cbmh/article/view/1414/1381>
- Boeker, W. (1989). Strategic change: The effects of founding and history. *Academy of Management Journal*, 32, 489-515. Retrieved from <http://www.jstor.org.libproxy.uregina.ca:2048/stable/i302918>
- Bono, J.E., & Judge, T.A. (2004). Personality and transformational and transactional leadership: A meta-analysis. *Journal of Applied Psychology*, 89, 901-910.

Bowen, G.A. (2008). Naturalistic inquiry and the saturation concept: A research note.

*Qualitative Research*, 8, 137-152. doi: 10.1177/1468794107085301

Breckenridge, J. (2009). Demystifying theoretical sampling in grounded theory research.

*Grounded Theory Review*, 8, 113-126. Retrieved from

<http://groundedtheoryreview.com/wp-content/uploads/2012/06/GT-Review-Vol8-no2.pdf>

British Columbia Ministry of Health. (2014). *Setting priorities for the B.C. health system*.

Retrieved from

<http://www.health.gov.bc.ca/library/publications/year/2014/Setting-priorities-BC-Health-Feb14.pdf>

Brodman, E. (1980). Education and attitudes of early medical librarians to their work: A

discussion based on the oral history project of the Medical Library Association.

*Journal of Library History (1974-1987)*, 15, 167-182. Retrieved from

<http://www.jstor.org/stable/25541073>

Brophy, J. (2012). Funding models – past and future. *HIM-Interchange*, 2, 1-3. Retrieved

from <http://www.himaa2.org.au/HIM-I/sites/default/files/HIM-I%202-2%20Editorial%20Brophy.pdf>

Brumberg, J.J., & Tomes, N. (1982). Women in the professions: A research agenda for

American historians. *Reviews in American History*, 10, 275-296. Retrieved from

<http://www.jstor.org/stable/2702343>

Brungardt, C. (1996). The making of leaders: A review of the research in leadership

development and education. *Journal of Leadership Studies*, 3, 81-95.

doi:10.1177/107179199700300309

- Bryant, A. & Charmaz, K. (2007). Grounded theory research: Methods and practices. In A. Bryant & K. Charmaz (Eds.), *The sage handbook of grounded theory* (pp.1-29) London, UK: Sage Publications.
- Budig, M.J. (2002). Male advantage and the gender composition of jobs: Who rides the glass escalator? *Social Problems*, 49, 258-277.
- Canada Health Infoway (CHI). (2012). *2011-2012 Summary corporate plan*. Ottawa: CHI.
- Canadian Agency for Drugs and Technologies in Health. (2009). *Activity-based funding models in Canadian hospitals*. Retrieved from <http://www.cadth.ca/products/environmental-scanning/health-technology-update/ht-update-12/activity-based-funding-models-in-canadian-hospitals>
- Canadian Association of Medical Record Librarians (CAMRL). (1944). Advances in record keeping. *The Bulletin of the Canadian Association of Medical Record Librarians*, 5, 7.
- Canadian Association of Medical Record Librarians (CAMRL). (1950a). Registration examination. *The Bulletin of the Canadian Association of Medical Record Librarians*, 7, 13.
- Canadian Association of Medical Record Librarians (CAMRL). (1950b). Schools approved. *Bulletin of the Canadian Association of Medical Record Librarians*, 7, 6.
- Canadian Association of Medical Record Librarians (CAMRL). (1953). Schools for medical record librarians approved by the Canadian Association of Medical Record Librarians. *Bulletin of the Canadian Association of Medical Record Librarians*, 10, 10.

- Canadian Association of Medical Record Librarians (CAMRL). (1969). A masters in medical record administration? *Canadian Association of Medical Record Librarians Newsletter, 1*, 14.
- Canadian Health Information and Privacy Registry Board. (n.d.). *Certification program*. Retrieved from [http://www.chiprb.org/certification\\_program.html](http://www.chiprb.org/certification_program.html)
- Canadian Health Information Management Association. (2006, March 20). *Meeting of the CHIMA Board of Directors*. CHIMA Archives, London, ON.
- Canadian Health Information Management Association. (2010). *Learning outcomes for health information management: Version 3*. London, ON: Author.
- Canadian Health Information Management Association. (2011). *HIM membership survey*. London, ON: Author.
- Canadian Health Information Management Association. (2012). *Evolve the College initiative: Development of a framework and work plan*. London, ON: Author.
- Canadian Health Information Management Association. (2013a). *CHIMA HIM salary survey summary report*. London, ON: Author.
- Canadian Health Information Management Association. (2013b). *Transforming health information management: The evolution of the HIM profession*. Retrieved from [https://www.echima.ca/media/documents/Workforce%20Transformation\\_FINAL\\_WEB.pdf](https://www.echima.ca/media/documents/Workforce%20Transformation_FINAL_WEB.pdf)
- Canadian Health Information Management Association (CHIMA). (2014). *Accredited HIM Schools*. Retrieved from <https://www.echima.ca/cchim/him-program>
- Canadian Health Information Management Association. (2015). *About CHIMA*. Retrieved from <https://www.echima.ca/chima/about>

- Canadian Health Record Association (CHRA). (1977, October 15). *Minutes of the second annual meeting of the CHRA*. CHIMA Archives, London, ON.
- Canadian Health Record Association. (1996). *Learning outcomes for health record education in Canada*. Don Mills, ON: Author.
- Canadian Health Record Association. (1998). *Education for health information management in Canada: Conceptual curriculum models for Canadian baccalaureate degree programs in health information management*. Don Mills, ON: Author.
- Canadian Health Record Association (CHRA). (2001). *Meeting of the board of directors*. CHIMA Archives, London, ON.
- Canadian Health Record Association. (2002). *Health information management: Central to reforming Canada's health care system*. (Unpublished document.) Don Mills, ON.
- Canadian Institute for Health Information (CIHI). (2008, March 6). Canadian Institute for Health Information (CIHI): Past, present, and future [PowerPoint slides]. Presentation to the CIHI Board of Directors. Ottawa, ON: CIHI.
- Canadian Institute for Health Information (CIHI). (2010). *A primer on activity-based funding*. Retrieved from [http://www.cihi.ca/CIHI-external/portal/pdf/internet/primer\\_activity\\_based\\_fund\\_en](http://www.cihi.ca/CIHI-external/portal/pdf/internet/primer_activity_based_fund_en)
- Canadian Institute of Health Information. (2011). *Canadian patient cost database technical document: MIS patient costing methodology, November 2011*. Retrieved from [http://www.cihi.ca/CIHI-external/portal/pdf/internet/MIS\\_PATIENT\\_COST\\_METH\\_EN](http://www.cihi.ca/CIHI-external/portal/pdf/internet/MIS_PATIENT_COST_METH_EN)

- Canadian Institute for Health Information. (2012). *Hospital standardized mortality ratio (HSMR)*. Retrieved from [http://www.cihi.ca/CIHI-ext-portal/pdf/internet/HSMR\\_Tech\\_Notes\\_201202\\_en.pdf](http://www.cihi.ca/CIHI-ext-portal/pdf/internet/HSMR_Tech_Notes_201202_en.pdf)
- Canadian Institute for Health Information. (2013). *Canadian hospital reporting project (CHRP)*. Retrieved from [http://www.cihi.ca/CIHI-ext-portal/pdf/internet/CHRP\\_TNCL\\_PDF\\_EN](http://www.cihi.ca/CIHI-ext-portal/pdf/internet/CHRP_TNCL_PDF_EN)
- Canadian Institute for Health Information. (2014). *Reflecting on 20 years*. Retrieved from [https://www.cihi.ca/en/cihi\\_20\\_years\\_en.pdf](https://www.cihi.ca/en/cihi_20_years_en.pdf)
- Canadian Institute for Health Information. (2015). *Case mix*. Retrieved from <https://www.cihi.ca/en/data-and-standards/standards/case-mix>
- Canadian Institute for Health Information (CIHI). (n.d.) *Canadian Institute for Health Information 2012 to 2017 strategic plan: Better data. Better decisions. Healthier Canadians*. Retrieved from [https://secure.cihi.ca/free\\_products/StrategicPlan2012\\_2017\\_en.pdf](https://secure.cihi.ca/free_products/StrategicPlan2012_2017_en.pdf)
- Canadian Museum of History. (2010). *The Great Depression: 1930-1939. Making medicare: The history of healthcare in Canada, 1914 - 2007*. Retrieved from <http://www.historymuseum.ca/cmc/exhibitions/hist/medicare/medic-2c01e.shtml>
- Carter, N.M., & Silva, C. (2010). *Pipeline's broken promise*. New York: Catalyst.
- Catalyst. (2013). *Catalyst quick take: Women in the labour force in Canada*. Retrieved from [http://www.catalyst.org/knowledge/women-labour-force-canada-0#footnote1\\_fzmxauk](http://www.catalyst.org/knowledge/women-labour-force-canada-0#footnote1_fzmxauk)
- Caviart Group. (2015). *Results of the AHIMA 2014 workforce study*. Vienna, VA: The Caviart Group, LLC.

