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Perceptions Among Women on Education for Health Information Management Career Advancement

Meagan Sampogna Williams
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Walden University

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Meagan Sampogna Williams

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Walden University
2018

Abstract

Perceptions Among Women on Education for Health Information Management Career

Advancement

by

Meagan Sampogna Williams

MBA, Robert Morris University, 2004

BS, University of Pittsburgh, 2000

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Health Services

Walden University

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Abstract

The increased use of technology has affected almost every aspect of how data are collected, stored, retrieved, and analyzed across the health care system. The health information management (HIM) workforce in the United States is predominantly composed of women. With HIM employment rising by 2020, additional education of the current workforce is a necessity. This qualitative phenomenological study evaluated women working with HIM associate degrees and RHIT certifications to determine their perceived need for advanced education for career advancement. This study used the social cognitive career theory (SCCT) to determine how women in HIM perceive needs based on self-efficacy, expected outcomes, and goals. The research questions evaluated education type, subject matters, and ability to advance. The study recruitment process included the use of HIM online research forums resulting and narrative inquiry data collection from 22 personal interviews across 19 states in the United States. Colaizzi's data analysis strategy demonstrated themes of HIM education access, barriers, preparedness, and role interests. The data gathered showed need and interest in further education directly correlated to time remaining in career and role aspirations. Recommendations for further research include evaluation of advanced HIM education needs in a male population or individuals with post-graduate education. To affect positive change, dissemination of this study's findings to HIM leaders may create awareness and rationale for women to obtain technology and data related advanced education. In addition, this study may influence educational institutions to promote HIM as a field of study and fill the anticipated gap in HIM field expertise in the coming decade.

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Chapter 1: Introduction to the Study

Introduction

The HIM field is responsible for ensuring health information is collected accurately and securely so health care practitioners can access health data in the provision of quality and continuity of patient care. In addition to uses for delivery of health services, health information data are used for reimbursement, practice management, and health outcomes (American Health Information Management Association [AHIMA], 2017). The introduction of the electronic health record (EHR) changed how HIM professionals gather, store, analyze, and access health information, thereby changing the skills and knowledge needed in the HIM workforce (Gibson, Abrams, & Crook, 2015). With the adoption of new technology, the roles and responsibilities of those working in the HIM field, the current HIM workforce is challenged to adapt given most are found to not possess a computer-related skill set (Jackson, Lower, & Rudman, 2016). Women represent approximately 90% of the HIM workforce in the United States (AHIMA, 2015). Insights gained from perspectives that women have of educational needs to support HIM roles may inform the HIM workforce of the skills and knowledge necessary to support a changing health care environment.

U.S. legislation ignited the shift from paper to EHRs in 2009. The Health Information Technology for Economic and Clinical Health (HITECH) Act promotes adoption and meaningful use of health information technology (U.S. Department of Health and Human Services [HHS], 2015). The HITECH Act was initiated to strengthen the privacy and security of protected health information (PHI) transmitted electronically

and impose penalties to the extent privacy or security is violated (HHS, 2015). The meaningful use of electronic health records (EHR-MU) is an effort led by the Centers for Medicare & Medicaid Services (CMS, 2016) and the Office of the National Coordinator for Health Information Technology (ONC). HITECH includes EHR-MU as a critical national goal throughout the U.S. health care delivery system to ensure EHR technology exchanges of health information in a manner that improves the quality of care (Centers for Disease Control and Prevention [CDC] Office of Public Health Scientific Services [OPHSS], 2016). A need for education and training exists in newly emerging areas such as data analytics, information governance, and privacy with installations of EHR technology on the rise in health care settings nationally (Butler, 2016). To maintain or advance their positions in the HIM workforce, women will need education aligned with updated HIM domain competencies.

This movement toward HIM technology and education affects not only those working in the field of HIM but also those responsible for preparing the future HIM workforce. Educators and HIM industry leaders acknowledge that a gap exists in the education of the current HIM workforce, as well as with the HIM curricula to prepare students for job placement (Jackson et al., 2016). Per an AHIMA (2015) member study, data and business analytics were the most critical future skills to the HIM profession with knowledge of health records and coding not as critical. HIM leaders and educators need information on how to address knowledge and skill gaps in the HIM profession, so the current workforce can successfully support and use technology and HIM data.

Gaining knowledge regarding necessary education for advancement may inform how women working in HIM advance roles aligning with emerging HIM trends and technology. In this study, I collected qualitative data from the current female HIM workforce population. Collection of such data was essential to obtain a rich understanding of whether lacking knowledge or education is hindering women working in HIM. Insights on this topic may further inform HIM leaders and educators about how to increase the HIM knowledge of existing employees in support of their changing environment.

In addition to this introduction, Chapter 1 includes the background, problem statement, purpose, and research questions posed for this qualitative study. Furthermore, in Chapter 1 I identify the theoretical framework, nature of the study, and relevant definitions to my study. I conclude Chapter 2 with research assumptions, scope, limitations, and study significance in this chapter. The content in these sections served as a framework for justifying my study topic specific to women working in the HIM field prior to grounding the study in evidence and literature gaps outlined in Chapter 2.

Background of the Study

Literature related to education and the HIM profession included four areas: (a) changing HIM environment, (b) workforce needs for the future of HIM, (c) gaps in HIM education, and (d) women and advanced education. Relative to the changing HIM environment, researchers found HIM susceptible to the increased use of computerization (Frey & Osborne, 2013). Technology replaced traditional HIM activities supporting health care data collection, documentation, and coding of paper medical records

(Sandefer, Marc, Mancilla, & Hamada, 2015). The use of technology to support these traditional tasks affected the types of HIM roles now needed in health care settings and the skills and knowledge necessary to advance to these functions (AHIMA, 2015; Gibson et al., 2015). For example, medical record coders historically read through paper medical records, translated the health information into diagnosis codes, populated paper claim forms with identified codes, and submitted claims to insurance companies for reimbursement to the health care provider or setting. Electronic health record systems now allow clinicians to capture medical information during a patient encounter and code the visit; therefore, modifying the medical record coder role to a quality assurance function as data within the record is viewed and electronically submitted to an insurance company for payment.

The advancement of HIM technology and EHR use affects the HIM industry in the United States as well as in other countries. The Canadian Health Information Management Association (CHIMA, 2012) anticipates the HIM profession to primarily focus on the analysis and quality assurance of health care data within a health record as opposed to the management of the health record itself. Researchers of three HIM workforce and member studies conducted by AHIMA, CHIMA, and the Health Information Management Association of Australia (HIMAA) all demonstrated a changing HIM work environment requiring increased professional skills in data quality, information governance, clinical management systems, and improved documentation for coding and reimbursement purposes (AHIMA, 2015; CHIMA, 2012; Sandefer et al., 2015). These findings indicate needs for the HIM workforce to adapt to a HIM working

environment where health data are collected, viewed, and analyzed more systemically.

This study was necessary to assess female HIM workforce perceptions of the importance of technology and individual skill attainment in technical competencies within the HIM field.

Unique to workforce needs and the future of HIM, researchers found a positive effect of student internships on the preparation of students entering the workforce from HIM academic programs (Hurst, Thye, & Wise, 2014; Jackson et al., 2016; Sweeney, 2012). In addition to internships, Bates et al. (2014) found HIM competencies taught in current HIM accredited institutions and the support of an assigned HIM mentor to prepare students for their work environment post-graduation. Yet, skill gaps exist for HIM roles and students entering the workforce (Jackson et al., 2016). Existing researchers focused on the needs and expectations of new HIM graduates entering the workforce (Bates et al., 2014; Hurst et al., 2014; Jackson et al., 2016; Sweeney, 2012). I found insufficient literature on evaluation of the current workforce needs in health care settings with new technology and use of health information.

Individuals with bachelor, master, or doctoral degrees and certification as Registered Health Information Administrators (RHIA) possess advanced education in HIM. HIM workforce and association membership data showed low attainment of an advanced HIM education with 35% of this population holding bachelor degrees, 13% with master degrees, and only 2% with doctoral degrees (AHIMA, 2015). Researchers focused on HIM education found gaps in the HIM curriculum specific to information governance, analytics, and privacy and identified needs for specialized certification in

certain HIM subject matters focused in technical areas (Bates et al., 2014; Canadian College of Health Information Management [CCHIM], 2015). In addition, the availability of an updated HIM curriculum and the number of HIM accredited educational institutions remain, low with only five colleges and universities offering master degree programs (Commission on Accreditation for Health Informatics and Information Management Education [CAHIIM], 2016). Given the CCHIM and CAHIIM findings, outcomes of this study informed curriculum gaps for existing HIM workforce members and provided possible recommendations on how the women in this workforce population may access advanced education with limited resources.

HIM education occurs through a variety of accredited, continuing education, and degree programs. It may be possible to advance HIM knowledge in the current working female population through continuing education requirements; however, Sandefer and Karl (2014) found higher competencies essentially come with higher degrees of education. In this study, I evaluated the perceptions women possess regarding educational needs in the current HIM workforce. The female population I focused on included women with associate degrees in HIM and certified as RHITs. I chose this study population as 37% of the current HIM workforce hold this degree as their highest level of education in the field and a baccalaureate is required to obtain a higher certification (AHIMA, 2015). I plan to disseminate study findings to HIM workforce leaders to create awareness of educational needs women working in HIM have for role attainment or advancement.

Problem Statement

The evolving HIM environment and advancing HIM roles require education in technology and other emerging HIM-specialized areas. As the U.S. health care system rapidly changes, health-related data uses go beyond traditional HIM functions requiring the current HIM workforce to learn new skills such as quality assurance of electronic health record clinical documentation (Desai, 2015). A low 13% of the respondents to a 2015 HIM workforce study held master's degrees (AHIMA, 2015). This finding represented a need for graduate education to address changing HIM practices. Johns's (2013) review of AHIMA member data showed that 10.5% of HIM certified women hold advanced degrees compared with 23.9% of HIM certified males. These education statistics and research findings regarding women in HIM professions and inevitable HIM industry changes demonstrate a potential gap in awareness women have about advanced education (Jackson et al., 2016; Johns, 2013). Therefore, a problem exists that women may not possess an understanding of education requirements in support of future HIM role attainment or advancement.

Purpose of the Study

The purpose of this qualitative study was to gain an understanding of how women with associate degrees and RHIT certification working in HIM perceive the need to further their education in support of advancing their role or career in a changing HIM environment. This population represents 35% of the women currently in the HIM workforce with less than 31% of the female population possessing higher HIM degrees and certification (AHIMA, 2015). With the skills and knowledge requirements in HIM

changing, this population of women faces the most significant opportunity for advancement with these skill and knowledge gaps filled. Therefore, I collected data for this study from female HIM professionals possessing an associate-level educational degree who have successfully obtained their RHIT certification. These women are likely to work in patient care health settings with responsibilities specific to data collection, analysis, billing, coding, privacy, compliance, or technology using health information. Data collection consisted of interviews with female RHIT associate-degreed HIM professionals currently working in the HIM workforce. In this study, I explored the experiences of women currently working in the HIM field about their education, opportunities for additional education, and lack of knowledge required or not necessary to support their HIM career.

Research Questions

I generated two detailed qualitative research questions based on the problem statement and purpose of this study relevant to the perspectives women with associate degrees and RHIT HIM certifications have on education for advancement in the HIM workforce.

RQ1: What additional education certifications, degrees, or experiences do women with an associate degree and RHIT certification perceive necessary to support career advancement in HIM?

RQ2: What additional HIM topics or subject matter areas do women with an associate degree and RHIT certification perceive necessary to understand or gain knowledge in to support career advancement in HIM?

RQ3: How do women with an associate degree, and RHIT certification perceive their ability to obtain advanced education in HIM?

I further support these research questions with the content delivered in the following chapters and ensured alignment with the interview questions used in the study related to the perception women have on the need for education related to HIM role and career advancement.

Theoretical Foundation

The theoretical foundation used for this study was the SCCT founded by Lent, Brown, and Hackett (1994). The SCCT aims to explain three relationships across the career development spectrum: (a) how primary academic and career interests develop, (b) how individuals make education and career choices, and (c) how one obtains academic and career success (Lent et al., 1994). The origin of the SCCT aligns with Bandura's (2001) social cognitive theory (SCT) proposing that behavioral changes may occur in small increments until one gains confidence while generating self-efficacy. These self-efficacy beliefs carried over to the SCCT model but were tied to outcome expectations and goals in one's education, career aspirations, choices, and successes (Lent et al., 1994). The SCCT is an appropriate theoretical foundation for this study of women in HIM because it seeks to determine why women select HIM as an educational route to a HIM career.

Use of the SCCT as a framework to guide the development of the study interview questions assisted in determining if self-efficacy in performing HIM roles had any relationship to education and success. At its core, Bandura's (1994) SCT focuses on

adaptive behavior and character behavior being influenced by situations encountered daily. When further applied to Lent et al.'s (1994) SCCT, Lent and Brown (2013) developed a model focused on career adaptation occurring at various life timeframes. This model is known as the career self-management model and applies to processes by which people change their behavior specific to their career or education (Lent & Brown, 2013). The application of the SCCT model to this study informed what may influence career or education changes in female HIM professionals given current HIM industry trends and needed knowledge or skills. I further discuss the career self-management model with the SCT and SCCT in the second chapter.

Nature of the Study

The nature of this study included qualitative phenomenological inquiry of women with an associate degree and RHIT certification actively working in the HIM industry within a health care setting. Qualitative research is intended to understand people from their points of view, frames of reference, and real experiences (Corbin & Strauss, 2008). This approach posits that patterns and relationships of meaning develop as a result of studying subjects such as women HIM professionals through prolonged engagement (Cope, 2014). The rationale for using this approach was driven by my need to understand the perception phenomena and obtain rich descriptions of the experiences of women HIM professionals relevant to education required of the HIM industry.

The data collection process consisted of conducting semistructured interviews with women actively working in various patient health care settings in a HIM position. I used open-ended interview questions to gather detailed information regarding current

HIM work experiences, HIM education effect, and any correlation between education and changing HIM work requirements. In addition, I focused on obtaining data from the lived experiences these women have had in maintaining and attaining HIM professional positions in a changing HIM workplace. I conducted data analysis to identify critical statements and determine meaning or essence of the descriptions provided by study participants (Cope, 2014). I used the NVivo Version 11 software to manage the data collected from the interview process and to determine trends for further evaluation and interpretation. In the next section, I address key definitions to terms relevant to the HIM field of research and study.

Definitions

It is possible to interpret education and professional advancement in the field of HIM in multiple ways. The following definitions outline how I intended certain terms in this study.

Advanced health information management (HIM) education: Advanced education includes the completion of a 4-year baccalaureate degree in HIM or a master's degree in a related-HIM field of studies such as health information technology, health care management, or health informatics.

Information governance: An organization-wide framework for managing information throughout its lifecycle and supporting the strategies, operations, regulatory, legal, risk, and environmental requirements (AHIMA, 2016d).

Assumptions

I found a few assumptions meaningful to this study of women in the HIM profession necessary to consider when collecting data for qualitative purposes. Qualitative interviewing as a form of data collection enables individuals to think and speak about their challenges, needs, experiences, expectations, and understandings (Nunkoosing, 2005). With qualitative interviews serving as the data collection framework for this study, I assumed that the women I selected for study participation were open and honest regarding their perceptions of educational need associated with their role in the HIM workforce. The second assumption is that the women interviewed did not hold back any information regarding their challenges encountered in maintaining or advancing their positions in a changing health care environment. With a lack of access and funding as well as gender bias or discrimination still being possible barriers to receiving a desired education or occupation, there was a need for the interviewees to be forthright with their lived experiences (Ibarra, Ely, & Kolb, 2013; Johns, 2013).

A way to mitigate these assumptions was to ensure I established a rapport with the interviewee by demonstrating trust and respect regarding the information each woman shares (DiCicco-Bloom & Crabtree, 2006). Participant awareness that their life experiences are critical to the subject at hand may support the ability to translate the data collected into meaningful study outcomes. The last assumption was that the use of cross-contextual or associated surroundings (Mason, 2006) of all-female gendered RHIT interview participants in various HIM roles provided significant study data. This

assumption was necessary to note with the study intent to gain an understanding of education perspectives across a gender-specific female population.

Scope and Delimitations

With women predominantly representing the current HIM professional workforce and HIM being among the fastest growing occupations, the scope of this study included perceptions of female HIM professionals (AHIMA, 2015; U.S. Bureau of Labor Statistics [BLS], 2015a, 2015b). I included female educators in this study, and there was already evidence demonstrating known gaps between the curriculum preparing HIM students and the actual skills needed in the HIM workplace environment (Jackson et al., 2016). The inclusion of female HIM educators did not introduce unnecessary bias associated with the need for advanced education in HIM as all women included in the study were teaching in associate degree programs with associate degrees as their highest level of education.

The study participant population excluded female HIM students not actively working in HIM. Few researchers focused on female HIM students; however, perceptions about the need for advanced education in a population of women students still completing foundational HIM studies may not have relevance to the topic of interest unique to this study. Therefore, I did not gather data from women taking coursework in HIM educational settings or institutions in this study.

Limitations

A limitation of this study included various views of advanced education existing across the study population. The AHIMA (2017b) requires continuing education credits for individuals possessing RHITs to maintain such certification. The definition of

advanced education in this study was the completion of a 4-year baccalaureate degree in HIM or a master's degree in a related-HIM field of study. Women may perceive the act of obtaining credits toward continuing education as advancing their education. There may also be variability across roles in HIM working environments that could limit the trends found in the data collected. My participation in the study may also introduce bias in the data collection process. I obtained a Bachelor of Science degree in HIM and a master's degree, and I have my RHIA certification to support my professional role in HIM. To reduce bias, I ensured that all interview participants were made aware of my RHIA certification and that I was not currently working professionally in HIM. I also gave the women who participated an opportunity to review their responses for interpretation accuracy before the completion of my data analysis steps.

Significance of the Study

Since 2009, the CDC (2012) and the ONC (2014) identified initiatives for setting standards, increasing adoption of EHRs, and building HIM leadership teams. The passing of the HITECH Act in 2009 drove these actions (HHS, 2015). The CDC (2012) and the ONC (2014) posited that EHRs and health information exchange (HIE) systems are integral to HITECH goals; however, adoption of health information technology is not without challenges. These problems require the HIM workforce to solve the need for current and incoming HIM professionals to possess technical and analytical skills (Dimick, 2012; Sandefer, DeAlmeida, Dougherty, Mancilla, & Marc, 2014).

Understanding how women with associate degrees and RHIT certification working in

HIM view the need for additional education to advance into future HIM roles may identify updates to HIM curriculum and competencies.

Significance to Practice

Study outcomes may inform how health care organizational leadership can create an environment conducive to their HIM workforce participating in advanced education. Specifically, this study highlights the HIM knowledge gap valuable to HIM professionals with RHIT certification and associate degrees. Therefore, I can provide my study outcomes to institutions or accrediting bodies for development of updated HIM curriculum or advancement programs.

Significance to Theory

The SCCT was found on the basis that cognitive phenomena associated with academic interests, career choices, and performance outcomes have a direct correlation to career models (Lent & Brown, 2013). This study outcome leveraged the SCCT by determining if there was an association between women possessing RHIT certification and associate-level degrees working in HIM and additional academic interests. Lack of HIM education may impact career options within a changing HIM industry. Application of the SCCT theory to this study informs how health care settings can support advanced education and career change decisions of women in HIM. With technology playing a significant role in the HIM profession, different HIM jobs surfaced. Data gathered in this study filled some of these gaps in new HIM roles by determining how women perceive their need for education to achieve such careers or job changes.

Significance to Social Change

As women continue to remain the primary gender representing the HIM RHIT and RHIA professions in the U.S. health care industry (AHIMA, 2015), succession planning, career development, and continuing education with a dynamic HIM environment is essential. Insights gained regarding educational gaps to attain roles in future HIM functions may assist organizations to provide tools, structure, and opportunities for women to increase knowledge while working. Positive social change implications for women with RHIT certification and associate degrees in HIM include a better understanding of HIM subject matter expertise and skills needed to meet the demands of an advancing HIM industry. Continued investment in women supporting RHIT HIM functions may raise the self-worth of a female workforce population having experienced significant change with the introduction of technology into the health record practice (AHIMA, 2015). Dissemination of study findings may contribute to positive social change for health services to promote a HIM workforce equipped and educated to support technology impacts on health information. Last, outcomes from this study may be used to inform current HIM workforce leaders on how to motivate women with associate degrees and RHIT certification to further their education toward a baccalaureate degree and RHIA certification.

Summary

In this chapter, I introduced the problem related to the number of RHIT certified women working in HIM with associate degrees and potential to obtain advanced education in support of the changing HIM work environment and technology (AHIMA,

2015; Dimick, 2012; Johns, 2013; Sandefer et al., 2014). I supported the problem statement with the research purpose described, and I outlined the research questions in alignment with my study's SCCT theoretical framework. Last, I reviewed the study assumptions, scope, limitations, and its significance.

The apparent gaps in the education of the HIM workforce in combination with the high population of women with current careers in this industry create a need to understand how this gap may be bridged (AHIMA, 2015, Butler, 2016; Desai, 2015). In this study, I intended to gain information from women with associate degrees and RHIT certification actively working in the field of HIM relevant to their perception of the need for advanced HIM education. The findings of this study inform health care setting HIM leadership and HIM educators on what additional education and support may be necessary for the female HIM RHIT workforce to possess and advance their HIM roles.

In Chapter 2, I provide a literature review of research distinct to the changing HIM environment, preparation of the HIM workforce for the future, known gaps in HIM education, and advanced education of women. Based on the literature reviewed and studies evaluated, I concluded the need for perspectives from women on advanced HIM education in their HIM work environment.

Chapter 2: Literature Review

Introduction

As health care settings implement new systems and processes in response to the evolution of patient care technology, the HIM workforce is finding itself in need of preparation for such changes (Dimick, 2012). The BLS (2015c) projects the HIM employment rate to increase 22% by the year 2020. As of 2015, women represented 90% of the HIM workforce predominantly staffed with RHIT certified professionals (AHIMA, 2015). Many health care organizations seek HIM certified professionals with skills and knowledge to support emerging HIM competencies as the increased use of technology transforms HIM roles and job duties. The purpose of this qualitative study was to gain an understanding of how women with associate degrees and RHIT certification working in HIM perceive the need to further their education for career advancement. In this study, I provide insight into whether women HIM RHIT professionals recognize the need for baccalaureate education and advanced certifications to reinforce their position in the HIM workforce.

A HIM workforce study conducted by AHIMA (2015) found 35% of women to possess an associate degree, 31% of women to hold bachelor degrees, and 12% of women to have master's degrees. These AHIMA (2015) education statistics indicate a population of women exists with a potential for furthered education and higher HIM certifications. Johns (2013) review of AHIMA member data additionally showed 10.5% of HIM certified women hold advanced degrees compared with 23.9% of HIM certified males. The large population of women in the HIM workforce and future HIM industry changes

demonstrate a potential gap in awareness women experience about advanced education and leadership opportunities.

Chapter 2 includes the search strategy that I used to identify and evaluate literature pertinent to the current HIM workforce, the changing HIM industry, and skills and knowledge needed to address the changes. In this chapter, I also review the theoretical framework applied to this study and the literature specific to this problem followed by a concluding summary. I used the gaps in the literature evaluated and research structures evaluated to inform the organizational structure and research questions.

Literature Search Strategy

Review of literature regarding a dissertation research topic identifies known information about the research topic, what qualifies or limits the findings of past studies, and most importantly how new research may inform an existing gap. Key terms and a combination of terms for the literature review search criteria included *health information management, HIM, professionals, workforce, advanced HIM careers, career advancement, health information education, HIM degrees, HIM certification, RHIA, RHIT, women, and females*. The literature I reviewed included journal articles and studies primarily published between 2012 and 2017. I obtained literature sources through the Walden University Library, ProQuest Central, MEDLINE, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), PubMed, Google Scholar, and Science Direct databases. I additionally reviewed member accessible data and articles from the AHIMA and the American Medical Informatics Association (AMIA).

Theoretical Foundation

The SCT, founded by Bandura (1986, 1997, 2001), proposes behavioral changes occur in small increments until an individual achieves a sense of self-efficacy based on confidence in performing a particular behavior. The SCT suggests learners are more apt to persist and put effort into activities in which they possess high self-efficacy (Bandura, 1986). Bandura (1986) based this idea on the assumption that behavior is a result of the interaction between a person and their environment. Self-efficacy is how one judges their capabilities of accomplishing actions to achieve a specific outcome (Bandura, 1986). Through the social cognitive view, one uses self-efficacy as a dynamic belief pertinent to performance that interacts with factors such as people and behaviors (Lent, Brown, & Hackett, 1994). These concepts collectively relate to how women may need encouragement in the HIM environment to consider additional education in a manner that achieves self-efficacy and bridges a knowledge and skill gap.

A link exists between self-efficacy and performance. In 1994, Lent et al. (1994) applied the SCT to the construct of career development. This model focused on self-efficacy beliefs, expectations of outcomes and goal representations (Lent et al., 1994). The connection of these three areas sought to explain interest development, choice making, and performance in both education and career context and led to the creation of the social cognitive career theory (SCCT; Lent et al., 1994). Since its initial inception, many researchers have applied SCCT to a variety of career development areas including developmental challenges and resource well-being with education and career choices (Lent, Hackett, & Brown, 1999; Lent & Brown, 2013). The SCCT considers humans as

living in a world that is social with many influencing external forces and the opportunity to influence others (Lent & Brown, 2013). For this study, it was vital that I find a theoretical concept that could apply to education as well as careers.

Contextually, career development research using the SCCT existed in numerous ways. For example, Wright, Perrone-McGovern, Boo, and White (2014) integrated the SCCT with Bowlby's (1973) attachment theory to explain how attachment relationships impact the career development of an individual (. I conducted this research to determine whether attachment correlates to self-efficacy of career decisions and academic choice or whether perceived social support and career barriers ascertain the relationship between attachment, career decisions, and academic self-efficacy (Wright et al.,2014). This self-efficacy and career or academic correlation study demonstrated that higher levels of career and academic self-efficacy beliefs had a direct relationship to perceived support (Wright et al.,2014). Lent and Brown (2013) set out to identify career behaviors workers may adapt to by life role and career-life period using Super's life space theory (Super, Savickas, & Super, 1996) and Turner and Lapan's (2013) model of career development. Also, taxonomies of career competencies and preparation tasks were used to guide the list (Lent, 2013). These adaptive career behaviors by life role as well as taxonomies of career competencies were used to guide the qualitative inquiry actions of this study reflecting on female HIM RHIT professionals and their possible view of education to achieve competency in their HIM role or position.

These concepts of adaptive behavior, career development, and self-management all have applicability when seeking information on whether women see a need for further

education to support their career growth. Beyond job growth, a need exists to fill the gap of knowledge and skills given the effect evolving technology has on the HIM industry (AHIMA, 2015; Desai, 2015; Johns, 2013). Specifically, I was interested in two developmental periods, and primary life roles regarding the establishment and maintenance worker. In Table 1, I outline the three sections of Lent and Brown's (2013) framework that include behaviors managing to events that may be predictable or developmental. My study aligned potential changes in HIM RHIT professional work and knowledge with the perception of education needs for development opportunities in women.

Table 1

Establishment and Maintenance Worker Adaptive Career Behaviors

Developmental period, primary life role	Partial list of adaptive behaviors
Establishment worker	<ul style="list-style-type: none"> • Continuation and elaboration of (and possibly recycling through) Exploration period tasks • Searching for and obtaining employment • Becoming socialized within one's work environment • Adjusting to working requirements • Managing work stresses and dissatisfaction • Managing work-family-life conflicts • Coping with negative events • Developing new interests and skills • Refining interpersonal, political, and networking skills • Engaging in self-advocacy/assertion • Engaging in organizational citizenship behaviors such as mentoring others • Managing aspects of one's personal identity at work • Preparing for career-related changes or "emergencies" • Revising or stabilizing vocational goals and plans
Maintenance worker	<ul style="list-style-type: none"> • Continuation and elaboration of exploration and Establishment period tasks • Recycling through Exploration and Establishment period tasks • Building job niches • Developing career self-renewal plans • Preparing for retirement, leisure, bridge employment, or an encore career • Revising or stabilizing vocational goals and plans

Note. Adapted from "Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span," by R. W. Lent and S. D. Brown, 2013, *Journal of Counseling Psychology*, 60, p. 560. Copyright 2013 by American Psychological Association. Reprinted with permission.

Lent and Brown (2013) believed that SCCT could be broadened a bit by taking a process-based approach to testing its design of predicting career or academic choices.

This test proposed an SCCT model focused on phenomena specific to career adaptation arising at various times of one's life (Lent & Brown, 2013). This career self-management model applied processes by which people change their behavior specific to their career or

education (Lent & Brown, 2013). Although Lent and Brown (2013) found career adaptability best characterized by learned behaviors, they also subscribe to the understanding that performance of such behaviors, traits, environmental support, and social cognitive factors such as self-efficacy are linked.