- Chaleff, I. (2003). *The courageous follower: Standing up to & for our leaders* (2nd Ed). Berrett-Koehler Publishers
- <http://common.books24x7.com.libproxy.uregina.ca:2048/toc.aspx?bookid=5763>
- Chan, D.W. (2000). The development of mentorship programs at the Chinese university of Hong Kong. *Roepers Review*, 23, 85-88. doi: 10.1080/02783190009554072
- Chao, G.T., Walz, P.M., & Gardner, P.D. (1992). Formal and informal mentorships: A comparison on mentoring functions and contrast with nonmentored counterparts. *Personnel Psychology*, 45, 619-636. doi: 10.1111/j.1744-6570.1992.tb00863.x
- Charmaz, K. (2000) Constructivist and objectivist grounded theory. In N.K. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.) (pp. 509-536). Thousand Oaks, CA: Sage Publications.
- Charmaz, K. (2008). Grounded theory as an emergent method. In S. N. Hesse-Biber & P. Leavy (Eds), *Handbook of emergent methods* (pp. 155-172). New York: The Guilford Press.
- Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). Los Angeles: Sage Publications.
- Clements, C. & Washbush, J.B. (1999). The two faces of leadership: Considering the dark side of leader-follower dynamics. *Journal of Workplace Learning*, 11, 170-176. doi: <http://dx.doi.org/10.1108/13665629910279509>
- COACH. (2012). *Health informatics professional core competencies*. Retrieved from <http://www.coachorg.com/en/resourcecentre/resources/Health-Informatics-Core-Competencies.pdf>

- COACH. (2014). *Certification (CPHIMS-CA)*. Retrieved from <http://www.coachorg.com/en/professionaldevelopment/Certification.asp>
- Coffman, J., & Neuenfeldt, B. (2014). *Everyday moments of truth: Frontline managers are key to women's career aspirations*. Retrieved from [http://www.bain.com/Images/BAIN\\_REPORT\\_Everyday\\_moments\\_of\\_truth.pdf](http://www.bain.com/Images/BAIN_REPORT_Everyday_moments_of_truth.pdf)
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Mahwah, NJ: Erlbaum.
- Collinson, D. (2006). Rethinking followership: A post-structuralist analysis of follower identities. *Leadership Quarterly*, 17, 179-189. doi:10.1016/j.leaqua.2005.12.005
- Combs, G. (2003). The duality of race and gender for managerial African American women: Implications of informal social networks on career advancement. *Human Resource Development Review*, 2, 385-405. doi 10.1 17711534484303257949
- Commission on the Future of Health Care in Canada. (2002). *Building on values: The future of health care in Canada - final report*. Ottawa, ON: National Library of Canada.
- Compliance Certification Board. (2013). *Certified in healthcare privacy compliance*. Retrieved from <http://www.compliancecertification.org/CHPC/CertifiedinHealthcarePrivacyCompliance.aspx>
- Consumer Measures Committee (2011, June 6). *Appendix 3: Model code for the protection of personal information*. Retrieved from <http://cmcweb.ca/eic/site/cmc-cmc.nsf/eng/fe00076.html>

- Cooney, A. (2010). Rigor and grounded theory. *Nurse Researcher*, 14, 4, 17 - 22.
- Retrieved from
- <http://journals.rcni.com/doi/pdfplus/10.7748/nr2011.07.18.4.17.c8631>
- Corbin, J., & Holt, N.L. (2005). Grounded theory. In B. Somekh and C. Lewin (Eds.), *Research methods in the social sciences* (pp. 49-55). London, UK: Sage Publications.
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Courtney, J.C. (1965). Reviews of books: Report of the Royal Commission on Health Services. *Canadian Journal of Economics and Political Science*, 31, 594-596.
- Retrieved from <http://www.jstor.org/stable/139841>
- Couture, J. (1969). New course for training medical record librarians in the province of Quebec. *Canadian Association of Medical Record Librarian Newsletter*, 1, 19-25.
- Cranston, S., & Keller, S. (2013). Increasing the 'meaning quotient' of work. *McKinsey Quarterly*, January. Retrieved from
- <http://www.mckinsey.com/insights/organization/>
- Creswell, J.W. (2009). *Research design: Qualitative, quantitative and mixed methods approaches*. Thousand Oaks, CA: Sage Publications.
- Creswell, J.W., Klassen, A.C., Plano Clark, V.L., & Smith, K.C.(2011). *Best practices for mixed methods research in the health sciences*. National Institutes of Health.
- Retrieved from [http://obssr.od.nih.gov/mixed\\_methods\\_research](http://obssr.od.nih.gov/mixed_methods_research).

- Crook, G., Abrams, K.J., & Arnold, G.B. (2013). The health information management profession. In K.J. Abrams and C.J. (Eds.), *Fundamentals of health information management* (2nd ed.) (pp. 7-17). Ottawa, ON: Canadian Healthcare Association.
- Crozier, S., & Dorval, C. (2002). The relational career values of post-secondary women students. *Canadian Journal of Career Development, 1*, 3-9. Retrieved from <http://ceric.ca/cjcd/archives/v1-n1/article1.pdf>
- Cyprian, M. (1945, Jan.). Responsibilities and duties of the Medical Record Librarian. *Bulletin of CAMRL, 5-8*.
- Cyert, R.M. (2009). Defining leadership and explicating the process. *Nonprofit Management and Leadership, 1*, 29-38. doi: 10.1002/nml.4130010105
- Daft, R. (2015). *The leadership experience* (6th ed.). Stamford, CT: Cengage Learning.
- Davidson, P.M., Elliott, D., & Daly, J. (2006). Clinical leadership in contemporary clinical practice: implications for nursing in Australia. *Journal of Nursing Management, 14*, 180-187. doi: 10.1111/j.1365-2934.2006.00555.x
- Davis, N., & LaCour, M. (2013). *Health information technology* (3rd ed.). St. Louis, MO: Elsevier Saunders.
- Day, D.V. (2000). Leadership development: A review in context. *Leadership Quarterly, 11*, 581-613. Retrieved from [http://www.profjayrfigueiredo.com.br/LID\\_AC\\_04.pdf](http://www.profjayrfigueiredo.com.br/LID_AC_04.pdf)
- De Groot, J. (2015). Chauncey Wright. In E.N. Zalta (Ed), *The Stanford encyclopedia of philosophy* (Spring 2015 Edition). Retrieved from <http://plato.stanford.edu/archives/spr2015/entries/wright>

- De Smet, A., McGurk, M., & Vinson, M. (2010). *How companies manage the front line today: McKinsey survey results*. Retrieved from [http://www.mckinsey.com/insights/organization/how\\_companies\\_manage\\_the\\_front\\_line\\_today\\_mckinsey\\_survey\\_results](http://www.mckinsey.com/insights/organization/how_companies_manage_the_front_line_today_mckinsey_survey_results)
- DeCuir-Gunby, J.T. (2008). Mixed methods research in the social sciences. In J. W. Osborne (Ed.), *Best practice in quantitative methods* (pp. 125-146). Thousand Oaks, CA: Sage Publications.
- DeRue, D.S., & Wellman, N. (2009). Developing leaders via experience: The role of developmental challenge, learning orientation, and feedback availability. *Journal of Applied Psychology, 94*, 859–875. doi: 10.1037/a0015317
- DeRue, D.S., Nahrgang, J.D., Hollenbeck, J.R., Workman, K.A. (2012). Quasi-experimental study of after-event reviews and leadership development. *Journal of Applied Psychology, 97*, 997-1015. doi: 10.1037/a0028244
- Desvaux, G., Devillard-Hellinger, S., & Meaney, M.C. (2008). A business case for women. *The McKinsey Quarterly*, 1-7. Retrieved from <http://dca.org.au/app/webroot/files/file/gender%20documents/Business%20Case%20for%20Women%20Mckinsey%20sept08.pdf>
- Dinh, J.E., Lord, R.G., Gardner, W.L., Meuser, J.D., Liden, R.C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *Leadership Quarterly, 25*, 36-62. Retrieved from <http://www.sciencedirect.com.libproxy.uregina.ca:2048/science/journal/10489843/25/1>

- Dinolfo, S., & Nugent, J.S. (2010). *Making mentoring work*. Retrieved from <http://www.catalyst.org/knowledge/making-mentoring-work-0>
- Draucker, C.B., Martsof, D.S., Ross, R., & Rusk, T.B. (2007). Theoretical sampling and category development in grounded theory. *Qualitative Health Research, 17*, 1137-1148. doi: 10.1177/1049732307308450
- Dreher, G.F., & Cox, T.H., Jr. (1996). Race, gender, and opportunity: A study of compensation attainment and the establishment of mentoring relationships. *Journal of Applied Psychology, 81*, 297-308. Retrieved from <http://ovidsp.tx.ovid.com.libproxy.uregina.ca/>
- DuBrin, A.J. (2013). *Leadership: Research findings, practices, and skills* (8th ed.). Boston, MA: Cengage Learning.
- Durkheim E. 2014. (1893). *The division of labor in society*. New York, NY: Free Press.
- Eagly, A.H. (1995). The science and politics of comparing women and men. *American Psychologist, 50*, 145-158. Retrieved from <http://ovidsp.tx.ovid.com.libproxy.uregina.ca>
- Eagly, A.H., & Carli, L.L. (2007). *Through the labyrinth: The truth about how women become leaders*. Boston, MA: Harvard Business School Press.
- Eagly, A.H., Johannesen-Schmidt, M.C., & van Engen, M.L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin, 129*, 569–591. Retrieved from <http://ovidsp.tx.ovid.com.libproxy.uregina.ca>

- Eagly, A.H., Karau, S.J., & Makhijani, M.G. (1995). Gender and the effectiveness of leaders: A meta-analysis. *Psychological Bulletin*, *117*, 125-145. Retrieved from [http://teaching.fec.anu.edu.au/BUSN2007/Eagly%20et%20al\\_1995.pdf](http://teaching.fec.anu.edu.au/BUSN2007/Eagly%20et%20al_1995.pdf)
- Eagly, A.H., Makhijani, M.G., & Klonsky, B.G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin*, *111*, 3-22. doi: 10.1037/0033-2909.111.1.3
- Eagly, A.H., & Mladinic, A. (1994). Are people prejudiced against women? Some answers from research on attitudes, gender stereotypes, and judgments of competence. *European Review of Social Psychology*, *5*, 1.35. doi: 10.1080/14792779543000002
- Ehrich, L.C., Hansford, B., & Tennent, L. (2004). Formal mentoring programs in education and other professions: A review of the literature. *Educational Administration Quarterly*, *40*, 518-540. doi: 10.1177/0013161X04267118
- Emden C., & Sandelowski, M. (1998). The good, the bad and the relative, part one: Conceptions of goodness in qualitative research. *International Journal of Nursing Practice*, *4*, 206–212. Retrieved from <http://web.a.ebscohost.com.libproxy.uregina.ca/>
- Emden C., & Sandelowski, M. (1999). The good, the bad and the relative, part two: Conceptions of goodness in qualitative research. *International Journal of Nursing Practice*, *4*, 2–7. Retrieved from <http://web.a.ebscohost.com.libproxy.uregina.ca/>
- Faculty of Information and Media Studies. (n.d.). *Health information science*. Western University of Ontario. Retrieved from [http://www.fims.uwo.ca/acad\\_programs/grad/HIS.htm](http://www.fims.uwo.ca/acad_programs/grad/HIS.htm)

- Fagenson, E.A. (1990). Perceived masculine and feminine attributes examined as a function of individuals' sex and level in the organizational power hierarchy: A test of four theoretical perspectives. *Journal of Applied Psychology, 75*, 204-211. doi: 10.1037/0021-9010.75.2.204
- Fitzpatrick, T.B. (1970). Data collection requirements for hospital management as related to the hospital discharge. Supplement: Hospital discharge data: report of the conference on hospital discharge abstracts systems. *Medical Care, 8*, 150-158.
- Fitzsimmons, T.W., Callan, V.C., Paulsen, N. (2014). Gender disparity in the C-suite: Do male and female CEOs differ in how they reached the top? *Leadership Quarterly, 25*, 245-266. doi: 10.1016/j.leaqua.2013.08.005
- Flexner, A. (1910). *Medical education in the United States and Canada: A report to the Carnegie Foundation for the advancement of teaching*. Boston, MA: B. P. Updike, The Merrymount Press.
- Frelick, K.M. (2013). Legal aspects of health information management. In K.J. Abrams and C.J. Gibson, (Eds.), *Fundamentals of Health Information Management* (2<sup>nd</sup> ed.) (pp. 251-276). Ottawa, ON: Canadian Healthcare Association.
- Fuller, J.B., Patterson, C., Hester, K., & Stringer, D.Y. (1996). A quantitative review of research on charismatic leadership. *Psychological Reports, 78*, 271-287. doi: 10.2466/pr0.1996.78.1.271
- Gardner, J. (1990). *On leadership*. New York: The Free Press.
- Gatrell, C., & Swan, E. (2008). *Gender and diversity in management: A concise introduction*. London, UK: Sage Publications.