Lent and Brown's (2013) Career Self-Management Model of SCCT has two portions to it. The first portion of the model focuses on the proximal person and influences on career behaviors the person may adapt to and the outcomes associated with such actions. The second part of the model reviews distal experiences and experiential sources of adaptive career behaviors (Lent & Brown, 2013).

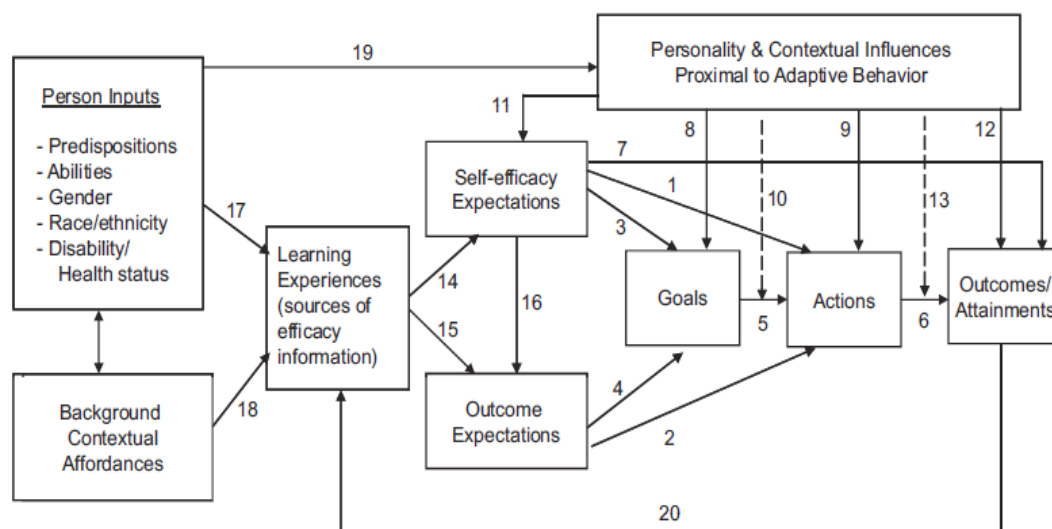


Figure 1. Model of career self-management. From “Toward a unifying social cognitive theory of career and academic interest, choice, and performance,” by R. W. Lent, S. D. Brown, & G. Hackett, 1994, *Journal of Vocational Behavior*, 45, p. 93. Copyright 1993 by R.W. Lent, S. D. Brown, & G. Hackett. Reprinted with permission.

In the career self-management model, Paths 1 through 4 demonstrate that self-efficacy and outcomes of expectations promote adaptive career behaviors directly and indirectly through the effects of personal goals noted in path 5 (Lent & Brown, 2013).

Path 6 depicts that individuals have a higher likelihood of attaining outcomes they seek if they have goals in mind. Path 7 introduces self-efficacy as having a direct link to results or achieved goals. When it comes to contextual and personality factors, support and obstacles may promote goals and actions but can also weaken them as noted in Paths 8, 9 and 10. Path 11 shows that support and barriers may also have an indirect relationship to goals through self-efficacy. Other influences such as access to people or resources from the environment may directly impact the outcomes following adaptive behaviors (Path 12) with actionable consequence relations (Path 13).

Paths 14 and 15 of the career self-management model show that experiences from education or socialization produce four pieces of information specific to self-efficacy and potential expectations: personal performance accomplishments, social encouragement and persuasion, observational learning, and physiological and affective states and reactions (Lent & Brown, 2013). In addition, self-efficacy is seen to have a direct effect on outcome expectations in Path 16. Personal inputs and other background contextual affordances may also determine the learning experiences one may encounter in Paths 17 and 18. Path 19 indicates social variables may influence the goals individuals set and actions that were taken based on what may appear to be socially acceptable or the norm within a given environment (Lent & Brown, 2013). Last, Path 20 shows a feedback loop of learning experiences attained after adaptive behaviors have formed and outcomes encountered.

This framework was used in this study to identify what adaptive behaviors impacted the consideration of maintenance or established worker to move to an

exploration role of a student. A trend in specific behaviors may directly or indirectly correlate with the perception that a need for additional education for career advancement in HIM exists. Also, self-efficacy of current HIM roles and outcomes associated with added HIM education also demonstrated why women holding associate degrees and RHIT certification feel a certain way toward their career and needs for growth.

Literature Review

Literature specific to HIM topics are primarily found in works completed and published by HIM associations. Changes in health care technology and the use of health care data has expanded the HIM literature available in the last 5 years. The following reflects literature reviewed related to key concepts and studies surrounding HIM industry advances, HIM technology workforce impact, women in HIM, and women pursuing advanced education.

Changing HIM Environment

As the U.S. health care delivery system evolves, resulting in rising costs for consumers, the need for change in how to manage health care information increases (CDC, 2014; Kaiser Family Foundation, 2015). The introduction of the EHR and other technologies including, computer-assisted medical coding, voice-recognition software, and health care exchanges has influenced significant change in a traditional HIM department (Dimick, 2012). Using sophisticated algorithms, regression analysis, regression, and distribution analysis, Frey and Osborne (2013) used the online service O*NET developed for the U.S. Department of Labor corresponding to the department's Standard Occupational Classification (SOC) to study the susceptibility of jobs to

computerization. This study found occupations in existing HIM, and medical records departments ranked 550 out of 702 occupations with 91% susceptibility to computerization (Frey & Osborne, 2013). The results of AHIMA's (2015) quantitative study assessing the future needs of the HIM workforce aligned with those of Frey and Osborne's (2013). Both studies demonstrated an increase in HIM technology decreased time spent on HIM medical coding, data analytics, and privacy monitoring functions (Sandefur et al., 2015). Although computerization of these HIM areas is changing the work effort of some functions, AHIMA researchers (2015) also found technology to increase the need for focus in other critical HIM areas such as data informatics, education, and leadership.

Similarly, technology impacts other aspects of health care such as community health. Braun, Catalani, Wimbush, and Israelski, (2013) conducted a systematic review of 28 individual peer-reviewed health, medical, and social science quantitative studies evaluating the effects of mobile health technology on work conducted in community health environment. All studies depicted an improved delivery of health services because of mobile technology. Four key strategic strengths of technology in the field of community-based health care found in these studies included (a) improved processes, (b) increased alignment of work to clinical standards and guidelines, (c) a conduit to education and training for geographically dispersed workers, and (d) better facilitation of leadership and management in terms of remote supervision of community health care workers (Braun et al., 2013). The AHIMA (2015) study demonstrated a gap between the perceived need for HIM roles in data analytics versus the rated importance of this

workforce competency. This study validated an earlier 2009 HIM workforce assessment, conducted on behalf of AHIMA, by the American Institutes for Research (AIR) indicating the focus on knowledge and certification needed to continue in areas such as technical data security, problem-solving, and data analysis (AIR, 2009). Similarly, Braun et al. (2013) found a continued need for measurement of performance and outcomes improvements using mobile technology data noting this data analytics gap is real across health care even outside of the traditional HIM department.

Canada and Australia researchers focused on the evolving HIM profession and identified challenges like those articulated by the AHIMA in the United States. HIMAA conducted a qualitative survey of its members followed by a series of member and non-member focus groups in 2013. This study focused on HIMAA's strategic performance and direction needed over the next 3 to 5 years. Findings from the HIMAA (2014) study demonstrated (a) the work of a HIM professional changing and becoming more demanding, (b) an increase in data management requirements and clinical systems needed, and (c) the need for accurate and timely coding of clinical information to improve documentation for reimbursement and revenue purposes.

A Canadian Health Informatics and Health Information Management sector study found a delay of the development and implementation of EHRs in Canada due to a shortage of HIM professionals with skills in areas of data quality management, standards, and information governance (Prism Economics and Analysis, 2014). Similar to the findings in Australia, the Canadian Health Information Management Association (CHIMA) leaders acknowledged the increased complexity of health care systems

resulting in the need for more HIM professionals needing to adapt to the use of health information technology (Gibson et al., 2015). The CHIMA predicts the function of record management will decrease in HIM and information management will become the primary focus for HIM professionals (Gibson et al., 2015).

These HIMAA and CHIMA studies reflect qualitative industry data with similar attributes and outcomes across multiple countries. The views depicted in these studies and literature include a sense of what topics, functional areas, and skills will require focus throughout the HIM profession. This research does not indicate how the current HIM workforce gains access to these advanced HIM knowledge sets as technology is rapidly advancing the HIM work environment.

HIM Workforce Preparation for the Future

Employment in HIM is increasing faster than most fields with an average increase of 16% more HIM-related technician and management jobs predicted between 2014 and 2020 (BLS, 2015a; 2015b). Given the increased use and requirements for technology in this field, the needed skills and knowledge of future HIM roles is relatively known. Jackson et al. (2016) conducted a mixed method study from a stratified random sample of HIM industry leaders and educators to examine opinions of these individuals concerning graduate preparedness. Quantitative results of this study showed employers, as compared to academics, noted a gap between skills gained through education and the expertise necessary to perform HIM functions (Jackson et al., 2016). Qualitative data revealed second-career students possessed more business acumen and better communication skills whereas first-time graduates were more capable of grasping new technology and skills

associated with computer systems (Jackson et al., 2016). The outcomes of the Jackson et al. (2016) study found both HIM industry leaders and educators to emphasize the importance of internships and practical HIM work experience prior to entering the workforce. The disconnect in these findings represents the need for the current HIM industry workforce to collaborate closely with HIM academics if knowledge and skills taught in existing HIM education institutions are to bridge the gaps needed in the workforce. Further research on similar perceptions outside of HIM should be considered, so a benchmark analysis against other industry sectors could be identified (Jackson et al., 2016). Last, this study only focused on individuals currently in the HIM industry and educators preparing the next generation of the HIM workforce.

Similar to Jackson et al. (2016) findings of the importance of internships for HIM students, Sweeney (2012) found medical student rotations and on-the-job training primary options to expose future surgeons to the complex technologies now used in many operating rooms and departments. Having practical experience was found to demonstrate positive outcomes in preparedness for new students entering industries roles beyond the medical and health care fields (Hurst et al., 2014). Such experience can similarly affect student readiness in the same manner mentoring can support HIM professionals. In a study conducted by Bates et al. (2014), results showed a positive experience associated with the relationship of a mentor in HIM existed. Bates et al. (2014) found that complementary roles of both HIM coursework and practical experience do prepare HIM professionals for entry level roles. This outcome varies slightly from the findings of Jackson et al. (2016) noting a gap between students and the knowledge level they possess

when entering the HIM workforce versus the skills and knowledge needed for the job. Despite these findings, little research is available demonstrating similar value for individuals already in their career for personal development, career advancement, and added job training purposes. Bates et al. (2014) suggested additional research to assess the various experiences students have during their internships.

Gaps in HIM Education

With education, knowledge, and skill gaps to support the future needs of HIM understood, it is of critical importance to determine how to fill these deficits for future of HIM roles. An AHIMA (2010) membership data study showed those members possessing more education experienced lower unemployment rates with 52% of the 49,000 members having a high school diploma or associate degree and 35% held a bachelor's degree, and 12% held master degrees. Although not related to unemployment, a similar quantitative study was conducted by AHIMA (2015) 4 years later showing 37% of the 3,370 study participants held an associate degree, 35% a bachelor's degree, 14% a master's degree and only 2% held a doctoral degree. This data indicates little movement in HIM resources obtaining higher education beyond a bachelor's degree despite the changing work environment landscape over a 4-year period.

As the accrediting body for the HIM profession in the United States, AHIMA set out to provide a vision for HIM education and professional standpoint on HIM in 2016 back in 2007 (AHIMA, 2007; Calhoun, Rudman, & Watzlaf, 2012). This AHIMA (2007) blueprint included three specific priorities specific to HIM education required by 2016 (a) transformation of HIM to a graduate-level profession, (b) realignment of the HIM

associate degree with workforce needs, and (c) preparation of an adequate and qualified pool of HIM faculty. AHIMA's Education Strategy Committee (ESC) created the Council for Excellence in Education (CEE) in 2010 to begin gathering data from the academic community as well as AHIMA members to inform the "Vision 2016" implementation plan (Calhoun et al.,2012). The CEE researchers used data from BLS (2015d) demonstrating the earnings value of higher education degrees, the CEE continues to ensure future education for HIM is available to promote HIM resources.

Alongside the CEE efforts in the United States, the CCHIM (2015) was also working in an advisory committee fashion to evaluate current college function and determined what training was necessary for electronic health systems. In addition to establishing a new curriculum for HIM entry-level students, they also considered specialization certificates for several HIM functional areas (Gibson et al., 2015). Likewise, Bates et al. (2014) identified the concept of developing expertise on a specific HIM industry topic. These studies continue to validate the need for institutional HIM curriculum changes and have identified ways in which many of the HIM accrediting bodies and institutions have begun working toward such modifications. In addition, these studies highlight changes for future students and do not identify how similar changes may impact individuals already in the field of HIM seeking specialization, further certification, as well as additional graduate education.

Another aspect of HIM education deficit may also include the availability of institutions and programs offering advanced or graduate degrees. Per the CAHIIM (2016), 267 institutions offer associate degrees in HIM, 59 colleges or universities

provide HIM baccalaureate degree programs, with only 5 of them offering master degrees in HIM.

Women and Advanced Education

As of 2015, women represented 90% of the HIM workforce (AHIMA, 2015). This statistic aligns similarly with the 2015 BLS (2015e) data with 74.6% of employed individuals in the health services industry being female. Johns (2013) review of AHIMA member data showed 10.5% of HIM credentialed women hold advanced degrees compared with 23.9% of HIM credentialed men. As CHIMA, HIMAA (2014), and AHIMA (2015) evaluate future HIM professional needs and adjust education curriculums as accreditation certification activities; it is unclear how women in HIM RHIT roles today will embrace the idea of HIM advanced education.

After the AHIMA CEE concluded the identification of 32 subdomains of the updated HIM curricular competencies, Sandefer and Karl (2015) conducted a study across four education categories: individuals with high school diplomas or equivalent, associate degrees, baccalaureate degrees, and graduate degrees. Ninety-two percent of the study participants were women and represented 48 of the United States, Washington, DC, and six individuals outside of the United States (Sandefer & Karl, 2015). The results demonstrated that individuals, predominantly women, with higher educational degrees self-rated themselves highly competent in HIM leadership/management and data analytics, statistics, and research (Sandefer & Karl, 2015). Individuals with lower education reported higher competencies in coding, clinical classification, and documentation (Sandefer & Karl, 2015). This data can be used by CEE to establish

continuing education in lacking HIM competency areas, but ultimately demonstrated high competencies do exist with higher degrees of education are attained (Sandefer & Karl, 2015). Although competencies may align with degree or training, my study specifically evaluated the correlation between a HIM associate degree and career advancement without higher education.