- Gerzema, J. & D'Antonio, M. (2013). *The Athena doctrine: How women (and the men who think like them) will rule the future*. San Francisco, CA: Jossey-Bass
- Gibson, C. J., Dixon, B. E., Abrams, K. (2015). Convergent evolution of health information management and health informatics: A perspective on the future of information professionals in health care. *Applied Clinical Informatics*, 6, 163-184. doi: <http://dx.doi.org/10.4338/ACI-2014-09-RA-0077>
- Gibson, C.J., Levesque, L., & O'Reilly-Brunelle, B. (2103). Towards an electronic health record. In K.J. Abrams and C.J. Gibson (Eds.), *Fundamentals of health information management* (2<sup>nd</sup> ed.) (pp. 141-157). Ottawa, ON: Canadian Healthcare Association.
- Gillenwater, S. (2012). *News: F-250 female chief information officers approaching 20%*. <http://boardroominsiders.com/news/?p=270>
- Glaser, B.G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Mill Valley, CA: Sociology Press.
- Glaser, B.G. (1998). *Doing grounded theory: Issues and discussions*. Mill Valley, CA: Sociology Press.
- Glaser, B.G. (2002). Conceptualization: On theory and theorizing using grounded theory. *International Journal of Qualitative Methods*, 1, 2-31. Retrieved from <http://www.ualberta.ca/~ijqm/>
- Glaser, B.G. (2007). Theoretical elaboration of quantitative data. *Grounded Theory Review*, 6, 1-37. Retrieved from <http://groundedtheoryreview.com/wp-content/uploads/2012/06/GT-Review-vol6-no3.pdf>

- Glaser, B.G. (2014). *Choosing classic grounded theory: A grounded theory reader of expert advice*. Mill Valley, CA: Sociology Press.
- Glaser, B.G. (2015). *Choosing grounded theory: A GT reader of expert advice*. Mill Valley, CA: Sociology Press.
- Glaser, B.G., & Strauss, A.L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Hawthorne, NY: Aldine de Gruyter.
- Goldman, A. (2010). Social epistemology. *The Stanford Encyclopedia of Philosophy* (Summer 2010 Edition), Edward N. Zalta (ed.). Retrieved from <http://plato.stanford.edu/archives/sum2010/entries/epistemology-social/>
- Gosling, S.D., Vasire, S., Srivastava, S., & John, O.P. (2004). Should we trust web-based studies? A comparative analysis of six preconceptions about internet questionnaires. *American Psychologist*, 59, 93-104. doi: 10.1037/0003-066X.59.2.93
- Gottfredson, L.S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28, 545-579. doi: 10.1037/0022-0167.28.6.545
- Gottfredson, L.S. (2002). Gottfredson's theory of circumscription, compromise, and self-creation. In D. Brown (Ed.), *Career choice and development* (4rth ed.). San Francisco, CA: Jossey-Bass.
- Government of Saskatchewan. (2012a). *List of summaries, consolidations and regulations: The freedom of information and protection of privacy act*. Retrieved from <http://www.justice.gov.sk.ca/Default.aspx?DN=2a36e28a-f0dd-42e3-ab34-9b79aa5a3151>

- Government of Saskatchewan. (2012b). *Protecting your information: Health Information Protection Act (HIPA)*. Retrieved from <http://www.health.gov.sk.ca/hipa>
- Grant, A.M., Gino, F., & Hofmann, D.A. (2011). Reversing the extraverted leadership advantage: The role of employee proactivity. *Academy Of Management Journal*, 54, 528-550. doi:10.5465/AMJ.2011.61968043
- Grimm, J.W., & Stern, R.N. (1974). Sex roles and internal labor market structures: The "female" semi-professions. *Social Problems*, 21, 690-705. doi: 10.2307/799643
- Hackman, J.R., & Oldham, G.R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16, 250-279.
- Hackman, J.R., & Wageman, R. (2007). Asking the right questions about leadership. *American Psychologist*, 62, 43-47. doi: 10.1037/0003-066X.62.1.43
- Hakim, C. (2006). Women, careers, and work-life preferences. *British Journal of Guidance & Counselling*, 34, 279-294. doi: 10.1080/03069880600769118
- Hall, R.J., & Lord, R.G. (1995). Multi-level information-processing explanations of followers' leadership perceptions. *Leadership Quarterly*, 6, 265-287.  
doi:10.1016/1048-9843(95)90010-1
- Health Canada. (2012). *Canada's health infostructure: History*. Retrieved from <http://www.hc-sc.gc.ca/hcs-sss/ehealth-esante/infostructure/hist-eng.php>
- Health Council of Canada. (n.d.). *Health Council of Canada reports*.  
<http://healthcouncilcanada.ca/reports.php>
- Health Level Seven International. (2015). *Introduction to HL7 standards*. Retrieved from <http://www.hl7.org/implement/standards/>

- Health Sciences Association. (n.d.). *Our members*. Retrieved from <http://www.hsabc.org/node/26/pdf>
- Heath, H., & Cowley, S. (2004). Developing a grounded theory approach: A comparison of Glaser and Strauss. *International Journal of Nursing Studies*, 4, 141–150. Retrieved from [www.elsevier.com/locate/ijnurstu](http://www.elsevier.com/locate/ijnurstu)
- Hemsworth, D., Muterera, J., & Baregheh, A. (2103). Examining Bass's transformational leadership in public sector executives: A psychometric properties review. *Journal of Applied Business Research*, 29, 853-862. Retrieved from [file:///C:/Users/pc0011/Downloads/7785-31063-1-PB%20\(1\).pdf](file:///C:/Users/pc0011/Downloads/7785-31063-1-PB%20(1).pdf)
- Higginbottom, G., & Lauridsen, E.I. (2014). The roots and development of grounded theory. *Nurse Research*, 21, (5), 8-13. doi: 10.7748/nr.21.5.8.e1208
- HIMSSAnalytics. (2015). *Electronic medical record adoption model (EMRAM)<sup>SM</sup>*. Retrieved from <http://www.himssanalytics.org/provider-solutions#block-himss-general-himss-prov-sol-annual-survey>
- Holland, J.L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources.
- Hood, J.C. (2007) Orthodoxy vs. power: The defining traits of grounded theory. In A. Bryant, A. & K. Charmaz (Eds.), *The Sage handbook of grounded theory* (pp.151-164). London, UK: Sage Publications.
- Hospital Employees Union. (n.d.). *Facilities benchmarks - part one*. Retrieved from <http://www.heu.org/members/benchmarks/facilities-benchmarks>

- House, R.J., Aditya, R.N. (1997). The social scientific study of leadership: Quo vadis? *Journal of Management*, 23, 409-473. Retrieved from [http://psgleadership.scripts.mit.edu/2012IAP/pdf/1\\_required\\_reading/Scientific%20views%20on%20Leadership.pdf](http://psgleadership.scripts.mit.edu/2012IAP/pdf/1_required_reading/Scientific%20views%20on%20Leadership.pdf)
- House, R.J., Hanges, P.J., Javidan, M., Dorman, P.W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: Sage Publications.
- Hout, T.M. (1999). Are managers obsolete? *Harvard Business Review*, 77, 161-168. Retrieved from <http://infotrac.galegroup.com.libproxy.uregina.ca/>
- Huffman, E.K. (1957). New developments in medical record departments. *Bulletin of Canadian Association of Medical Record Librarians*, 14, 4-9.
- Human Resource and Skills Development Canada. (2013). *National occupation codes*. Government of Canada. Retrieved from <http://www.hrsdc.gc.ca/eng/jobs/lmi/noc/index.shtml#tab2>
- Ibarra, H., Carter, N.M., Silva, C. (2010). Why men still get more promotions than women. *Harvard Business Review*, 85, 40-47. Retrieved from <https://hbr.org/2010/09/why-men-still-get-more-promotions-than-women>
- Ingersoll GL. (1998). Organizational redesign. Changing educational needs of midlevel nurse administrators. *Journal of Nursing Administration*, 28, 13-16.
- International Association of Privacy Professionals. (n.d.). *CIPP certification*. Retrieved from <https://iapp.org/certify/cipp>
- International Data Group. (n.d.) Audience highlights. *Chief Information Officer Magazine*. Retrieved from

[http://idg.com/www/IDGProducts.nsf/ByKey/Russia\\_Publication\\_Chief-Information-Officer-Magazine](http://idg.com/www/IDGProducts.nsf/ByKey/Russia_Publication_Chief-Information-Officer-Magazine)

International Health Standards Development Organization (IHTSDO). (2014). *2014 update: Strategic directions*. Retrieved from

<http://www.ihtsdo.org/member/united-states/2014-update>

Ivankova, N.V., Creswell, J.W., & Stick, S.L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods, 18*, 3-20. doi: 10.1177/1525822X05282260

Jamal, A., & Grant, C. (2014). *An essential guide to clinical documentation improvement* [White paper]. London, ON: CHIM Inc.

Johns, M.L. (Ed.). (2011). *Health information management technology: An applied approach* (3rd ed.). Chicago, IL: American Health Information Management Association.