Despite limited advanced educational programs in HIM, women are not in the minority when it comes to having a significant presence in higher education environments. The White House Council of Economic Advisers (2014) reviewed Current Population Survey (U.S. Census Bureau, 2014) data showing an increase between 1900 and 2014 of women attaining postsecondary educational degrees over men. According to the U.S. Department of Education (2014), women represent almost half of the students in professional degree programs such as law, medicine, and business accounting for more than a 40 % increase since the 1960s. With much of the HIM industry represented by women with a potential knowledge gap in support of future HIM needs, ensuring women understand the importance of additional education is necessary.

Per Johns (2013), women do not achieve higher roles within the HIM profession for reasons such as lack of flexible working arrangements, limited access to networks critical for promotional opportunities, and differences in confidence and career ambitions. These same findings were identified by Peters and Daly (2013) when using a qualitative interpretive approach to evaluate the experiences of returning students in the field of engineering. This study aimed to determine individual's decisions on returning to graduate school for the completion of advanced degrees (Peters & Daly, 2013). Although

the study found the returning participants to have a high expectancy of success in completing a graduate degree, balance, cultural and environment challenges and financial support cost the students (Peters & Daly, 2013). This study produced positive recommendations for colleges and universities to consider relative to recruitment and support for returning students in their educational institutions, but the study was limited to a single research university in the field of engineering (Peters & Daly, 2013). Collection of similar data across multiple schools could have identified if there were differences among the returning student populations.

Thomas, Drake-Clark, Grasso, and Banta (2014) set out to determine the experiences of women completing doctoral degrees in a program federally funded by the National Institute of Education (NIE) in a qualitative narrative study. This study was conducted in a large southern research university based on faculty acknowledgment of the need for women to have encouragement and support in obtaining a post-graduate education (Thomas et al., 2014). Many themes emerged from this research including the value of on-hands experience in leadership, the bond among the women all returning to academia later in their careers, female mentors driving female students to success, and the gift the educational experience was (Thomas et al., 2014). These themes represent how the NIE program organized and the support these women received throughout their education. Similar assistance and application of such an organizational structure could balance the challenges Peters and Daly (2013) discovered in their study.

Summary and Conclusions

I found many trends in the literature and research reviewed noting the quest for HIM continued education and the need for educating the female population supporting the HIM profession as health care technology becomes the norm in the HIM industry. As founded by Dimick (2012), Frey and Osborne (2013), and Sandefer et al. (2015), a gap exists in HIM with technology, data analytics, and education. These same needs and focus are not only apparent in the United States but also in other countries with formal HIM certification and accreditation programs such as Canada and Australia (HIMAA, 2014; Prism Economics and Analysis, 2014; AHIMA, 2015; Gibson et al., 2015). There is vital importance in developing competencies to bridge the gaps in these functions areas in the HIM curriculum as well as increase the perception of the need for skills and knowledge across many HIM specializations.

With the HIM profession growing at a rapid pace beyond many other industries, the need for educators with the necessary experience to support the changing HIM curriculum competencies is more apparent (BLS, 2015a, 2015b). To further inform HIM educator gap, Sweeney (2012), Hurst et al. (2014), and Jackson et al. (2016) found positive outcomes associated with the use of mentors, internships, or practical rotational experiences in the preparation of entry-level health care and HIM professionals entering the workforce. Employing similar practices within health care HIM settings for the female population already in the workforce may also demonstrate similar outcomes.

Women are not deterred from continuing their education as evidenced by the U.S. Census Bureau (2014) and U.S. Department of Education (2014) data. Women as

minorities have also proven that pursuing advanced education with the right funding and institutional support structure for returning students is possible and achievable (Thomas et al., 2014). With a HIM female dominant workforce needing to remain in the HIM profession to accommodate its fast pace growth, an awareness as well as a mechanism for women to obtain education beyond the HIM degrees and certification they possess today is critical to overcoming the needs of the HIM industry.

Chapter 3: Research Method

Introduction

As I concluded from the review of the literature, women working in the field of HIM with associate degrees and RHIT certification need a full understanding of how technology and other contemporary health information subject matters may affect their work and roles. The purpose of this study was to understand the perspectives female RHITs had regarding the need for education to advance their profession. Chapter 3 includes an outline of the methodology and design used to address the problem and purpose of this study. I also describe the research design strategy and rationale for the selection of this design. I also include discussion regarding my role as the researcher, methodology, and sample size used to conduct my research in this chapter. I conclude the chapter with details regarding my data collection and analysis processes while demonstrating how I upheld trustworthiness, dependability, readability, transferability, and ethical evaluations throughout the research process.

Research Design and Rationale

A qualitative research method using personal narrative interviews was the research design that I chose for this study. Since the inception of social sciences, narratives in some form are recognized as important sources of research and a discipline commonly used in qualitative research design (Holstein & Gubrium, 2012). Social constructivism is the belief that an individual creates meaning based on the context of the social world (Vygotsky, 1980). The philosophical origin of social constructivism is found in narrative research as articulated information is found to express individual reality

(Casey, Proudfoot, & Corbally, 2016). Lived personal, educational, and professional experiences brought understanding to how women holding associate degrees and RHIT certification while actively working in HIM positions could advance their roles while aligning with HIM industry changes.

The research questions for this study included the following:

RQ1: What additional education certifications, degrees, or experiences do women with an associate degree, and RHIT certification perceive necessary to support career advancement in HIM?

RQ2: What additional HIM topics or subject matter areas do women with an associate degree, and RHIT certification perceive necessary to understand or gain knowledge in to support career advancement in HIM?

RQ3: How do women with an associate degree, and RHIT certification perceive their ability to obtain advanced education in HIM?

Although workforce and education studies are limited in the field of HIM, most are found to use quantitative approaches to identify HIM curriculum gaps, HIM education influencing factors, and assess the needs for future HIM graduates (AHIMA, 2015; Condon & Barefield, 2012; Safian, 2012). More recently, Jackson et al. (2016) conducted a qualitative study on new graduates and second-career students in HIM to gain an understanding of the perceived disconnect between the preparation provided by academia, and the skills employers need in graduates entering the HIM workforce. In this study, Jackson et al. (2016) found second-career students to possess business acumen and communication skills, whereas new graduates were more adept at approaching new

technology. The skills gap recognized by HIM employers and educators were determined through qualitative methods focused on the perceptions of HIM professional and academic population in Jackson et al.'s study. Similarly, I chose a qualitative approach to explore such gaps by gaining an understanding of perceptions women in HIM with associate degrees and RHIT certification have specific to needing advanced HIM education.

Without education in advancing HIM topics such as technology, women in the HIM workforce with RHIT certification and associate degrees could be limited to obtaining higher positions or credentials. Narrative inquiry through personal interviews was a channel through which women participating in my study had the opportunity to respond using their words. Narrative inquiry often produces personal content that is meaningful, unanticipated by the researcher, and rich in nature (Stuckey, 2013). Given the lack of research on how or why a gap in education exists across the HIM workforce, narrative data obtained through personal interviews produced further in-depth information on this subject matter.

Role of the Researcher

My role as a researcher included collecting and analyzing data from personal interviews conducted with 22 women study participants recruited through the AHIMA Foundation Research online community discussion board. To minimize bias within my study, I ensured there were no personal or professional relationships with the study members and assured my participants that I did not work professionally within an organization where they currently worked. In addition, study participants were not

employed by organizations where I possessed professional affiliations. Instead, I worked to identify female study participants who held associate degrees in HIM with RHIT certification actively working in a HIM role in a health care setting. I managed bias through my data organization process by thoughtful study planning and identified data themes categorically at the outset of my research (Hammer, du Prel, & Blettner, 2009). This process ensured preconceived ideas or personal experiences did not affect data trends noted throughout data collection activities, but rather through the lived experiences of my study participants.

As the researcher, I was responsible for maintaining reliability, trustworthiness, and validity with my study participants. There are several ways I controlled these factors. First, as recommended by Golafshani (2003), I triangulated the data collected against other current HIM workforce and education studies to confirm themes and findings were trustworthy in nature. Second, I maintained a personal journal throughout the data collection and analysis processes allowing for reflection to keep my biases in check while conducting my research. Third, I verified my interview recordings with my field notes kept throughout the interview process and aligned this information with the themes identified before the data collection process started.

Methodology

Participant Selection Logic

The population identified for this study included women currently working in the field of HIM. The sample focused on women HIM RHIT certified professionals with HIM associate degrees working a minimum of 3 years in the field within the United

States. This sample was justified given the gap in literature seeking to understand the views of women specifically on advanced education needs in HIM. Convenience-based sampling was used to target sample size of 15 to 20 female study participants for interviews consisting of semistructured open-ended questions. This sample size was determined based on Mason's (2010) evaluation of Bertaux's (1981) guidelines confirming 15 as the smallest number of qualitative study participants regardless of study methodology. In addition, Crouch and McKenzie (2006) found the use of in-depth interviews with study populations less than 20 participants allowed for greater involvement between the investigator and respondents which in turn enhanced the validity of a study. Convenience-based sampling in qualitative research can result in a broad sample universe leading to unwarranted generalizations (Robinson, 2014). This sampling strategy was supported using a narrowed female demographic population of women with RHIT certification working in the field of HIM in the United States for narrative research to obtain a deep understanding of life experiences informing perception of education need.

Study participants were female in gender, must work in the field of HIM, hold an associate degree in HIM, have RHIT certification, and have been working in the HIM industry for a minimum of 3 years. This inclusion criterion ensured I gathered information from women RHITs established in their career and working during a time when technology began to introduce change into the HIM working environment (HHS, 2015). Participants were recruited from the AHIMA Foundation Research online engagement community and therefore members of AHIMA, which indicated they were

HIM RHIT professionals. The goal of the narrative research was to obtain an in-depth understanding of lived experiences and apply this information to a related situation or scenario (Wertz, Charmaz, McMullen, Josselson, & Andersen, 2011). I anticipated attaining this goal by gathering data from a sample size of 15 to 20 study participants. Per Mason (2010), saturation is likely to be achieved at any point in the qualitative research process. I followed Bertaux's (1981) guidelines indicating a sample size of 15 to be the smallest population considered in a qualitative study regardless of the methodology used while achieving saturation with up to 20 study participants.

I recruited study participants by posting study information including my topic, intent, and selection criteria for participation on the AHIMA Foundation Research online community discussion board. This online community was comprised of 1100 AHIMA subscribed members across the United States and was also accessible to the public to discuss issues related to research as well as research methodologies, and peer-reviewed publications (AHIMA, 2016e). There were additional AHIMA member state communities also used to post study recruitment information. Interested participants were able to reply to the post or contact me by phone or email.

Instrumentation

The data collection instrument for this study was a semistructured interview guide (Appendix A). I developed this guide to keep the interviews focused on the study topic while drawing out the participant's thoughts, feelings, and experiences pertinent to the need for education to further their roles in HIM. With the use of qualitative interview guidance from Gill, Stewart, Treasure, and Chadwick (2008), I documented general

questions at the start of the interview guide and advanced to specific ones ordered by importance and relevance to the research topic. The guide was designed to establish rapport with the interview participants with prompts to share and collect specific information and serve as procedural steps to follow throughout the interview process (Jacob & Furgerson, 2012). Use of this interview guide was of great assistance in supporting a consistent exchange of questions and responses with the study participants.

Recruited participants who met the selection criteria were required to acknowledge an informed consent. I conducted the interviews by telephone using a speakerphone system to record the interviews. A semistructured interview guide allowed the researcher to ask the same questions to each interview participant but adapt the delivery of the questions to explore a more personal side of the interviewee (Turner, 2010). This flexibility established an interview environment where participants may elaborate on their responses for detailed data discovery (Gill et al., 2008). Proper management of interviews required a focus on responses to each question to obtain the same general information from each interviewee (Turner, 2010). As the researcher, I needed to strike the right balance between the structured questions and probing for profound insights from the participants to obtain data relevant to the study.

Open-ended interview questions permitted interviewees to offer information uncovering as much as possible about the topic at hand (Jacob & Furgerson, 2012). Questions consisted of an SCCT construct of personal interests, influences, barriers, goals, and expectations. The interview questions requested explanation and descriptions

from the interviewee aligned with the study topic and focused on drawing out details that informed the gap in literature specific to women, education, and the field of HIM.

Procedures for Recruitment, Participation, and Data Collection

The recruitment process for women HIM RHIT professional study participants with associate degrees in HIM included the use of professional society member online public message and discussion boards. I recruited female HIM professionals working in health care settings to participate in my study using the AHIMA Foundation Research and individual state AHIMA member online community discussion boards. State member discussion sites included:

- Washington, Oregon, California, Nevada, and Arizona representing the western region;
- South Dakota, Nebraska, Kansas, Oklahoma, and Texas representing the Midwest region;
- New York, Pennsylvania, Ohio, Virginia, North Carolina, South Carolina, and Florida representing the eastern region.

Study recruitment using online message boards and forums assisted in gaining desired diversity in participants and served as a tool to further access qualitative data through telephone interviews (Trier-Bieniek, 2012; Weslowski, 2014). In the case of this study, I attained participant diversity with the various HIM settings, roles, and experience the women interviewed with RHIT certification had. Utilization of member and public accessible online message boards with national and regional reach allowed for recruitment across a diverse population of target study participants.

The AHIMA Foundation (2016) focuses on bringing both the private and public sectors together to advance research specific to the management of health information. An AHIMA (2016e) Foundation online community exists for members and the public where issues and topics related to HIM research are posted and discussed. This online community connects to research study participants meeting the study criteria as well as parties interested in HIM research topics in general.

Interested participants may be able to the discussion post that automatically sent me an email, or they contacted me using the email address in the recruitment post. Each participant was evaluated to ensure they met the criteria of being an active HIM professional. The criteria used for study participation included participants:

- Were female in gender
- Held an associate degree in HIM
- Held a RHIT certification
- Held a position in the HIM field responsible for data collection, analysis, billing, coding, or technology using health information at the time of interview
- Worked in the HIM industry for greater than six years

Participants meeting the study criteria received an informed consent letter via email.

Once 15 to 20 participants fulfilling the criteria of the study agreed to participate in the interview process, they were contacted via email or phone to arrange a time convenient for them to respond to the interview questions.