Johns, M.L. (2013). Breaking the glass ceiling: Structural, cultural, and organizational barriers preventing women from achieving senior and executive positions. *Perspectives in Health Information Management, 1*, n.p. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3544145/>

Johnson, R.B., & Onwuegbuzie, A.J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher, 33*, 14-26 doi: 10.3102/0013189X033007014

Joint Commission (2013). *History of the Joint Commission*. Retrieved from [http://www.jointcommission.org/about\\_us/history.aspx](http://www.jointcommission.org/about_us/history.aspx)

- Jolly, R. (2011). *The e health revolution—easier said than done*. (Parliament of Australia research paper No. 3, 2011–12). Commonwealth of Australia: Department of Parliamentary Services. Retrieved from [http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/1232345/upload\\_binary/1232345.pdf;fileType=application/pdf#search=%222010s%20jolly,%20rhonda%22](http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/1232345/upload_binary/1232345.pdf;fileType=application/pdf#search=%222010s%20jolly,%20rhonda%22)
- Judge, T.A., & Bono, J.E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology, 85*, 751-765. doi: 10.1037//0021-9010.85.5.751
- Judge, T.A., & Kammeyer-Mueller, J.D. (2012). On the value of aiming high: The causes and consequences of ambition. *Journal of Applied Psychology, 97*, 758-775. doi: 10.1037/a0028084
- Judge, T.A., Thoresen, C.J., Bono, J.E., & Patton, G.K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin, 127*, 376-407. doi: 10.1037//0033-2909.127.3.376
- Kandelousi, N.S., Ali, A.J., & Abdollahi, A. (2010). *Interpersonal communication and communication satisfaction*. Germany: Lambert Academic Publishing.
- Katz, R., & Tushman, M.L. (1983). A longitudinal study of the effects of boundary spanning supervision on turnover and promotion in research and development. *Academy of Management Journal, 26*, 437-456. doi: 10.2307/256255
- Kennedy, M. (2014, October 15). *HIMs Adding Value: Health Care Leaders Perspective Part 4* [video file]. Retrieved from

<https://www.youtube.com/watch?v=kIFr5aKs4hM&index=13&list=PLAys5d6HZngL1fHvl77vKqaizdwhU4Qlh>

- Kenney, R.A., Schwartz-Kenney, B.M., & Blascovich, J. (1996). Implicit leadership theories: Defining leaders described as worthy of influence. *Personality and Social Psychology Bulletin*, 22, 1128-1143. doi: 10.1177/01461672962211004
- Ketefian, S., Redman, R.W., Hanucharunkul, S., Masterson, A., & Neves, E.P. (1999). The development of advanced practice roles: Implications in the international nursing community. *International Nursing Review*, 48, 152-163. Retrieved from <http://deepblue.lib.umich.edu/>
- Kincaid, W.H. (1968). The changing role of the medical record librarian: "Documentalist" best describes MRL's new role. *The Bulletin of the Canadian Association of Medical Record Librarians*, 25, 2-5.
- Kirkpatrick, S.A. & Locke, E.A. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology*, 81, 36-51. doi: dx.doi.org/10.1037/0021-9010.81.1.36
- Kleinman, C.S. (2003). Leadership roles, competencies, and education: How prepared are our nurse managers? *Journal of Nursing Administration*, 33, 451-455. Retrieved from <http://ovidsp.tx.ovid.com.libproxy.uregina.ca/>
- Kline, T. J. B. (2005). *Psychological testing: A practical approach to design and evaluation*. Thousand Oaks: Sage.
- Kochan, T.A., & Dyer, L. (1976). A model of organizational change in the context of union-management relations. *Journal of Applied Behavioral Science*, 12, 59-78. doi:10.1177/002188637601200107

- Kouzes, J.M., & Posner, B.Z. (2002). *The leadership challenge* (3rd ed.). San Francisco: John Wiley & Sons.
- Kram, K.E. (1983). Phases of the mentor relationship. *Academy of Management Journal*, 26, 608-625. Retrieved from <http://www.jstor.org/stable/255910>
- Kram, K.E., & Isabella, L.A. (1985). Mentoring alternatives: The role of peer relationships in career development. *Academy of Management Journal*, 28, 110-132. Retrieved from <http://www.jstor.org/stable/256064>
- Kruse, K. (2013). *What is leadership?* Retrieved from <http://www.forbes.com/sites/kevinkruse/2013/04/09/what-is-leadership/>
- Kulikowski, C.A., Shortliffe, E.H., Currie, L.M., Elkin, P.L., Hunter, L.E., Johnson, T.R., . . . Williamson, J.J. (2012). AMIA Board white paper: Definition of biomedical informatics and specification of core competencies for graduate education in the discipline. *Journal of the American Medical Informatics Association*, 19, 931-938.
- Landes, D.S. (2003). *The unbound Prometheus: Technological change and industrial development in Western Europe from 1750 to the present* (2nd ed.). Cambridge, UK: Cambridge University Press
- Lanz, P.M. (2008). Gender and leadership in healthcare administration: 21st century progress and challenges. *Journal of Healthcare Management*, 53, 292. Retrieved from [http://www.ncid.umich.edu/events/Lantz-Gender\\_and\\_Leadership\\_in\\_Healthcare\\_Administration\\_21st\\_Century.pdf](http://www.ncid.umich.edu/events/Lantz-Gender_and_Leadership_in_Healthcare_Administration_21st_Century.pdf)
- Lee, K., & Ashton, M.C. (2004). Psychometric properties of the HEXACO personality inventory. *Multivariate Behavioral Research*, 39, 329-358. doi: 10.1207/s15327906mbr3902\_8

- Liff, S., & Ward, K. (2001). Distorted views through the glass ceiling: The construction of women's understandings of promotion and senior management positions. *Gender, Work and Organization, 8*, 19–36. doi: 10.1111/1468-0432.00120
- Ling, W., Chia, R., & Fang, L. (2000). Chinese implicit leadership theory. *Journal of Social Psychology, 140*, 729-739. Retrieved from <http://web.ebscohost.com.libproxy.uregina.ca>
- Lipscomb, C.E. (2003). Professional boundaries and medical records management. *Journal of the Medical Library Association, 91*, 393-396. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC209501/>
- Lojpur, A., Aleksić, A., Vlahović, S., Pejić Bach, M., & Peković, S. (2014). Examining determinants of leadership style among Montenegrin managers. *Our Economy, 61*, 13-24. doi: 10.1515/ngoe-2015-0002
- Lord, R.G., De Vader, C.L., & Alliger, G.M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures. *Journal of Applied Psychology, 71*, 402-410. Retrieved from <http://ovidsp.tx.ovid.com.libproxy.uregina.ca>
- Lowe, K.B., Kroeck, K.G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly, 7*, 385-415. doi:10.1016/S1048-9843(96)90027-2
- Ludmerer, K.M. (2010). Commentary: Understanding the Flexner Report. *Academic Medicine, 85*, 193-196. Retrieved from

[https://ualearn.blackboard.com/bbcswebdav/pid-303852-dt-content-rid-690898\\_1/courses/49626.201240/readings/Ludmerer-Flexner-AcadMed.pdf](https://ualearn.blackboard.com/bbcswebdav/pid-303852-dt-content-rid-690898_1/courses/49626.201240/readings/Ludmerer-Flexner-AcadMed.pdf)

Luzzo, D.A., & Severy, L. (2009). *Making career decisions that count: A practical guide* (3rd ed.). Upper Saddle Hill, NJ: Prentice Hall.

MacDonald, M., Crook, G., & Cotton, S. (2013). Privacy, confidentiality, access and release of personal health information. In K. J. Abrams and C. J. Gibson, (Eds.), *Fundamentals of Health Information Management* (2<sup>nd</sup> ed.) (pp. 277-289). Ottawa, ON: Canadian Healthcare Association.

MacDonald, M., & Schreiber, R. (2001). Constructing and deconstructing: Grounded theory in a postmodern world. In R. Schreiber & P. N. Stern (Eds.), *Using grounded theory in nursing* (pp. 35-54). New York: Springer.

MacEachern, M.T. (1948). Manual of Hospital Standardization. *Bulletin of the Canadian Association of Medical Record Librarians*, 5, 5-10.

MacFarlane, J.A. (1964). *Canada Royal Commission on Health Services: Medical education in Canada*. Ottawa, ON: Queens Press.

Manz, C.C., & Sims, H.P. Jr. (1980). Self-management as a substitute for leadership: A social learning theory perspective. *Academy of Management Review*, 5, 361-367.

Retrieved from <http://www.jstor.org/stable/2571111>

Marchildon G. (2013.) Implementing lean health reforms in Saskatchewan. *Health Reform Observer - Observatoire des Réformes de Santé*, 1, 1-9. doi:

[dx.doi.org/10.13162/hro-ors.01.01.01](http://dx.doi.org/10.13162/hro-ors.01.01.01)

Martin, R., & Epitropaki, O. (2001). Role of organizational identification on implicit leadership theories (ILTs), transformational leadership and work attitudes. *Group*

*Processes & Intergroup Relations*, 4, 247–262.

doi:10.1177/1368430201004003005

Mazurkewich, C. (2010, November 26). Activity based funding [PowerPoint presentation]. Retrieved from

[www.cihiconferences.ca/.../CIHI%20Health%20System%20Funding%20...](http://www.cihiconferences.ca/.../CIHI%20Health%20System%20Funding%20...)

McCrae, R.R., & John, O.P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60, 175-215. doi: 10.1111/j.1467-

6494.1992.tb00970.x

McDonagh, K.J., Bobrowski, P., Hoss, M.A. K., Paris, N.M., & Schulte, M. (2014). The leadership gap: Ensuring effective healthcare leadership requires inclusion of

women at the top. *Open Journal of Leadership*, 3, 20-29. doi:

10.4236/ojl.2014.32003

Mertz, N.T. (2004). What's a mentor, anyway? *Educational Administration Quarterly*,

40, 541-560. doi: 10.1177/0013161X04267110

Merriam, S.B., & Brockett, R.G. (2007). *The profession and practice of adult education: An introduction*. San Francisco, CA: John Wiley & Sons, Inc.

Milan, A., Keown, L-A., & Robles Urquijo, C. (2011). *Families, living arrangements,*

*and unpaid work*. Component of Statistics Canada Catalogue no. 89-503-X.

Women in Canada: A gender-based statistical report. Ottawa, ON: Statistics

Canada.

Ministry of Health Services. (2010). *News release: B.C. launches patient-focused funding*

*province wide*. Retrieved from [http://www2.news.gov.bc.ca/news\\_releases\\_2009-](http://www2.news.gov.bc.ca/news_releases_2009-2013/2010HSERV0020-000403.htm)

[2013/2010HSERV0020-000403.htm](http://www2.news.gov.bc.ca/news_releases_2009-2013/2010HSERV0020-000403.htm)

- Moriyama, I.M., Loy, R.M., & Robb-Smith, A.H.T. (2011). *History of the statistical classification of diseases and causes of death*. Harry M. Rosenberg & Donna L. Hoyert, eds. Hyattsville, MD: National Center for Health Statistics.
- Moroney, Sr. M.C. (1969, January-February). Post-graduate education for the medical record librarian. *Canadian Association of Medical Record Librarians Newsletter*, 1, 17-18.
- Moroney, Sr. M.C., Macdonald, M.I., Bradley, L.O., Bury, R., & Holmes, L.K. (1970). Report of the Aims and Objectives Committee. *Canadian Association of Medical Record Librarians Newsletter*, 3, 27-32.
- Moss-Racusin, C.A., Dovidio, J.F., Brescoll, V.L., Graham, M.J., & Handelsman, J. Science faculty's subtle gender biases favor male students. *Proceedings of the National Academy of Sciences*, 109, 16474–16479. doi: 10.1073/pnas.1211286109
- Muenjohn, N., & Armstrong, A. (2008). Evaluating the structural validity of the Multifactor Leadership Questionnaire (MLQ): Capturing the leadership factors of transformational-transactional leadership. *Contemporary Management Research*, 4, 3-14. Retrieved from <http://www.cmr-journal.org/article/viewFile/704/2045>
- Murphy, D. (2010). Coding in Ireland: Time for recognition. *Health Information Management Journal*, 39, 42-46. Retrieved from <http://web.ebscohost.com.libproxy.uregina.ca>
- Murray, E., Burns, J., May, C., Finch, T., O'Donnell, C., Wallace, P., & Mair, F. (2011). Why is it difficult to implement e-health initiatives? A qualitative study.

- Implementation Science*, 6. Retrieved from  
<http://www.implementationscience.com/content/pdf/1748-5908-6-6.pdf>.
- Myers G.W. (1912a). Hospital records in relation to the hospital library. *Bulletin of the Medical Librarian Association*, 1, 55–7.
- Myers G.W. (1912b). Report of committee on new members. *Bulletin of the Medical Librarian Association*, 2, 10. Retrieved from  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC234588/pdf/mlab00370-0011b.pdf>
- Myers, G.W. (1929). President's address. *Bulletin of the Association of Record Librarians of North America*, 1, 1-3.
- National Health Information Council. (1991). *Health information for Canada 1991: Report of the national task force on health information*. Retrieved from  
<http://www.statcan.gc.ca/pub/4220352-eng.pdf>
- Naylor, C.D. (1999). Health care in Canada: Incrementalism under fiscal duress. *Health Affairs*, 18, 9-26. doi: 10.1377/hlthaff.18.3.9
- Neubert, M.J., & Palmer, L.D. (2004). Emergence of women in healthcare leadership: Transforming the impact of gender differences. *Journal of Men's Health and Gender*, 1, 383-387. Retrieved from  
<http://www.sciencedirect.com.libproxy.uregina.ca>
- Offermann, L.R., Kennedy Jr., J.K., & Wirtz, P.W. (1994). Implicit leadership theories: Content, structure, and generalizability. *The Leadership Quarterly*, 5, 43-58.  
Retrieved from <http://www.sciencedirect.com.libproxy.uregina.ca>
- Office of the Auditor General of Canada. (2010). *Electronic health records in Canada: An overview of federal and provincial audit reports*. Ottawa, ON: Office of the

- Auditor General of Canada. Retrieved from [http://www.oag-bvg.gc.ca/internet/english/parl\\_oag\\_201004\\_07\\_e\\_33720.html](http://www.oag-bvg.gc.ca/internet/english/parl_oag_201004_07_e_33720.html)
- Office of the Privacy Commissioner of Canada. (2009). *Fact sheets: Privacy legislation in Canada*. Retrieved from [http://www.priv.gc.ca/resource/fs-fi/02\\_05\\_d\\_15\\_e.asp](http://www.priv.gc.ca/resource/fs-fi/02_05_d_15_e.asp)
- O'Grady, J. (2009). *Health informatics and health information management: Human resources report*. Toronto, Canada. Retrieved from [https://www.echima.ca/media/documents/HHIM\\_report\\_E\\_web.pdf](https://www.echima.ca/media/documents/HHIM_report_E_web.pdf)
- Olsson, S., & Walker, R. (2004). "The wo-men and the boys": Patterns of identification and differentiation in senior women executives' representations of career identity. *Women In Management Review*, 19, 244 – 251. doi: 10.1108/09649420410545962
- Ontario Ministry of Health and Long-Term Care. (2013). *Performance Management Framework*. Retrieved from <http://www.health.gov.on.ca/en/pro/programs/publichealth/performance/>
- Pfeffer, J. (1977). The ambiguity of leadership. *Academy of Management*, 12, 2005-212. Retrieved from <http://cnx.org/resources/57a9239e98cfe3a054423cb2d81f6023f4b8c8ad/Pfeffer.pdf>
- Phillips, J.S., & Lord, R. G. (1986). Notes on the practical and theoretical consequences of implicit leadership: Theories for the future of leadership measurement. *Journal of Management*, 12, 31-41. doi: 10.1177/014920638601200104
- Popper, M., Landau, O., & Gluskinos, U.M. (1992). The Israeli defense forces: An example of transformational leadership. *Leadership and Organizational Development Journal*, 13, 3-8.

- Porterfield, J.D. (1976). Evaluation of the care of patients: Codman revisited. *Bulletin of the New York Academy of Medicine*, 52, 30-38. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1807168/>
- Preyra, C. (2004). Coding response to a case-mix measurement system based on multiple diagnoses. *Health Services Research*, 39, 1027-1046. doi: 10.1111/j.1475-6773.2004.00270.x
- Prism Economics and Analysis. (2014). *Health Informatics and Health Information Management: Human Resources Outlook, 2014 – 2019*. Toronto, ON: Author.
- Ragins, B.R., Cotton, J.L., & Miller, J.S. (2000). Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management Journal*, 43, 1177-1194. Retrieved from <http://www.uwplatt.edu/files/tlc/Mentoring/Mentorig%20Program%20Outcomes.pdf>
- Ragins, B.R., Townsend, B., & Mattis, M. (1998). Gender gap in the executive suite: CEOs and female executives report on breaking the glass ceiling. *Academy of Management Executive*, 98, 28-42.
- Ray, M.N., & Landry, A.Y. (2016). Health care systems. In M. Abdelhak & M.A. Hanken (Eds.) *Health information: Management of a strategic resource* (5th ed.) (pp. 1-38). St. Louis: Elsevier Saunders.
- Reece, A.M. (1996). *Reforming education for health information professionals: Answering questions about the CHRA's education plans*. Don Mills, ON: CHRA.
- Reichard, R.J., & Avolio, B.J. (2005). Where are we? The status of leadership intervention research: A meta-analytic summary. In W. L. Gardner, B. J. Avolio, &

- F. O. Walumbwa (Eds.), *Authentic leadership theory and practice: Origins, effects and development* (pp. 203–226). Amsterdam, NL: Elsevier JAI Press.
- Richards L., & Morse J.M. (2012). *README FIRST for a User's Guide to Qualitative Methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Roberts, B.W., Walton, K.E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological bulletin*, *132*, 1-25. doi: 10.1037/0033-2909.132.1.1
- Robertson, C.M. (1970). The Hospital Medical Records Institute. *Medical Care*, *8*, 93-97. Retrieved from <http://www.jstor.org/stable/3762714>
- Rodger, G. (1984, February 24). Letter from the Executive Director of the Canadian Nurses Association to the Executive Director of CHRA (File: 15-1-5). CHIMA Archives, London, ON.
- Roe, A. (1956). *The psychology of occupations*. Hoboken, NJ: John Wiley & Sons Inc.
- Rosch, E. (1978). Principles of categorization. In E. Rosch & B.B. Lloyd (Eds.), *Cognition and categorization*. Hillsdale, USA: Erlbaum. Retrieved from <http://www.sybergroup.com/docs/CatPrin.pdf>
- Ross-Smith, A., & Chesterman, C. (2009). 'Girl disease': Women managers' reticence and ambivalence toward organizational advancement. *Journal of Management & Organization*, *15*, 582-595. Retrieved from <http://search.proquest.com.libproxy.uregina.ca>
- Ryan, M.K., & Haslam, S.A. (2005). The glass cliff: Evidence that women are over-represented in precarious leadership positions. *British Journal of Management*, *16*, 81-90.

- Saldaña, J. (2013). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage Publications.
- Sanchez-Hucles, J.V., & Davis, D.D. (2010). Women and women of color in leadership: Complexity, identity, and intersectionality. *American Psychologist*, *65*, 171-181. Retrieved from <http://ovidsp.tx.ovid.com.libproxy.uregina.ca>.
- Sandberg, S. (2013). *Lean in: Women, work, and the will to lead*. New York: Alfred A. Knopf.
- Sawchuk, P.H. (2007). Equity in work organizations: Issues of gender, race, disability and class. In J. Bratton, P. Sawchuk, C. Callinan, and E. Forshaw (Eds.), *Organizational behaviour: Understanding the workplace* (pp. 276-294). London, UK: Palgrave-MacMillan.
- Schyns, B., & Schilling, J. (2011). Implicit leadership theories: Think leader, think effective? *Journal of Management Inquiry*, *20*, 141-150. doi: 10.1177/1056492610375989
- Shepherd, J. (2010). Health information management and clinical coding workforce issues. *Health Information Management Journal*, *39*, 37-41. Retrieved from <http://web.ebscohost.com.libproxy.uregina.ca>
- Skolnik, M.L. (2004). The relationship of the community college to other providers of postsecondary and adult education in Canada and implications for policy. *Higher Education Perspectives*, *1*, 36-58.
- Slee, V.N. (1970). Professional activity study. Supplement: Hospital discharge data: report of the conference on hospital discharge abstracts systems. *Medical Care*, *8*, 34-40. Retrieved from <http://www.jstor.org.libproxy.uregina.ca>

- State of Victoria: Department of Health. (2011). *Health information workforce strategic framework: Supporting a high quality, sustainable health information workforce for all Victorians*. Retrieved from [http://www.health.vic.gov.au/hdss/hiw/hiwsf\\_07072011.pdf](http://www.health.vic.gov.au/hdss/hiw/hiwsf_07072011.pdf)
- Stationwala, A. (2014, October 15). *HIMs Adding Value: Health Care Leaders Perspective Part 1* [video file]. Retrieved from <https://www.youtube.com/watch?v=isveftFCqPY&index=10&list=PLAys5d6HZngL1fHv177vKqaizdwhU4Qlh>
- Statistics Canada. (2011a). *2011 National Household Survey: Data table*. Government of Canada. Retrieved from <http://www12.statcan.gc.ca/census-recensement/index-eng.cfm>
- Statistics Canada. (2011b). *Education in Canada: Attainment, field of study and location of study*. (Catalogue no. 99-012-X2011001). Ottawa, ON: Government of Canada.
- Stead, V. (2013). Learning to deploy (in)visibility: An examination of women leaders' lived experiences. *Management Learning*, 44: 63-79. doi: 10.1177/1350507612470603
- Stiles, W.B. (1999). Evaluating qualitative research. *Evidence Based Mental health*, 2, 99-101. doi: 10.1136/ebmh.2.4.99
- Stinchcombe, A.L. (1965). Social structure and organizations. In J.G. March (Ed.), *Handbook Of Organizations* (142-194). Chicago, IL: Rand-McNally & Co.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.