Data were collected through telephone interviews during a prearranged time with the interviewee. Telephone interviews have been found to provide sound data from

interview participants and can result in rich information (Trier-Bieniek, 2012). Each interview was held using a speaker phone and audio recorder, so data collected could be transcribed into a document of the interview questions and responses. I informed participants that they may withdraw from the interview process at any time. Should this had occurred, I would have continued to solicit additional members to meet my study sample size. Upon closing each interview, I described the transcription process used to create a written version of the interview questions and their responses to each participant. I provided each transcribed interview to the interview participant via email, and the interviewee was requested to review, correct, and update any misinterpretations noted in the transcription to ensure the accuracy of the data collected.

Data Analysis Plan

Each of the questions created for the interview process aligned with one of the primary research questions pertinent to the study. The first four questions focused on gaining insight into the roles held in the HIM field, changes to these roles and educational needs that arose during such changes. The second four questions focused on understanding how the study participants gain additional education in the HIM field today, what HIM role advancement they desire, and what barriers may exist to education or role attainment. Table 2 outlines the alignment of each research question to interview questions. This alignment assisted with the coding of interview responses categorically as part of the data analysis process.

Table 2

Research Question Alignment to Interview Questions

Research question	Interview question(s)
RQ1	<ul style="list-style-type: none"> • Q1: Various roles held professionally in HIM • Q3: HIM associate degree preparation • Q4: Additional education needs for their current role • Q6: Future roles and needed education • Q8: Opportunity for additional education
RQ2	<ul style="list-style-type: none"> • Q2: HIM role changes and influences • Q3: HIM associate degree preparation • Q4: Additional education needs for their current role • Q5: Knowledge gathering or maintenance
RQ3	<ul style="list-style-type: none"> • Q6: Future roles and needed education • Q7: Known barriers to obtaining additional education

Colaizzi's data analysis approach is what I used to obtain exhaustive data relevant to the experiences of the female HIM study participants. I applied the following seven steps as described by Speziale and Carpenter (2007) when conducting my data analysis:

- 1) transcribed each verbal interview into a thorough narrative report;
- 2) identified and extracted meaningful statements and phrases specific to each research question;
- 3) interpreted and formulated meaning from the data transcribed;
- 4) placed the meanings into categories based on themes found in the data;
- 5) documented the results into a comprehensive report;
- 6) identified the fundamental concepts and findings from the data;
- and 7) validated the interpretations made from the data with the study participants.

I used NVivo 11 qualitative data analysis software for the data transcription process and theme identification. Discrepant cases found throughout the validation process required data follow-up with the study participant. I collected updated data to remedy the discrepant

case and re-validate data updates with impacted study participant to ensure accurate data during the analysis steps.

Issues of Trustworthiness

Credibility

Management of credibility during the scholarly research process is one way to prevent issues of trustworthiness from arising during research preparation, data collection, and data analysis. Establishment of credibility in qualitative research requires the researcher to accurately represent the study participants and the data collected during the research process (Cope, 2014; Elo et al., 2014). There are a few strategies I used in support of providing credibility during my qualitative research study. The first included the completion of the National Institutes of Health (NIH) Office of Extramural Research web-based training course focused on the protection of human research participants. The second strategy included limiting the sample size to approximately 20 participants, as Mason (2010) outlines that the timing of research data saturation aligns to a point when a researcher stops obtaining new relevant information. I followed the data collection process approved by the IRB and conducted all interviews in a professional manner.

Steps to support credibility were also necessary for the data analysis stage of the research process. Validation from study participants reviewing the data outcomes holistically can improve the credibility of the analysis (Thomas & Magilvy, 2011). This process, also known as member-checking, allowed the study participants to view how their contributions and responses were portrayed (Cope, 2014; Houghton, Casey, Shaw, & Murphy, 2013). Once I completed the transcription reports of each interview, I

provided a copy of the report to each study participant to review for accuracy.

Completion of this step before I identified key themes and analyzed the data additionally supported the data creditability.

Transferability

Unlike credibility that focuses on internal validity, transferability centers on ensuring external validity during the research process. Transferability is met when the study outcomes have meaning and applicability to other individuals or groups that were not a part of the study (Cope, 2014, Elo et al., 2014). Women working in the field of HIM is a variation of participant selection I used for my study. Use of a single-gendered population may provide data with transferability to women in other areas of health care or men also in HIM work environments.

In addition, I included explicit content and direct quotes captured throughout the data collection process where possible when documenting the study outcomes. The accomplishment of transferability requires the development of full data description (Houghton et al., 2013). I also achieved transferability by describing the data in a manner that allowed readers to derive other interpretations.

Dependability

Dependability in qualitative research refers to keeping the data stable and consistent when subject to varying conditions and timeframes (Cope, 2014; Elo et al., 2014). One dependability protocol that I used was the development and maintenance of an audit trail throughout my data collection and analysis processes using the NVivo software audit and query tools. Examination of the process by which the result of a study

is achieved can inform the trustworthiness and dependability of the process and the data collected and evaluated (Houghton et al., 2013). A documented audit trail demonstrates to the reader how and why I made certain data interpretations and decisions.

Confirmability

Confirmability is ensuring the data collected throughout the study process is representative of the views of the participants and not the researcher (Houghton et al., 2013). I demonstrated confirmability in my study by using as many direct quotes to inform the themes determined during data analysis as possible. Utilization of verbatim data prevents researcher bias from entering the study process and may bring to light, rich themes for data interpretation.

Ethical Procedures

Upon completion of my oral proposal defense, I completed an Institutional Review Board (IRB) application to secure university approval of my research processes. Walden University IRB approval number 08-03-17-0390084 with an expiration date of August 2, 2018, was granted allowing me to begin my study data gathering process. IRB approval signified that steps taken to recruit study participants, gather data, and analyze it complied with the proper ethical standards. Research participants were required to acknowledge a consent form that was IRB-approved. By acknowledging the consent, participants understood the purpose of the study and stated their willingness to participate. I upheld professional conduct when interacting with the study participants and used active listening techniques to establish a non-threatening environment and rapport throughout the interview process.

I informed participants that the interview would take between 30 and 45 minutes and recorded for transcription purposes. For confidentiality and purposes, I masked the names of each participant in my documentation and utilized unique numeric identifiers throughout my data collection process. Interviews were conducted over the phone allowing the participant to be in a setting of their choice. During the interview, study participants could request to withdrawal from the study at any time. After the interview, each participant received a written copy of the transcribed interview and given an opportunity to review for accuracy. With IRB approval, I issued a \$10 gift card to each participant to thank them for their time and contributions to my study and the social change of educating women in HIM.

I stored all written documentation developed throughout the interview and data collection activities in a secure and locked location. The only individuals with access to the data collected from the study participants included my dissertation committee members and me. The data collected will be stored for five years and then destroyed.

Summary

The main points of this chapter included the identification of the qualitative methodology and narrative interview approach for my study, a discussion of my role as the researcher, and my participant selection and criteria for 15 to 20 female study participants. In this chapter, I also reviewed the use of online message boards and forums as a recruitment strategy for study participation and the use of the Colaizzi method for my data analysis plan. Last, I outlined strategies for handling issues of trustworthiness that could arise throughout the research processes.

Chapter 4: Results

Introduction

The purpose of this qualitative study was to gain an understanding of how women, with associate degrees and RHIT certification working in HIM, perceive the need to further their education in support of advancing their role or career in a changing HIM environment. The research questions (RQ) were the following:

RQ1: What additional education certifications, degrees, or experiences do women with an associate degree and, RHIT certification perceive necessary to support career advancement in HIM?

RQ2: What additional HIM topics or subject matter areas do women with an associate degree and RHIT certification perceive necessary to understand or gain knowledge in to support career advancement in HIM?

RQ3: How do women with an associate degree and RHIT certification perceive their ability to obtain advanced education in HIM?

This chapter includes an overview of the key results surrounding women's perspectives resulting from the study interviews and data analysis conducted. Chapter 4 also includes the study setting, demographics of study participants, data collection process, and data analysis. Last, I include a review of the evidence of trustworthiness and study results.

Research Setting

I conducted this qualitative phenomenological study within a 30-day period in August 2017 and September 2017 by telephone using a toll-free conference line with

recording features to conduct interviews with 22 women from 19 states across the United States. These states included Massachusetts, New Jersey, Virginia, Kansas, Arkansas, South Carolina, Louisiana, Kentucky, Tennessee, Wisconsin, Minnesota, North Dakota, Texas, New Mexico, Nevada, Colorado, California, Washington, and Hawaii. As illustrated in Figure 2, the state locations using an icon with the number of participants noted next to the icon the 19 states.



Figure 2. Demographic location of the research study.

After posting my study recruitment letter on the AHIMA Engage online community via the AHIMA website, I received 32 responses to my study via email or through the AHIMA Foundation Research and 45 individual state AHIMA member online community discussion board posts. Throughout the 30-day period, I offered more than 50 designated times and dates to all study participants responding with interest

meeting the study criteria for interview scheduling purposes. Of the 32 interested study invitation respondents, eight of the women did not respond to my email communication seeking to schedule an interview time, two women were not available during the 30-day window to participate, and 22 women responded and identified a selected time for me to conduct the interview. For recruitment and interview scheduling purposes, I created and maintained a log to document all communications with each interested study respondent, including the method of contact used, date of communication, interview schedule date and time options, and date and time selected.

The study participants did not indicate that personal or organizational conditions affected them in a manner that may have influenced the study outcomes at any point in the interview or data validation processes. None of the study participants with scheduled interview times withdrew from the study data collection process. Two of the study participants needed to reschedule their initially scheduled interview date and time due to work related or personal obligations arising unexpectedly. Once a study date and time was confirmed with the study participant, I sent them an email containing a toll-free telephone conference line and link to a web-based conference line to use during the scheduled interview time. All study participants used both the Global Meet telephone and Cisco WebEx web-based conference line options provided to them and agreed to the audio recording of the interview using the conference line technology.

Demographics

The 22 study participants were geographically dispersed throughout the United States and represented various HIM positions, work environments, tenure, and ages. I

gathered demographic and profiled information for each participant at the start of each interview. Table 3 reflects this anonymous participant profile data.

Table 3

Study Participant Demographic Information

Participant number	Work setting	State	Years in HIM	Age range (y)	Professional title
1	Systems vendor	CO	21	50-59	Business analyst
2	Academia	VA	8	30-39	Professor
3	Insurance	CA	25	40-49	Program manager
4	Long-term care	HI	14	40-49	HIM director
5	Academia	AR	40	Over 60	Professional
6	Acute care	MN	20	40-49	HIM manager
7	Coding	CA	40	Over 60	Coding manager
8	Coding	TN	22	40-49	Coding director
9	Academia	KY	23	40-49	Professor
10	Health system	NV	15	50-59	Auditor
11	Remote	SC	13	50-59	Coding consultant
12	Remote	LA	31	50-59	Quality assurance
13	Remote	NM	11	50-59	Coder
14	Acute care	MA	27	50-59	HIM director
15	Acute care	KS	29	Over 60	HIM supervisor
16	Acute care	TX	5	Over 60	HIM manager
17	Acute care	ND	7	40-49	HIM director
18	Clinic	WA	9	50-59	Quality assurance
19	Acute care	NM	12	40-49	Auditor
20	Academia	WI	22	40-49	HIM dept. chair
21	Acute care	KS	30	50-59	HIM data analyst
22	Consulting	NJ	20	50-59	Director coding education

Most of the study participants, 41%, were between 50 and 59 years, followed by 36% between 40 and 49 years of age, and 18% older than the age of 60 years. Only 1 participant was under 40 years of age. I outline study participant age information in Figure 3.

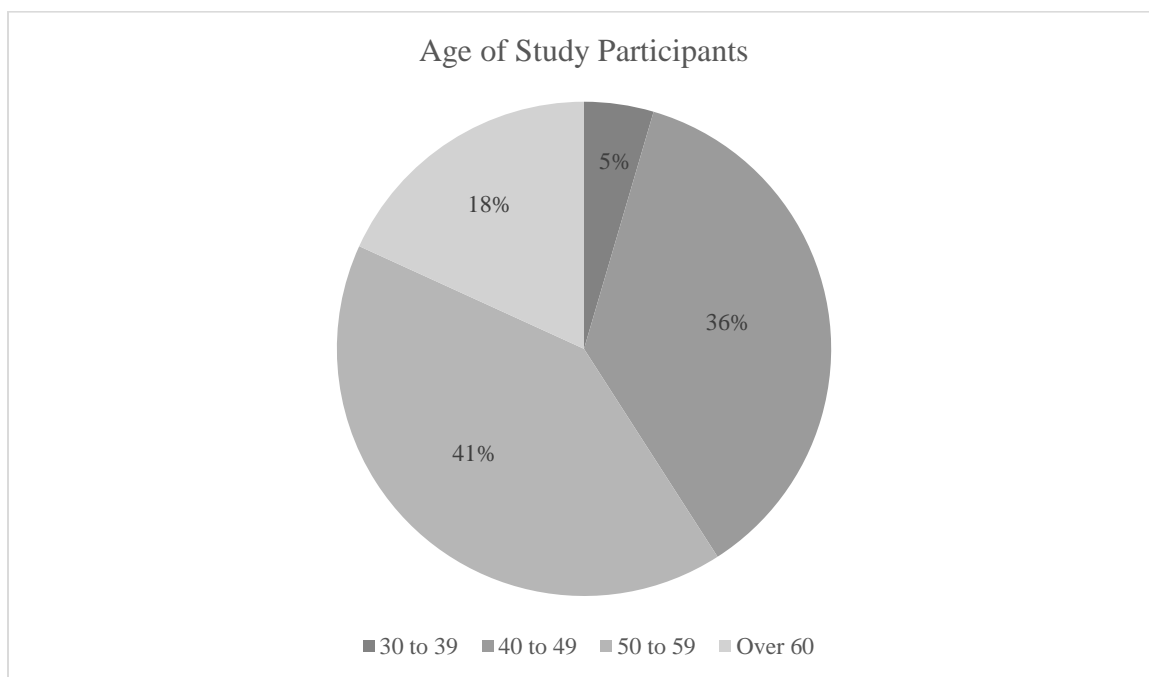


Figure 3. Study participant age ranges demographic information.

I found the women in my study to hold employment across five professional areas of HIM. The participants held roles in medical coding, quality assurance, HIM education or academia, as well as in management positions. Figure 4 shows the breakdown of how many participants held professional roles in each of these areas. Most of the women held HIM management positions representing 27% of the study population with 22% of the women working in HIM educational roles. Eighteen percent work in quality assurance and coding, and 13% have HIM positions focused on data and analytics.