- Strauss, A., & Corbin, J. (1994). Grounded theory methodology: An overview. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 273-285). Thousand Oaks, CA: Sage Publications.
- Strauss, A., & Corbin, J. (1998) *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). London, UK: Sage Publications.
- Super, D.E. (1992). Toward a comprehensive theory of career development. In D. H. Montross & C. J. Shinkman (Eds.), *Career development: Theory and practice* (pp. 35-64). Springfield, IL: Charles C Thomas.
- Swoyer, C. (2014). Relativism, In E. N. Zalta (Ed), *The Stanford encyclopedia of philosophy* (Winter 2014 Edition). Retrieved from <http://plato.stanford.edu/archives/win2014/entries/relativism>.
- Tashakkori, A. & Teddlie, C. (2003). *Handbook of mixed methods in social & behavioral research*. Thousand Oaks: Sage Publications.
- Timmermans, S., & Berg, M. (2003). *The gold standard: The challenge of evidence-based medicine and standardization in health care*. Philadelphia, PA: Temple University Press.
- Tomlinson, M.T., O'Reilly, D., & Wallace, M. (2013). Developing leaders as symbolic violence: Reproducing public service leadership through the (misrecognized) development of leaders' capitals. *Management Learning*, 44, 81-97. doi: 10.1177/1350507612472151

Trinidad, C., & Normore, A.H. (2005). Leadership and gender: A dangerous liaison?

*Leadership & Organization Development Journal*, 26, 574-590. doi:

10.1108/01437730510624601

Trochim, W.M.K. (2006). *Research methods knowledge base: Positivism & post-*

*positivism*. Retrieved from

<http://www.socialresearchmethods.net/kb/positvsm.php>

Urbina, S. (2004). *Essentials of psychological testing*. Hoboken: John Wiley & Sons.

van Engen, M.L.& Willemssen, T.M. (2004). Sex and leadership styles: A meta-analysis

of research published in the 1990s. *Psychological reports*, 94, 3-18. doi:

10.2466/pr0.94.1.318

van Sonderen, E., Sanderman, R., & Coyne, J. C. (2013). *Ineffectiveness of reverse*

*wording of questionnaire items: Let's learn from cows in the rain*. PLoS ONE, 8.

doi:10.1371/journal.pone.0068967

Van Vugt, M., Hogan, R., & Kaiser, R.B. (2008). Leadership, followership, and

evolution: Some lessons from the past. *American Psychologist*, 63, 182–196. doi:

10.1037/0003-066X.63.3.182

Warner, J. (2011). *Diversity: Acting on what we know*. Retrieved from

<http://www.directorship.com/acting-on-what-we-know/>

Warren, A. (2009). *Cascading gender biases, compounding effects: An assessment of*

*talent management systems*. New York: Catalyst.

Watson, P.J. (2012). Health information managers and managing change: an historical

overview. *HIM-Interchange*, 2, 2-4. Retrieved from <http://hima2.org.au/HIM->

[I/sites/default/files/HIMI\\_2-1\\_Watson\\_HIMs\\_and\\_managing\\_change.pdf](http://hima2.org.au/HIM-I/sites/default/files/HIMI_2-1_Watson_HIMs_and_managing_change.pdf)

- Watzlaf, V.J.M., Rudman, W.J., Hart-Hester, S., & Ren, P. (2009). The progression of the roles and functions of HIM professionals: A look into the past, present, and future. *Perspectives in Health Information Management*, 6, 1-13.
- Whitbourne, S.K. (2011, November 8). Why introverts can be great leaders...if you just give them a chance [Web log post]. Retrieved from <https://www.psychologytoday.com/blog/fulfillment-any-age/201111/why-introverts-can-be-great-leaders>
- Whittington, J.L., Goodwin, V.L., & Murray, B. (2004). Transformational leadership, goal difficulty, and job design: Independent and interactive effects on employee outcomes. *Leadership Quarterly*, 15, 593-606. doi:10.1016/j.leaqua.2004.07.001
- Williams, C.L. (1992). The glass escalator: Hidden advantages for men in the 'female' professions. *Social Problems*, 39, 253-267.
- Wilson, J.P., & Western, S. (2000). Performance appraisal: An obstacle to training and development? *Journal of European Industrial Training*, 24, 384-390. Retrieved from <http://search.proquest.com.libproxy.uregina.ca:2048>
- World Health Organization. (n.d.). *History of the development of the ICD*. Retrieved from <http://www.who.int/classifications/icd/en/HistoryOfICD.pdf>
- Yukl, G. (2010). *Leadership in organizations*, (7<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.
- Yukl, G. (2013). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson.
- Zaccaro, S.J., Kemp, C., & Bader, P. (2003). Leader traits and attributes. In J. Antonakis, A.T. Cianciolo, & R.J. Sternberg (Eds.), *The nature of leadership* (101-124). Thousand Oaks, CA: Sage Publications.

**APPENDIX A**

**HIM Leadership Questionnaire**

I currently work in acute care (If yes, skip next question)

I am currently a student in an accredited HIM program/a recent graduate who has not yet passed the national certification examination. (If yes, skipped work setting questions. If no, to next question.)

I work in the following area: (drop down menu)

If you work in more than one area, please select the area where you work the majority of the time.

- acute care
- community care
- primary care
- chronic care
- cancer care
- population health
- vendor
- extended care
- government/Ministry
- eHealth Ministry
- CIHI
- Canada Health Infoway
- Mental health
- Education
- Other: please specify \_\_\_\_\_

According to the organizational chart, the director/supervisor of my department reports to:

Finance; Chief Information Officer; Information Technology; CEO; Clinical Director/Clinical Services; Other please specify

My current job title/area of specialization is: coding specialist; release of information specialist; data analyst; business analyst; privacy officer; terminology standards; decision support analyst; supervisor; manager; director; other please specify

My union affiliation is: health professionals' union; clerical union; government employees' union; non-unionized; out of scope; other please specify

My job description accurately reflects my role and responsibility level.

Overall in my job, I feel that I am currently: under-employed (not utilizing my full skill set/knowledge); employed appropriately for my skill set/education level; challenged beyond my current skill level

My employment category is: Employed full-time; part-time; casual; retired; self-employed; currently on maternity/parental leave; currently on disability leave

I have worked in the HIM field for \_\_\_\_\_ years:

I am a Female \_\_\_\_\_ Male \_\_\_\_\_

I am between \_\_\_\_\_ years of age (18-24; 25-29; 30-34; 35-39; 40-44; 45-49; 50-54; 55-59; 60-64; 65 and over)

I live in the province/territory of \_\_\_\_\_

I am the primary caregiver for at least one of the following:

- infant/young children (0 - 5 years of age)
- older child/adolescent (6 - 17 years of age)
- disabled adult child
- elderly parent
- I am not a primary care provider

My relationship status is: single, married, living with partner, divorced, widowed, separated.

My highest level of education prior to entry to the HIM program is:  
 High school, Undergraduate – 1, 2, 3, 4th year/degree; internationally trained clinician,  
 Master's – started but didn't finish, currently enrolled, completed; PhD – started but  
 didn't finish, currently enrolled, completed.

Please select the type of HIM program that you completed when you first became certified

Initial HIM Education (drop down menu)

- HIM certificate, one year, associate level
- HIM certificate, two years, associate level
- HIM certificate, one or two years, certificant level
- HIM diploma, two years, certificant level
- HIM diploma, three years, certificant level
- HIM undergraduate degree, certificant level
- HIM Master's degree (country other than Canada)

Previous work experience prior to entry to HIM. Please describe any previous work experience you had prior to your training/employment in HIM profession. Open ended question: (string variable).

Have you completed any leadership training? Yes or No

I have completed further education post-HIM certification Yes or No

I am planning on continuing on in my formal education within the next five years Yes or No

Please select the level of formal education you plan on enrolling in within the next five years Certificate; Diploma; Post-diploma; Undergraduate degree; Master's degree; PhD

What discipline are you planning on continuing on your education in? (Free form answer)

If you are planning on writing an exam to earn additional credentials or advanced credentials, please select all that apply: PMP; CPHIMS(CA); Privacy; CHE; AHIMA's CHDA; AHIMA's CPHS; AHIMA's CDIP; AHIMA's CHTS; Other: (please specify)

Continuing Education: Please indicate the extent to which you agree or disagree with the following statements using the scale provided.

Strongly disagree      Disagree      Neutral      Agree      Strongly Agree

Continuing education is important to my professional development.

Continuing education is important to my career advancement

Continuing education is not important to me

My continuing education is mainly my own responsibility.

My continuing education is a joint responsibility between myself and my employer

My continuing education is mainly my employer's responsibility

My continuing education mainly benefits: Myself or My employer

I attend workshops/conferences/seminars as often as possible

Strongly disagree      Disagree      Neutral      Agree      Strongly Agree

I attend workshops/conferences/seminars to (indicate all that apply): network with colleagues; get motivated/inspired; stay current in my field; obtain CPE credits; other

I only attend a workshop/conference/seminar if all my expenses are paid by my employer

Strongly disagree      Disagree      Neutral      Agree      Strongly Agree

Please indicate the extent to which you agree or disagree with the following statements regarding leadership.

Strongly disagree      Disagree      Neutral      Agree      Strongly Agree

I am proud to be a certified HIM professional

I strive to initiate change in my workplace, particularly in relation to my role as an HIM professional.

I seek out new opportunities to use my skill set at work.

While I don't seek out new opportunities, if they come my way I will pursue them.

I am not interested in pursuing new opportunities at work.

Please select the statement that best represents your opinion regarding leadership.

I aspire to be a leader in my job.

I have no desire to be a leader in my job.

Please select the statement that best represents your opinion regarding career advancement.

I aspire to advance in my career to a higher level of formal leadership.

I have no desire to advance in my career to a higher level of formal leadership.

Please select the statement that best represents your opinion regarding your work.

I consider my work as a job and not a career.

I consider my work as a career.

Over the next five years, my career aspiration is to:

continue in my current position.

change to a different area or competency within HIM.

advance in my career to the level of manager/supervisor.

advance in my career to the level of director.

advance in my career to the C-suite level (e.g., CFO, CEO, CIO) or senior leadership level.

become an independent consultant.

retire.

I have no idea.

Change careers - please specify Please indicate the extent to which you agree or disagree with the following statements regarding leadership.

I would apply for a position I was interested in if I felt that my skills, abilities, and/or education met \_\_\_\_\_ of the listed requirements. 50%; 60%; 70%; 75%; 80%; 90%; 100%

I keep my resume up to date. Yes or No

**APPENDIX B**

**HEXACO Personality Inventory – 60 Item Scale**

### HEXACO Personality Inventory – 60 Item Scale

Next you will find a series of statements about you. Please read each statement and decide how much you agree or disagree with that statement, and select your answer from the available options. Please answer every statement, even if you are not completely sure of your response.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. I would be quite bored by a visit to an art gallery.	1	2	3	4	5
2. I plan ahead and organize things, to avoid scrambling at the last minute.	1	2	3	4	5
3. I rarely hold a grudge, even against people who have badly wronged me.	1	2	3	4	5
4. I feel reasonably satisfied with myself overall.	1	2	3	4	5
5. I would feel afraid if I had to travel in bad weather conditions.	1	2	3	4	5
6. I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed.	1	2	3	4	5
7. I'm interested in learning about the history and politics of other countries.	1	2	3	4	5
8. I often push myself very hard when trying to achieve a goal.	1	2	3	4	5
9. People sometimes tell me that I am too critical of others.	1	2	3	4	5
10. I rarely express my opinions in group meetings.	1	2	3	4	5
11. I sometimes can't help worrying about little things.	1	2	3	4	5
12. If I knew that I could never get caught, I would be willing to steal a million dollars.	1	2	3	4	5
13. I would enjoy creating a work of art, such as a novel, a song, or a painting.	1	2	3	4	5
14. When working on something, I don't pay much attention to small details.	1	2	3	4	5
15. People sometimes tell me that I'm too stubborn.	1	2	3	4	5
16. I prefer jobs that involve active social	1	2	3	4	5

interaction to those that involve working alone.					
17. When I suffer from a painful experience, I need someone to make me feel comfortable.	1	2	3	4	5
18. Having a lot of money is not especially important to me.	1	2	3	4	5
19. I think that paying attention to radical ideas is a waste of time.	1	2	3	4	5
20. I make decisions based on the feeling of the moment rather than on careful thought.	1	2	3	4	5
21. People think of me as someone who has a quick temper.	1	2	3	4	5
22. On most days, I feel cheerful and optimistic.	1	2	3	4	5
23. I feel like crying when I see other people crying.	1	2	3	4	5
24. I think that I am entitled to more respect than the average person is.	1	2	3	4	5
25. If I had the opportunity, I would like to attend a classical music concert.	1	2	3	4	5
26. When working, I sometimes have difficulties due to being disorganized.	1	2	3	4	5
27. My attitude toward people who have treated me badly is "forgive and forget".	1	2	3	4	5
28. I feel that I am an unpopular person.	1	2	3	4	5
29. When it comes to physical danger, I am very fearful.	1	2	3	4	5
30. If I want something from someone, I will laugh at that person's worst jokes.	1	2	3	4	5
31. I've never really enjoyed looking through an encyclopedia.	1	2	3	4	5
32. I do only the minimum amount of work needed to get by.	1	2	3	4	5
33. I tend to be lenient in judging other people.	1	2	3	4	5
34. In social situations, I'm usually the one who makes the first move.	1	2	3	4	5
35. I worry a lot less than most people do.	1	2	3	4	5
36. I would never accept a bribe, even if it	1	2	3	4	5

were very large.					
37. People have often told me that I have a good imagination.	1	2	3	4	5
38. I always try to be accurate in my work, even at the expense of time.	1	2	3	4	5
39. I am usually quite flexible in my opinions when people disagree with me.	1	2	3	4	5
40. The first thing that I always do in a new place is to make friends.	1	2	3	4	5
41. I can handle difficult situations without needing emotional support from anyone else.	1	2	3	4	5
42. I would get a lot of pleasure from owning expensive luxury goods.	1	2	3	4	5
43. I like people who have unconventional views.	1	2	3	4	5
44. I make a lot of mistakes because I don't think before I act.	1	2	3	4	5
45. Most people tend to get angry more quickly than I do.	1	2	3	4	5
46. Most people are more upbeat and dynamic than I generally am.	1	2	3	4	5
47. I feel strong emotions when someone close to me is going away for a long time.	1	2	3	4	5
48. I want people to know that I am an important person of high status.	1	2	3	4	5
49. I don't think of myself as the artistic or creative type.	1	2	3	4	5
50. People often call me a perfectionist.	1	2	3	4	5
51. Even when people make a lot of mistakes, I rarely say anything negative.	1	2	3	4	5
52. I sometimes feel that I am a worthless person.	1	2	3	4	5
53. Even in an emergency I wouldn't feel like panicking.	1	2	3	4	5
54. I wouldn't pretend to like someone just to get that person to do favors for me.	1	2	3	4	5
55. I find it boring to discuss philosophy.	1	2	3	4	5
56. I prefer to do whatever comes to mind, rather than stick to a plan.	1	2	3	4	5
57. When people tell me that I'm wrong, my	1	2	3	4	5

first reaction is to argue with them.					
58. When I'm in a group of people, I'm often the one who speaks on behalf of the group.	1	2	3	4	5
59. I remain unemotional even in situations where most people get very sentimental.	1	2	3	4	5
60. I'd be tempted to use counterfeit money, if I were sure I could get away with it.	1	2	3	4	5

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This questionnaire is available free for use by non-profit academic researchers.

## HEXACO-60 Scoring Key

### Scoring Keys for the 60-Item Version

<b>Honesty-Humility</b>	
Sincerity	6, 30R, 54
Fairness	12R, 36, 60R
Greed-Avoidance	18, 42R
Modesty	24R, 48R
<b>Emotionality</b>	
Fearfulness	5, 29, 53R
Anxiety	11, 35R
Dependence	17, 41R
Sentimentality	23, 47, 59R
<b>Extraversion</b>	
Social Self-Esteem	4, 28R, 52R
Social Boldness	10R, 34, 58
Sociability	16, 40
Liveliness	22, 46R
<b>Agreeableness</b>	
Forgiveness	3, 27
Gentleness	9R, 33, 51
Flexibility	15R, 39, 57R
Patience	21R, 45
<b>Conscientiousness</b>	
Organization	2, 26R
Diligence	8, 32R
Perfectionism	14R, 38, 50
Prudence	20R, 44R, 56R
<b>Openness to Experience</b>	
Aesthetic Appreciation	1R, 25
Inquisitiveness	7, 31R
Creativity	13, 37, 49R
Unconventionality	19R, 43, 55R

### **HEXACO-6Scoring Instructions**

Notes Items indicated with R are reverse-keyed items; for these items, responses should be reversed prior to computing scale scores: 5 > 1, 4 > 2, 3 > 3, 2 > 4, 1 > 5

Facet scale scores should be computed as means across all items in facet, after recoding of reverse-keyed items. Note that the facet scales of the 100- and 60-item versions of the HEXACO-PI-R are very short and are not intended to have high levels of internal consistency reliability. They are recommended for use as predictors of conceptually related criterion variables and as indicators of the HEXACO personality factors.

Factor scale scores should be computed as means across all items in factor. If orthogonal factor scale scores are desired, these can be calculated as varimax-rotated principal components of facet scales as calculated by a computer statistical package. (Note that a moderately large sample size (~250) may be needed to produce a stable component solution.)

**Appendix C**

**Research Ethics Approval**

<b>PRINCIPAL INVESTIGATOR</b> Kelly Abrams 3859 Montague Street Regina, SK S4S 3J6	<b>DEPARTMENT</b> Education Adult Education and Human Resource Development	<b>REB#</b> 2014-092
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**SUPERVISOR**  
Dr. Abu Bockarie

**FUNDER(S)**  
Unfunded

**TITLE**  
Leadership and Health Information Management in Canada

<b>APPROVAL OF</b>  Appendix A – Information for potential survey participants / consent form Appendix B – Information for potential interview participants / consent form Appendix C – HEXACO Personality Inventory Appendix D – Multifactor Leadership Questionnaire Self-Report Leader Form Appendix E – Draft HIM professional and HIM student quantitative questionnaire Appendix F – Draft Health Information Management Professional Qualitative Interview Questions Appendix G – Draft Health Leader Qualitative Interview Questions Appendix H – Recruitment E-mail Blast Template	<b>APPROVED ON</b> June 17, 2014	<b>NEXT RENEWAL DATE</b> June 7, 2015
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Full Board Meeting   
 Delegated Review

**CERTIFICATION**

The University of Regina Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol, consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

**ONGOING REVIEW REQUIREMENTS**

In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month of the current expiry date each year the study remains open, and upon study completion.

Please refer to the following website for further instructions: <http://www.uregina.ca/research/REB/main.shtml>



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 Dr. Larena Hoeber, Chair  
 University of Regina – Research Ethics Board

Please send all correspondence to:

Office for Research, Innovation and Partnership  
 University of Regina  
 Research and Innovation Centre 109  
 Regina, SK S4S 0A2  
 Telephone: (306) 585-4775 Fax: (306) 585-4893 [research.ethics@uregina.ca](mailto:research.ethics@uregina.ca)

**APPENDIX D**

**Recruitment Email Blast Template**



WOULD YOU LIKE TO PARTICIPATE IN RESEARCH?

**Volunteer participants are needed  
for a research study conducted by a University of Regina student titled:**

## **Leadership and Health Information Management in Canada**

### **Purpose and Objective of the Research:**

The purpose of this research is to explore the factors that influence the leadership development of certified HIM professionals in Canada.

### **Procedure:**

Participants will be asked to complete a number of online questionnaires that assess demographic characteristics, leadership qualities, and personality dimensions. It is expected that completion of the questionnaires will take approximately 30 to 45 minutes.

### **Confidentiality:**

Participation in this research will be anonymous and confidential. Potentially identifying information such as email addresses (e.g., as in the case of communication to answer questions) or IP addresses will be deleted from the data gathered before preparation of the dissertation.

### **Right to Withdraw:**

Your participation is completely voluntary. You are free to withdraw from the research project at any time prior to completion and submission of the questionnaires. Please be advised that, because the investigators are not collecting identifying information, your withdrawal will not be possible after you have submitted the questionnaires.