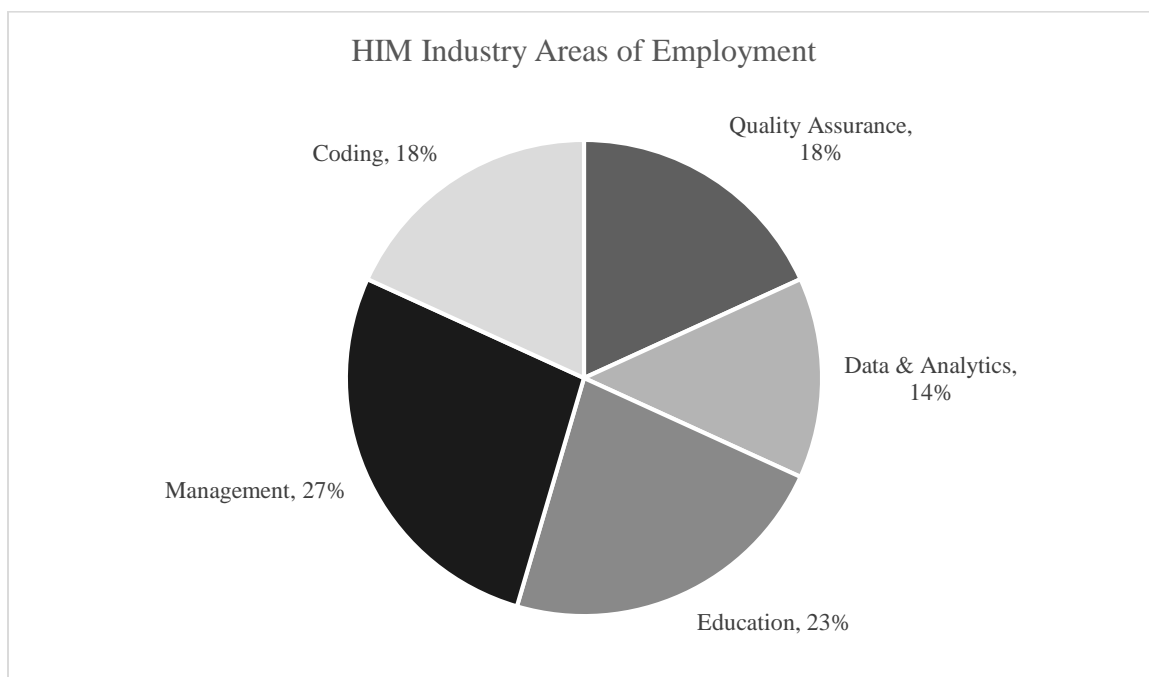


Figure 4. Study participant HIM industry employment information.

Related to work experience, the women study participants represented a total of 444 years working in HIM with the average number of years working in the field equaling 20.2 years per participant. Sixty eight percent of the women interviewed have worked in a HIM role between 11 and 30 years. Figure 5 represents the range of years worked and the number of study participants in each range. The women interviewed held many roles throughout these years in HIM with 18 out of the 22 participants having experienced a position in medical coding specifically.

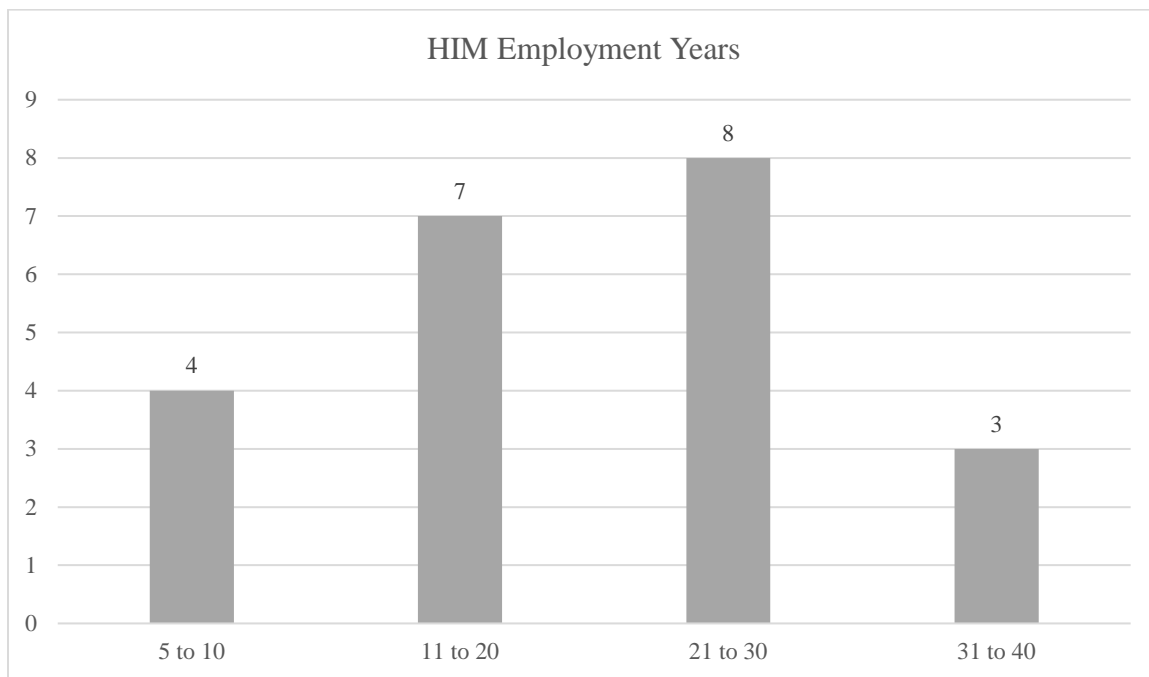


Figure 5. Range of years study participants have worked in HIM.

Data Collection

The data collection process consisted of telephone-based interviews with 22 women meeting the study criteria possessing an associate degree, RHIT certification, and working in HIM for 3 or more years. These interviews took place between the second week in August of 2017 and concluded the second week in September of 2017. Most of the women interested in study participation chose to contact me via the email address provided in the recruitment letter posted to each of the AHIMA online community forums approved as part of the IRB process. All interview dates and times were coordinated and scheduled via email within five days of confirming the participant met the study criteria. Upon interview date and time confirmation, an electronic meeting invite was sent to each participant via email containing a toll-free telephone conference line and link to a web-based conference line to use during the scheduled interview. The toll-free number and web-based conference line served as tools for audio recording each interview. A detailed log was kept during the recruitment, interview scheduling, data collection, and transcription processes to track all communications, interviews, and validation activities.

I attached my IRB-approved informed consent letter to the study recruitment postings; however, each interview participant preferred to consent via email as opposed to responding to the online forum post itself. I collected all informed consents in writing via email from each participant and tracked receipt in my data collection log to ensure consents were received before the start of each scheduled interview. Each interview lasted between 25 and 35 minutes in length and each participant provided a verbal

agreement to having the interview audio recorded before the interview questions and dialog commencing. Upon conclusion of each interview, two recordings were made available to me within 48-hours via the toll-free phone line service and the web-based meeting service used during the interview process. Both tools were used to ensure a back-up was available should one of the services not record correctly during the interview.

After consent for interview recording was received, each interviewee was provided a brief description of my study and its purpose. I referenced the approval of the data collection process from my university IRB and was transparent about my AHIMA membership, and RHIA certification was provided. The first portion of the interview process consisted of collecting demographic information from each participant:

- Health Information Management Certification(s) held in addition to confirming RHIT certification
- Work setting
- Work location (city and state)
- Number of years working in HIM
- Professional role or title
- Confirmation of completion of Associate degree in HIM
- Age range 20-29, 30-39, 40-49, 50-59, Over 60

Once I gathered the demographic information, the interview proceeded using the semistructured interview guide (Appendix A) as the instrument to explore participants' perceptions of the need for education to further their roles in HIM. As recommended by Gill et al. (2008), I used more general questions to start the interview process leading to

questions of more importance and relevance to the study. This tool also served as a guide allowing me to establish rapport with each of the interview participants with prompts and data collection steps procedurally (Jacob & Furgerson, 2012). During each interview, I took notes using my laptop computer within the context of the interview tool. I gathered responses, thoughts, and information while posing all questions in the tool. Last, I created and stored a document containing the interview content for each interview conducted aligning to the guide.

The data collection plan outlined in Chapter 3 was upheld with study participation from all geographic areas anticipated. During the data collection process itself, there were two occasions when one of the audio recording methods did not work as intended; however, the second method did serve as a backup source, so an audio recording was available for these two interviews. All the interviewees participated in each of the interviews in their entirety. There were no unusual circumstances encountered during the data collection process.

Data Analysis

The data analysis process commenced upon completion of all 22 interviews and receipt of interview audio recordings from the recording services. The methodology used for the data analysis process included the seven steps to Colaizzi's approach, as described by Speziale and Carpenter (2007). The first of these steps was to transcribe each verbal interview into a detailed and thorough report. The completion of this step consisted of listening to the recordings of each interview and generating a written narrative report with the background presented to each participant at the onset of each interview; the

responses received to each demographic question asked, and the reactions and dialog of each open-ended interview question posed. I emailed each transcribed report to the respective participant for review and an opportunity to provide any corrections to the information gathered and confirm the accuracy of the information. Each study participant was given one week to respond to the review request. Three respondents provided minor updates and corrections to the transcripts received. Updates to these three transcripts were made prior to any further data analysis steps being completed.

The second and third steps of Colaizzi's process includes the identification and extraction of any phrases or statements of significance to each of the research questions to interpret and formulate meaning from the transcribed narratives. To complete these steps, I loaded all interview notes and validated transcripts into NVivo 11 as source files and created cases for each participant linked to these sources. I then reviewed each source file in detail and generated nodes representing the meaningful statements and phrases categorically as described in Table 4.

Table 4

Transcription Nodes Based on Data Themes of Significance

Node category	Node subcategory
HIM education	<ul style="list-style-type: none"> • Access • Barriers • Interest in future education • Maintenance • Preparedness
HIM experiences	<ul style="list-style-type: none"> • Negative • Positive
HIM impacts to roles HIM responsibilities	<ul style="list-style-type: none"> • Influences • N/A
HIM roles	<ul style="list-style-type: none"> • Future role interests • Nonprofessional roles • Past roles

The next data analysis step consisted of placing meanings into the categories above according to the themes found in the data. This step was addressed by reviewing each transcript of the 22 interviews in NVivo and manually coding the participant responses and narrative content to the nodes in Table 4. This coding process organized the data allowing for interpretation of results aligned to the study research questions.

Evidence of Trustworthiness

Credibility

Credibility was maintained using the strategies outlined in Chapter 3. Mason (2010) proposed the timing of research data saturation is when the researcher is unable to obtain new relevant information. This data saturation point occurred with 22 study participants and was achieved by using the interview tool (Appendix A). The use of this

tool ensured primary interview questions aligned to the research questions were asked consistently for all interviews allowing for exploration of detailed responses as needed. One adjustment made to the credibility strategy noted in Chapter 3 included a review of the most recent literature. This review determined if new information or findings related to this study existed further emphasizing or disputing the original study purpose.

New relevant literature was found to identify other emerging HIM education topics of importance including clinical terminology, vocabularies, and classifications as steps to advanced roles in Information Governance (IG) or Big Data, which moves from producing health care data to interpreting it (Hyde, Casto, Koehler, & Peterson, 2017). The HIM industry needs for professionals with knowledge and credentials in data analytics, and informatics remains an area of concern in recent literature. With the curriculum for RHIT and Associate-degree programs having been more generalized across HIM topics, AHIMA and its Council for Excellence in Education (CEE) have launched a campaign to make curriculum changes for all degree levels to include new competencies and specialized domains in 2018 (Butler, 2017). These additional literature findings demonstrate the continued focus on the current HIM workforce as well as continued gaps in what this workforce needs to succeed in this changing industry.

Transferability

Capturing many detailed and thorough responses from the study participants allowing information to emerge that could transfer to other HIM roles and professional environments achieved transferability. Given the significant response to the study received during the recruitment process, study outcomes were placed into a briefing

document that may be made available through the online forums where recruitment was conducted. These forums are accessible to other researchers, AHIMA members with various types of credentials and education, and members of state affiliated AHIMA groups where information. Given this broader population of HIM stakeholders, the representation of the full description of the data as part of the study findings will allow readers to derive different interpretations.

Dependability

Using the NVivo 11 statistical software helped me to attain dependability throughout the research process. NVivo supported the stabilization of the data throughout the collection and interpretation steps while maintaining a repository of interview transcriptions, the coding of the interview responses, and various queries use to analyze the data. In addition to using NVivo, a study journal and log was created using Microsoft OneNote as a tool to manage the following:

- Study invitation posting locations and information
- Study invitation response and correspondence details
- Interview scheduling data
- Interview and study participant email communication templates for informed consent confirmation and interview meeting invitations
- Interview transcription audit trail and study participant confirmation of transcription data

I maintained this OneNote journal to document the audit trail of activities, communications, and tasks completed throughout the recruitment, data collection, and

analysis steps of the study. This detailed log allowed for timely connectivity to study participants and ensured I followed the IRB approved data collection steps as intended.

Confirmability

Confirmability was obtained during the data collection process by transcribing interview responses using direct quotes and details provided by each study participant. Each complete transcript was made available to its respective study participant to confirm the accuracy and representation of the data collected during the interview process. These direct quotes and specific data elements captured were in turn used to identify emerging themes in the data and aligned to coding nodes and elements used for data analysis purposes. Further information and direct quotes representing real experiences, feelings, and emotions revealed throughout the study represent the results upcoming in this chapter.

Results

Future Certification for Advancement

Two primary themes emerged when evaluating the results aligned with my first research question focused on necessary education to support career advancement. The first theme centered on a belief that the HIM industry focuses on professionals possessing HIM certifications in some specialized areas as a channel for role advancement. In addition to the traditional HIM technician (RHIT), administrator (RHIA), and coding (CCA, CCS, CCS-P) certifications offered by AHIMA, five specialization certifications are now possible credentialing options made available over the last six years (AHIMA, 2017c). These certifications include credentials in data analytics, privacy and security,

clinical documentation improvement, health care technology, and health informatics (AHIMA, 2017c).

Thirteen of the 22 study participants, 59%, had interest in three of the specialization certifications. An individual with a bachelor's degree in HIM from a CAHIIM-accredited program or is an RHIT and meets certain conditions set forth by the Commission on Certification for Health Informatics and Information Management (CCHIIM) can participate in the RHIA certification process (AHIMA, 2017d). The same percentage of survey participants had interest in obtaining their RHIA credentials. Table 5 outlines those certifications of interest and the number of participants interested in each.