**For more information and to participate please click on the following link:**

[www.-----](http://www.-----)

**APPENDIX E**

**Information for Potential Survey Participants / Consent Form**

## **Information for Potential Survey Participants / Consent Form**

### **Project Title:**

Leadership and Health Information Management in Canada

### **Researcher(s):**

Kelly Abrams, Ph.D. Student, Faculty of Education – Adult Education and Human Resource Development, University of Regina.

### **Supervisor:**

Dr. Abu Bockarie, Faculty of Education – Adult Education and Human Resource Development.

### **Purpose and Objective of the Research:**

The purpose of this research is to explore the factors that influence the leadership development of certified HIM professionals in Canada.

### **Procedure:**

Participants will be asked to complete a number of online questionnaires that assess demographic characteristics, leadership qualities, and personality dimensions. It is expected that completion of the questionnaires will take approximately 30 to 45 minutes.

### **Funded by:**

The entire cost of the study is borne by the researcher. There are no conflicts of interest that pertain to the researcher, the academic supervisor, or the University of Regina.

### **Potential Risks:**

Participation in this study presents no known or anticipated risks to you.

### **Potential Benefits:**

This study is expected to provide no direct benefits to participants; however, the knowledge gained from this research may, over time, provide benefits to HIM professionals including improved career advancement opportunities, greater visibility and understanding of the profession, and the broadening of available HIM professional roles.

### **Compensation:**

No compensation is offered for participation.

**Confidentiality:**

Participation in this research will be anonymous and confidential. Potentially identifying information such as email addresses (e.g., as in the case of communication to answer questions) or IP addresses will be deleted from the data gathered before preparation of the dissertation. The surveys will be conducted using FluidSurveys.com. The FluidSurveys.com servers are protected with generally available security technologies, including firewalls and data encryption. These technologies are designed to prevent unauthorized access. SSL security will not be used as sensitive information (e.g., name) will not be collected.

**Storage of Data:**

Data will be stored electronically in password-protected, encrypted files on the laptop of the researcher for a period of five years after which it will be deleted using an electronic file shredding program. No data will be stored in hard copy format.

**Right to Withdraw:**

Your participation is completely voluntary. You are free to withdraw from the research project at any time prior to completion and submission of the questionnaires. Please be advised that, because the investigators are not collecting identifying information, your withdrawal will not be possible after you have submitted the questionnaires.

**Follow up:**

Study findings will be disseminated in formats that may include a dissertation, peer-reviewed journal publications, conference presentations, and via professional association websites/newsletters.

**Questions or Concerns:**

If you have any questions or concerns regarding your participation in this study please contact the investigator or her supervisor by email or telephone (contact information below).

Kelly Abrams  
Faculty of Education – Adult Education  
and Human Resource Development

Dr. Abu Bockarie  
Faculty of Education – Adult Education  
and Human Resource Development

This project has been approved on ethical grounds by the University of Regina Research Ethics Board on June 17, 2014 (approval # 2014-092). Any questions regarding your rights as a participant may be addressed to the committee (306-585-4775 or [research.ethics@uregina.ca](mailto:research.ethics@uregina.ca)). Out of town participants may call collect.

**Consent:**

By completing and submitting the online questionnaire, **YOUR FREE AND INFORMED CONSENT IS IMPLIED** and indicates that you have read and understand the above conditions of participation in this study.

**Appendix F**

**Information for Potential Interview Participants / Consent Form**



## **Information for Potential Interview Participants / Consent Form**

### **Project Title:**

Leadership and Health Information Management in Canada.

### **Researcher(s):**

Kelly Abrams, Ph.D. Student, Faculty of Education – Adult Education and Human Resource Development, University of Regina.

### **Supervisor:**

Dr. Abu Bockarie, Faculty of Education – Adult Education and Human Resource Development.

### **Purpose and Objective of the Research:**

The purpose of this research is to explore the factors that influence the leadership development of certified HIM professionals in Canada.

### **Procedure:**

Participants will be interviewed in-person where geographically possible or via Skype. All interviews will be recorded; however, participants may request that the recording device be turned off at any time. The expected time commitment for the interviews is one interview per participant with a length of approximately 30 to 60 minutes.

### **Funded by:**

The entire cost of the study is borne by the researcher. There are no conflicts of interest that pertain to the researcher, the academic supervisor, or the University of Regina.

### **Potential Risks:**

Participation in this study presents no known or anticipated risks to you.

### **Potential Benefits:**

This study is expected to provide no direct benefits to participants; however, the knowledge gained from this research may, over time, provide benefits to HIM professionals including improved career advancement opportunities, greater visibility and understanding of the profession, and the broadening of available HIM professional roles.

### **Compensation:**

No compensation is offered for participation.

**Confidentiality:**

Participation in this research will be confidential. The data from this research project will be published in a dissertation and presented at conferences; however, your identity will be kept confidential. Although there may be direct quotations from the interview, you will be given a pseudonym, and all identifying information (e.g., participant's name, name of participant's organization, participant's position) will be removed from the dissertation. After your interview, and prior to the data being included in the dissertation, you will be provided the opportunity to review the transcript of your interview, and to add, edit, or delete information from the transcripts as you see fit. It is anticipated that the review process will take no longer than 30 minutes.

**Storage of Data:**

Data will be stored electronically in password-protected, encrypted files on the laptop of the researcher for a period of five years after which it will be deleted using an electronic file shredding program. No data will be stored in hard copy format.

**Right to Withdraw:**

Your participation is completely voluntary. You can answer or not answer questions at your discretion. Should you wish to withdraw, your information will be destroyed. Your right to withdraw from the study will apply until you have approved the final version of your interview transcript. After this date it is possible that analyses, which involve the pooling of data, will have occurred.

**Follow up:**

Study findings will be disseminated in formats that may include a dissertation, peer-reviewed journal publications, conference presentations, and via professional association websites/newsletters.

**Questions or Concerns:**

If you have any questions or concerns regarding your participation in this study please contact the researcher or her supervisor by email or telephone (contact information below).

Kelly Abrams  
Faculty of Education – Adult Education  
and Human Resource Development

Dr. Abu Bockarie  
Faculty of Education – Adult Education  
and Human Resource Development

This project has been approved on ethical grounds by the University of Regina Research Ethics Board on June 17, 2014 (approval # 2014-092). Any questions regarding your rights as a participant may be addressed to the committee (306-585-4775 or [research.ethics@uregina.ca](mailto:research.ethics@uregina.ca)). Out of town participants may call collect.

**SIGNED CONSENT**

Your signature below indicates that you have read and understand the description provided.

I have had an opportunity to ask questions and my/our questions have been answered. I consent to participate in this research project. A copy of this Consent Form has been provided to me.

---

*Name of Participant*

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*Signature*

---

*Date*

---

*Researcher's Signature*

---

*Date*

**APPENDIX G**  
**Interview Participant Table**

<b>Date of interview (2015)</b>	<b>Participant*</b>	<b>Role</b>	<b>Sex</b>	<b>Estimated Years Experience</b>	<b>Length of interview (minutes)</b>
January 18	HIM#1	Manager	F	24 years	12:49
March 14	HIM#2	Clinical coder	F	27 years	40:04
March 21	HIM#3	Decision support	F	3 years	48:49
March 21	HL#1	Consultant	M	15 years	32:46
March 23	HIM#4	Business intelligence	M	11 years	50:16
March 24	HIM#9	Manager	F	Over 45 years	39:57
March 26	HIM#8	Manager	F	Over 25 years	43:17
March 31	HIM#5	Director	F	10 years	44:24
April 2	HIM#6	Manager	F	20 years	67:56
April 2	HIM#10	Manager	F	21 years	58:00
April 6	HIM#7	Consultant	M	15 years	46:25
April 6	HL#2	CEO	M	16 years	58:29
April 8	HIM#12	Decision support	F	25 years	53:52
April 11	HIM#13	Classification	F	9 years	62:14
April 20	HIM#11	Classification	F	Over 35 years	51:08
April 22	HIM#14	Educator	F	Over 20 years	56:25
May 25	HL#3	Director	M	21 years	32:37
June 22	HL#4	Inspector	F	Over 40 years	31:01
June 25	HL#5	Director	F	25 years	35:35

<b>Date of interview (2015)</b>	<b>Participant*</b>	<b>Role</b>	<b>Sex</b>	<b>Estimated Years Experience</b>	<b>Length of interview (minutes)</b>
June 29	HL#6	CEO	M	Over 30	35:46
June 30	HL#7	Vice President	F	Over 25 years	45:15

\*Participant numbers were assigned at the time of initial contact and consent

**APPENDIX H**  
**Health Information Management Professional**  
**Interview Schedule**

Prior to the recording being started, the interviewee was reminded of the confidential nature of the interview and that all data would be anonymized to protect their identity. Demographic data including age, sex, years in practice, highest level of education, and current position title were gathered.

1. Tell me about how you first heard of the HIM profession. What made you decide to enter into the HIM profession?
2. What were your career goals when you entered the profession? How did you view the HIM profession when you entered it in terms of as a career itself?
  - a. In terms of your goals in HIM, do you feel that you've met them or not?
3. When you think about the HIM profession itself, what positive changes have you seen that have happened in HIM since you started in the profession?
  - a. What about negative changes?
4. What do you think some of the main challenges are?
5. Where do you see yourself in five years now from a professional sense?
6. When we're talking about leadership, what factors do you think affect HIM professionals and the advancement into leadership roles?
7. How do you think issues of gender influence the profession? (This question was only asked if gender did not arise during the course of the interview.)
8. What recommendations can you offer to other HIM professionals to develop or enhance their career development specific to leadership development?

**APPENDIX I**

**Health Leader Interview Schedule**

Prior to the recording being started, the interviewee was reminded of the confidential nature of the interview and that all data would be anonymized to protect their identity. Demographic data including age, sex, years in practice, highest level of education, and current position title were gathered.

1. What was your first role in health? Tell me about your career progression.
2. Please describe your understanding of the role of the HIM professional, in general.
3. In terms of the education around the Health Information Management profession, can you tell me what your perception is of the education that the HIM professions have currently?
  - a. Depending on response, the following information is provided. The majority of the people coming out into the field, and in the field, enter through a diploma level. Do you see that as a barrier to moving into the senior leadership positions?
4. What is your perception of the HIM profession?
5. What advice would you offer an individual HIM professional to advance in their career, in regards to leadership development?
6. What advice would you offer to HIM professionals to advance the professional leadership development as a whole?
7. How do you think issues of gender influence the profession? (This question was only asked if gender did not arise during the course of the interview.)