Table 5

Further HIM Certification Interest

HIM certification type	Number of participants interested
Certified Coding Specialist (CCS)	4
Certified Health Data Analyst (CHDA)	5
Certified Documentation Improvement Practitioner (CDIP)	4
Registered Health Information Administrator (RHIA)	13

This certification-focus appeared to be of importance of more than half of the women interviewed. Participant 2 stated that “people are looking more at your credentials than education.” Participant 16 is a hiring manager and mentioned that “everyone I hire from here on out need to be AHIMA educated and working on a certification or credential of some sort.” She further stated that “credentials are the difference between doing a job and understanding the context of it.” Participant 22 stated that “clinical

documentation improvement (CDI) is becoming more and more popular and a hot topic, which is why I am pursuing my CDIP credentials.” Participant 15 noted, “I really wish I would have already received my bachelor’s degree to sit for my RHIA.”

It is worth highlighting that the interest level the study participants had in HIM education through specialized certification was in addition to HIM certifications already held. Holding an RHIT certification was criteria for study participation; however, I also collected data regarding other HIM certifications each woman in the study possessed. As noted in Table 6, 59% of the women did have a single RHIT certification, 18% had one additional certification beyond their RHIT, and another 18% had two additional certifications. Twelve of these added certifications focused on professional medical coding areas including general coding specialization (CCS) and coding specialization for physician-based coding (CCS-P). As the HIM industry changed, and new certification opportunities were made available, these women still desire to gain knowledge in specialized HIM areas.

Table 6

Study Participant HIM Certifications

Certification(s)	Number of participants
Single certification (RHIT)	13
Two certifications (RHIT + 1 additional)	4
Three certifications (RHIT + 2 additional)	4
Four certifications (RHIT + 3 additional)	0
Five certifications (RHIT + 4 additional)	1

Future Education for Advancement

The second theme surrounded a notion that degreed education beyond an associate degree would or could have contributed to advancement in the field of HIM. Of 22 participants, 14 (63.6%) stated they would like to obtain their bachelor's degree. In addition, nine of the 22 study participants (40.9%) would be interested in further pursuing a master's degree, and two participants (9%) were considering obtaining a doctoral degree as noted in Figure 6. Although this advanced education interest in the form of obtaining another collegiate degree was present in the data, some of this data did not necessarily demonstrate a connection between degreed education and career advancement.

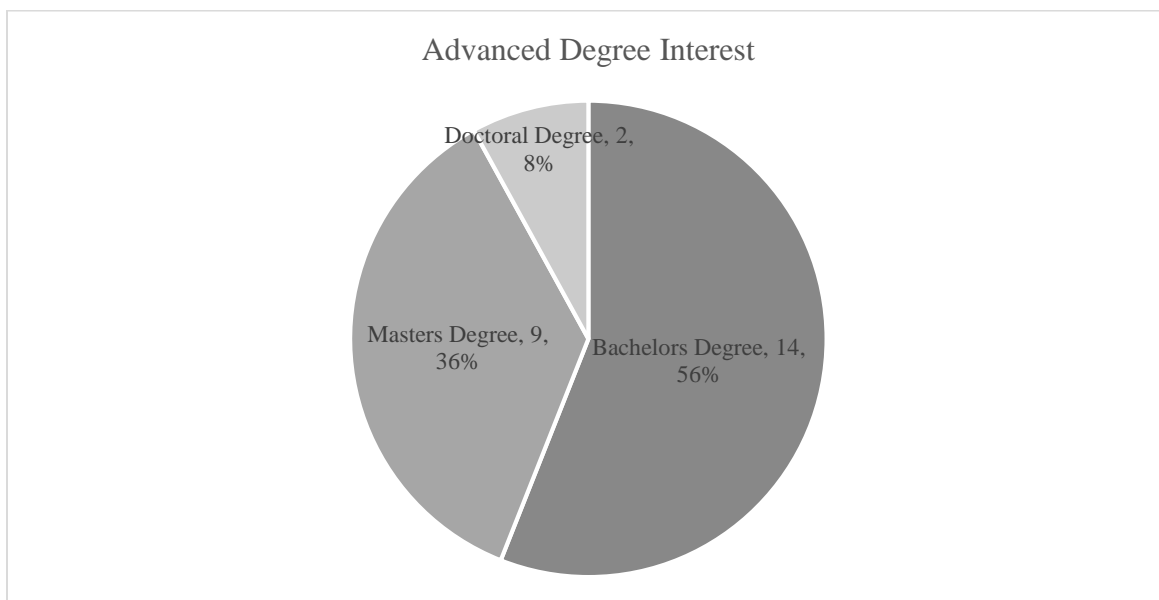


Figure 6. Study population interest in advanced degree education.

When asked about the need for additional education to gain a future role they desired, 8 of the women (36.3 %) acknowledged that pursuing these degrees would not have changed the outcome of the advanced role these women were currently in or would

further assist them in obtaining an advanced professional role. Three of the women (13.6%) were very specific to point out that obtaining an advanced degree was a personal goal and not necessarily a requirement for them to advance in their role, career, or achieve a role in HIM of interest. Participant 10 stated, “I won’t probably even use it except to put it on a business card, but I will still have the personal growth to know that I did it.” Six women (27.2%) in the study explicitly stated a bachelor’s or advanced educational degree was necessary for them to pursue another role of interest in HIM.

In some instances, the study participants had definite ideas as to what type of advanced degree or subject matter they would like to obtain. Four women would like to align their bachelors in HIM to gaining their RHIA certification. Participant 4 noted “I would love to get my bachelor’s and sit for my RHIA” and participant 3 stated, “I have always thought about continuing on to my bachelor’s and getting my RHIA; however, I haven’t really felt that I needed it to get to where I am thus far.” Those women interested in their master’s degrees mentioned a “master’s degree in health care law” (Participant 2, 2017) and “...continuing a Master’s in career and technical education” (Participant 20, 2017). Participant 21 stated, “...there is a Master’s in informatics that I also think is something that would advance me based on others I know having gone through this program.”

HIM Topics and Subject Matter Areas for Advancement

When evaluating study data related to the second research question on the perceived need of knowledge in certain HIM topics and subject matter areas, most of the topics raised aligned to gaining knowledge in specialized areas, and advanced

certifications eluded to in the previous section. Ten of the 22 participants (45. %) indicated a need for continued knowledge and experience in data or informatics. Participant 3 said, “I have also looked at the CHDA (certified health data analyst) credentials because of course in my field everything is data driven...” Participant 7 did not want to go back to obtain a RHIA mentioning “I have been doing pretty well on my own to make it as far as I have, but informatics is something I have always been interested in, and interoperability is another key area.” Participant 11 indicated that while she focused on medical coding for 13 years, “I would like to be in the numbers and data analysis.” Participant 16 noted that “big data is also an area that we need information on and I find limited resources to go to with questions on big data, so I need to be the one to be the expert on it.”

Five women (22.7%) of the study population would like their education advancement to lead to a role in management. Operations and project management were two areas of management interest noted. Two participants highlighted the need for skills not related to HIM as focus areas for HIM programs in educational intuitions and HIM departments to consider. One women noted interest in education in medical or clinical terminology and another in public speaking as subject areas that are not necessarily tied to educational degrees but are skills useful for their role in HIM or advancement.

Barriers to Obtaining Advanced Education in HIM

The third research question specific to women’s perception of their ability to obtain advanced education in HIM brought to light several barriers articulated by the study participants. Table 7 denotes the seven primary obstacles mentioned by the study

participants when I sought to gather information regarding the challenges encountered when pursuing additional education.

Table 7

Identified Barriers to Obtaining HIM Education

Barrier Type	Number of participants [%]
Time commitment	10 [45%]
Cost and/or expense	10 [45%]
Inability to maintain work-life balance	6 [27%]
Distance to available HIM education/school	3 [14%]
Return on investment	2 [9%]
Number of pre-requisite courses to get into desired program	2 [9%]
Age and time left in career	2 [9%]

Seventeen of the study participants (77%) resided in rural areas and highlighted access to education as an issue. Many of the women indicated education being highly accessible online; however, five of them specifically noted the challenge they experience with locating education. Participant 15 said, “It is really hard out here in a rural area and to go to workshops and go to training I have to drive anywhere from 4 to 8 hours as I am not close to any big cities.” Aside from distance, other references to education access centered on education being paid for by their employer as a benefit not always provided. Five of the participants indicated they had access to continued education or funds supporting programs, classes, or credits.

Age and Education Interest

There was a correlation in the data between the age of the women interviewed and their interest in pursuing education for career advancement. More than half (59%) of the

women in the study population were between the age of 50 and 70. These 13 women have worked in the HIM industry for an average of 22.3 years. Six of these 13 participants (46% of the women over the age of 50 and 27% of the overall study participants) mentioned their age or the amount of time left in the HIM career as a reason to not consider obtaining advanced education.

In some instances, interest in education was present in the dialog, but a reference to the reality of pursuing it was evident. Participant 15 stated “I really love coding and I would love to get a coding credential on top of my RHIT. If I wasn’t the age that I am, I would definitely seek that out.” In other instances, participants referenced the interest in additional education as a past consideration and an effort that would have provided value earlier in their career. Study participant 15 mentioned “I think having my bachelor’s and RHIA would have given me the confidence to pursue something else.” Participant 5 said, “If I were an instructor earlier in my career I would have gone for my RHIA credentials but at this point in my life – no.” Participant 18 stated “... if I was younger, I probably would have pursued it but not at the present time.”

One woman recognized the time investment aligned with her current career status and opted for seeking education in other ways. Participant 16 said:

The problem is – I am 62 years old. If I go back to school, I will almost be retired by the time I am done. So, I have opted for some certifications and credentials in other areas. Time left in my career is probably the biggest barrier.” Another participant acknowledged that she may be required to obtain more education but

was uninterested unless necessary. This woman mentioned “I may be forced to go , but I am in my 60’s and not interested at this point.

Three women in this age range (23%) referenced education or an advanced certification may not offer them anything further in their career. Participant 10 said, “I am now into auditing, and I am not really sure my RHIA would get me anywhere in this area.” Participant 11 stated, “It [obtaining an advanced degree] will not change my pay grade or put me in a supervisory position, so I haven’t bothered obtaining them at this point.” Participant 12 mentioned “I would like to get my RHIA. Not that I would want it to further my career but more for my personal benefit and what based on where I want to be.”

Nine of the 22 study participants (40.9%) were between the ages of 30 and 49. Only one of the nine women felt there was no need for advanced education or certification. Participant 3 stated “I have always thought about continuing on to my bachelor’s and getting my RHIA. I haven’t really felt that I needed it to get to where I am at thus far.” Eight of the nine women in this early-mid career age range did have an interest or desire in obtaining another degree or certification. Participant 4 noted “I would like to specifically get a bachelor’s degree to sit for RHIA. If the opportunity presented itself, I would be very interested in the bridge program between the RHIT to the RHIA.” Participant 6 said, “I would like to move toward the CDI. I have considered getting my RHIA, but that would entail getting a 4-year degree which would be at least two more years of school for myself.” Four of the women in this age range have already begun working toward furthering their education beyond their associate degree. Study

participant 8 shared “I intend to finish my bachelor’s in HIM and while I am undecided at this point as to whether I will stick with a HIM and get a master’s or whether I will go into healthcare administration.” Participant 9 has said she would pursue education beyond a bachelor’s degree saying they would like to get a “Doctorate in Education (Ph.D. Ed.)” and they “...feel it would be needed to advance into the HIM Program director role.”

Preparedness and Impact of HIM Industry Changes

The majority, 21 of the 22 (95.4%) of the study participants indicated their associate degree did, in fact, prepare them for their role in HIM. The area of HIM these participants felt most prepared in was medical coding. Participant 21 said, “I felt that my degree allowed me to understand coding and I liked it” and participant 22 noted, “The associate degree was perfect as far as getting me into the medical field and getting into coding.” There were references made to the information gained during coursework being outdated as compared to the work they do in HIM today, but that was to be expected given the age range of the participants and HIM industry changes to date. Table 8 outlines the industry changes mentioned by the women interviewed.

Table 8

HIM Industry Changes Impacting Role or Needed Education

Industry change	Number of participant references
Scanning of medical records	6
Increased data analytics	4
ICD-9 to ICD-10 codes	10
Electronic health records	14
Decentralization of medical records departments/remote employment	3
Reimbursement landscape	2
Telehealth	1
Importance of data quality (CDI)	4

Summary

In summary, key findings of this study included the perception that education in HIM did not just present itself in the form of degree programs, but also through specialized HIM certifications and credentials. Most of the women studied were very prepared for a career in HIM given their associate degree education and were interested in further education based on the length of time left in their HIM career. Chapter 4 provided an overview of the study setting and detailed demographics of the women who participated in the study. I outlined the study results in alignment with the research questions of the study. In addition to providing evidence of trustworthiness, I presented results associated with each of the study research questions. In Chapter 5, I will interpret the results draw conclusions, and make recommendations from the data collected and analyzed.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this phenomenological inquiry of women with an associate degree and RHIT certification was to determine their perception of the need for advanced education. I designed the research questions to determine what the women believed regarding the need and type of education to advance professionally while identifying what may prevent women from obtaining or pursuing additional education. This study intends to fill a gap in the literature regarding educational needs specifically in the female HIM workforce. The outcomes of this study may inform HIM educators and organizational leaders of the type of education desired and the association of this education to future career roles for women.

One key finding of this study demonstrated that women view advanced education in HIM as both degreed education as well as nondegree certifications in HIM specialized areas. A second key finding highlighted the interest in data analysis as a primary HIM subject matter where advanced education is wanted most. A third key finding identified the time commitment and cost of advanced education as the most significant barriers to women pursuing further education in HIM. The data collected from the study participant also found a correlation between age and interest in obtaining advanced education for career advancement.

Interpretation of Findings

Perception of Education in Changing HIM Environment

The women who participated in this study were vocal with regard to the amount of change they had experienced thus far in their HIM careers. As noted in the study conducted by Frey and Osborne (2013), occupations in the field of health information management and records departments were 91% susceptible to computerization. As depicted in Table 9, professional role changes and educational needs of the women study participants were relevant due to HIM technology related industry changes including:

- Scanning of medical records.
- Increased data analytics.
- Electronic health records.
- Remote employment for HIM resources using technology to support HIM professional responsibilities.
- Telehealth.
- Clinical data quality.

These findings support those of Frey and Osborne (2013) and further inform the perspective given by Dimick (2012) who believed EHR and other technologies significantly impacted the work of HIM professionals.

The systematic review of 28 individual peer-reviewed studies evaluating the effects of mobile health technology on work conducted in community health environment conducted by Braun et al. (2013) provided relevance to this study in all four critical strategic strengths of technology noted in their findings as follows:

Table 9

Study Outcomes and Key Strategic HIM Technology Strengths

Strength	Study findings
Improved processes	<ul style="list-style-type: none"> • Increased use of technology in HIM did change many of the processes they used to conduct manually • Data access from scanned documents and use of technology increases the quality of information used for reimbursement purposes • Accessing data electronically further provides physicians data to support quality of patient care initiatives and diagnoses
Increased alignment of work to clinical standards and guidelines	<ul style="list-style-type: none"> • 18% of the women interviewed had interest in becoming a Certified Documentation Improvement Practitioner (CDIP) • The use of technology in HIM practices has increased the number of inputs and sources of data which can, in turn, have an adverse effect on the quality of the documentation • AHIMA's (2017e) CDIP certification provides HIM professionals with knowledge of compliant medical coding and billing requirements and EHR technology skills to capture clear documentation
Conduit to education and training for geographically dispersed workers	<ul style="list-style-type: none"> • 77% of the women in the study population reside and work in rural areas; however, only 22.7% found education a challenge to access • Participants indicated education was made readily available via technology and in some instances through their employer
Better facilitation of leadership and management regarding remote supervision of community health care workers	<ul style="list-style-type: none"> • The need for education in management did emerge as a relevant finding with 22.7% of the women interviewed desiring further education in operations or project management specifically

The women in this study viewed education through a few different lenses. One view included the evaluation of HIM subject matter areas requiring education. As noted by Jackson et al. (2016), education and HIM industry leaders identified a gap distinctly

tied to education in the current workforce specific to possession of computer-related skill sets. Although the concept of computer-related skills did not emerge as a theme in the data collected, the interest in the function of data manipulation and analysis of health information did arise as a specific area of interest. Forty-five percent of the study participants indicated a need for continued knowledge and experience in data or informatics which in turn could support Jackson et al.'s (2016) findings in a more definitive manner of how technology skills could apply to HIM. This focused interest in health informatics also aligns to AHIMA's (2015) member study that identified data and business analytics as the most critical skills to the future of the HIM profession. Similarly, the importance of data analytics and clinical documentation as crucial educational areas of interest in the study results also validates the HIMAA (2014) study in Australia finding the HIM profession to change with the increased amount of data and clinical system management needed for accurate and timely coding of clinical information for billing purposes.

As noted in the literature review for this study, I did not find research indicating how the current HIM workforce gains access to advanced HIM knowledge highlighted as gaps within many of the previous studies evaluated. Figure 6 shows how the study participants maintain and obtain their HIM knowledge and education.

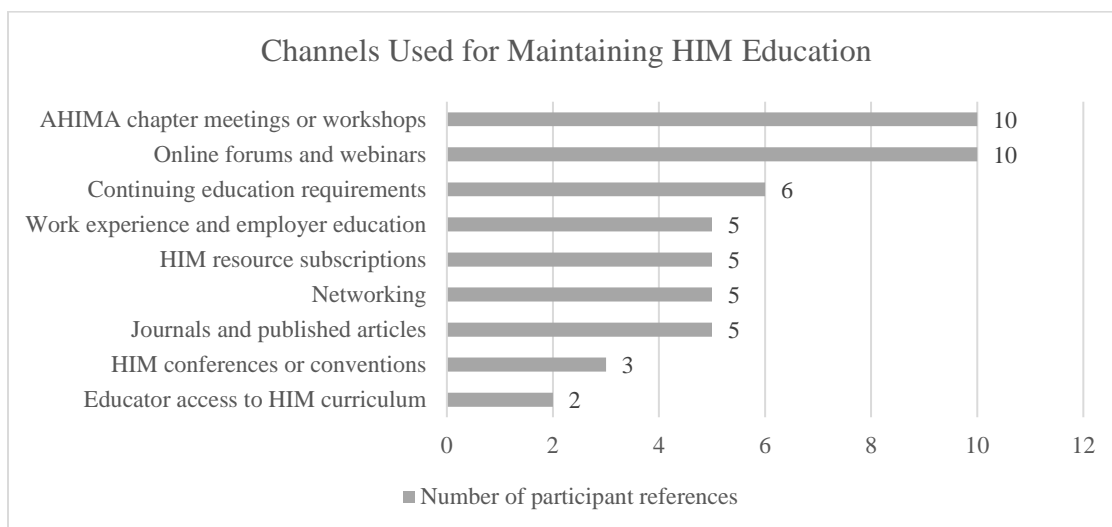


Figure 6. Channels used by study participants to maintain their HIM education and knowledge.

The most commonly used channels by which the participants obtained education or stayed current with HIM topics impacting their professional roles was by attending AHIMA chapter meetings and workshops and leveraging online forums or webinars. Because of the RHIT certification requirement for continuing education to stay certified, study participants also acknowledged receipt of additional knowledge by meeting their continuing education process.

The second view of education in the study results aligned with advanced college education and degrees. More than 60% of the study participants did desire to continue their education by obtaining a bachelor's degree and defined advanced education as a college degree. Within this 60%, only a third of the women (27.2%) indicated a need for this education for career advancement or to perform the duties of their current professional roles. The correlation between these data findings, the ages of the study population, and the number of years these women have been in the HIM industry

working as professional demonstrated that women working in HIM for more than a decade had made it quite far in their career with an associate degree.

The primary reasons for these women to obtain a bachelor's degree include gaining an RHIA certification or HIM specialization pertinent to their role. Many of the women would have pursued an advanced degree if they had started the process earlier in their career. Barriers of life circumstances, time and cost prevented these women from taking on an advanced degree previously and in some instances the return on the investment of obtaining an advanced degree presently may not make sense either.

The third view of education found in the study outcomes emphasized the definition of HIM education to also come in the form of specialized HIM certifications. This view was evidenced both by the certifications the study participants were interested in obtaining as outlined in Table 5 and in the number of certifications already held by the women in the study population as described in Table 6. These specialized HIM certifications offered by AHIMA are structured programs to benefit both the individual pursuing the certification by increasing job mobility, opportunities, and earning potential as well as the employers knowing such certification demonstrates proficiency and high competency (AHIMA, 2017f). Some of these credentials do require a bachelor's degree and others require an associate degree and related experience in the certification subject area. Sixty percent of the women in the study were interested in obtaining their RHIA which does require a bachelor's degree. This data finding subsequently aligned to the 60% of the study participants desiring a bachelor's degree as a form of advanced education.

Outside of education in the form of collegiate degrees and specialized certifications, Jackson et al. (2016) highlighted the importance of internships for HIM students, and similarly, Sweeney (2012) found student rotations and on-the-job training in the medical field as primary options for preparing students. The topic of internships did not surface in this study; however, the idea of mentoring did. Two women identified the importance of mentoring as part of their career on-boarding process and two women referenced the fact they consider themselves mentors in HIM within their current professional role. This study information may support the study conducted by Bates et al. (2014), showing a positive experience when a relationship with a mentor in HIM existed. In addition, the women in this study mentioned networking as a mechanism for both continued education from peers and coworkers but also as a channel for career development and advancement.

Findings Relevant to Theory

This study leveraged Lent and Brown's (2013) social cognitive career theory (SCCT) to determine if there was an association between women holding an associate degree with RHIT certification and interest in pursuing additional education for career advancement. This theory was organized to identify worker career behaviors based on life-roles or career-life periods (Lent & Brown, 2013). The life space theory developed by Super et al. (1996) was used to derive the life-role portion of the SCCT, and Turner and Lapan's (2013) model of career development supported the career-life period aspect of the SCCT. Using the SCCT model and the partial list of adaptive behaviors outlined in Table 1, I categorized the study participants into one of two life-role types, the

establishment worker or the maintenance worker. Table 10 outlines the outcomes of this mapping exercise. The life-role assignments similarly aligned to the ages and length of time the women in the study were in their HIM careers.

Table 10

Study Population Alignment to SCCT Life Roles

Life-role	Number of study participants
Establishment worker	5
Maintenance worker	17

Self-efficacy, traits, and environmental support have all been found to play a role in career adaptability according to the SCCT (Lent & Brown, 2013). The data collected in this study supports the SCCT in the following ways:

- Known barriers to education access (as outlined in Table 7) did limit the ability of the women in this study to receive an advanced education despite interest
- The study population's high interest in obtaining a bachelor's degree (63.6 %) or an advanced HIM certification (59 %) was related to a desire of self-efficacy in their current role, and advanced role, or to meet a personal goal
- The women in the study experienced a change in their HIM professional responsibilities due to many HIM industry changes (identified in Table 8) resulting in career adaptation with education tied to the change, not to personal or professional interests

This study demonstrated that HIM industry changes, the increased need for HIM specialization in certain subject areas, and education in non-degree formats (Figure 6)

have all informed career paths women have taken when holding an associate degree and a RHIT certification. The women study participants had (a) the ability to hold strong HIM positions without a need for advanced collegiate education, (b) decreased interest in pursuing degree education in end of career stages, and (c) increased interest specialized HIM certifications as an alternative to obtaining a bachelor's or advanced college degree. These findings of self-efficacy informed career aspirations and choices made by the women throughout their time working in HIM.

Limitations of the Study

This qualitative phenomenological study was organized to identify the perceived need women have for education to advance their careers in HIM. A limitation to this study was the recruitment of the study population from the optional AHIMA membership research and state chapter online forums. Although this recruitment method was necessary to locate a broad geographic representation of participants with RHIT certification issued by AHIMA, this process limited in the study population to active association members with an online presence. Given the higher than anticipated response to the study invitation posted, another limitation included the significant amount of coordination and communication required to accommodate phone interview time with study participants located in five time zones across 19 states (Figure 2) from Massachusetts to Hawaii. It was necessary to conduct interviews before and after typical workday hours for many of the women impacting their level of engagement; however, all were very cooperative and gave a minimum of 30 minutes of their time aligned with the study scope and design.

Recommendations for Further Research

I have a few recommendations regarding further research to fill gaps in this study. The first recommended area includes the evaluation of the same perception of advanced education in a male HIM study populated as compared to the female population targeted in this study. Given the significant level of tenure and experience found in the women who participated in this study, conducting a study with a HIM employee population with less than five years of HIM industry experience could provide another view of similar educational need perceptions for more recent associate degree graduates. Another recommendation for additional research could include a study of women with post-graduate HIM degrees to identify if there is a correlation between degree status and attainment of career goals in HIM. This type of study could be of interest to educators and employers seeking to develop organizational leadership around key HIM topics such as data analytics, security, and interoperability.

With 63.6% of the study participants indicating a desire to obtain a bachelor's degree the data in this study demonstrated interest and need in furthered HIM education; yet, many limitations and barriers existed to obtain such education. This study also revealed the high interest in HIM specialized certifications as a form of knowledge advancement and education as opposed to obtaining a graduate or post-graduate college degree. Further evaluation of individuals possessing HIM specialized certifications for subject matter areas such as data analysis (CHDA) and documentation improvement (CDIP) and the impact of such certification on career advancement could inform the effectiveness of these recently added certifications to the HIM marketplace.

A focus on education itself through the lens of HIM institutions could also be helpful to the lacking body of HIM related studies. Past studies (Jackson et al., 2016) did include data collection from HIM educators that were broadly defined. Further research and data gathering from HIM educators tied explicitly to academic programs of HIM higher education or responsible for delivering content for AHIMA-sponsored HIM certifications could also lead to insights into HIM curriculum needs. Such information could also inform how education access barriers identified in this study may be overcome.

Implications

Positive Social Change

Identification that women working in HIM with associate degrees and RHIT certification do not feel threatened to obtain advanced degrees to further their career in this study is a positive social change finding. This discovery, coupled with the long tenure of the study population in the HIM field with an associate degree, signifies a potential lack of awareness about HIM as a field of study or as a career path in health care. With the development of educational degrees in health information systems and administration, awareness is improving. According to feedback from study participants, there is still a great deal of opportunity to inform, support, and encourage students to consider HIM as an option for study. Educators and employers should be pleased to learn that career advancement of the study population came through experience, and there was a strong interest in further education in subject matter areas of importance in the lines of HIM work they supported.

Outcomes from this study can inform organizations and accrediting body leaders such as AHIMA, CCHIM, and HIMAA of the importance of communication and marketing of HIM to the next potential generation of students. A briefing document inclusive of study outcomes and recommendations will be made available to the AHIMA member population and HIM research forum using the same web-based channels leveraged for study recruitment. A HIM career option provides the ability to combine data, technology, finance, clinical, and patient care knowledge into a robust, unique, and ever-changing profession in health care with many career path opportunities. These opportunities may or may not be realized without extensive degrees and advanced education but also through specialized HIM certification offerings. Increase use of technology in the HIM industry has modified the work of HIM professional responsibilities, the need for individuals to fuel a future workforce in HIM remains a known statistic (BLS, 2015c) as of the time of this study. As future generations of students seek opportunities in growing fields, better definition of HIM as a profession and its various educational options can assist in improving communications and awareness. This study also identified that despite interest in advanced HIM education existing in women working in the field, the length of time remaining in one's career does impact the ability to pursue such education. This information may assist the Commission on Certification for Health Informatics and Information Management (CCHIIM) in developing additional HIM certifications that may be less burdensome to obtain than degree programs.

Recommendations for Practice

HIM possessing AHIMA-issued certifications are required to maintain their certification through the completion of continuing education units (CEUs) or credits over a 2-year period. A potential recommendation for practice includes the evaluation of a modified continuing education process that allows HIM professionals with RHIT certification to collect CEUs toward specialized certifications or collegiate degrees. As of the end of 2017, earning such credits is above and beyond the receipt of additional certifications in the AHIMA continuing education program. Also, the more HIM certifications one has, the more CEUs they must obtain within a 2-year timeframe. If CEUs were organized to provide more content aligned to a certification track of interest and selection by a HIM professional, other education options might be made available to an existing tenured HIM workforce without requiring education in the form of an advanced college HIM-related degree. Such continuing education program changes could reduce the existing barriers to education identified in this study.

Conclusion

Based on the findings of this qualitative phenomenological study, women currently working in HIM with associate degrees and RHIT certification do have an understanding of HIM education options available to them. The length of time in the HIM profession did influence the perceived need to obtain HIM education in the form of an advanced college degree. Those women considered early to mid-career (less than 15 years) are more inclined to consider pursuing more college education in the form of a bachelor's or another post-graduate degree. Those women later in their HIM careers

(greater than 15 years) are less inclined to go back for degreed education; however, they did have interest in obtaining a degree if more career time allowed for a return on the education investment. I also discovered that having an option for non-degree forms of education, including specialized HIM certifications, is also of great interest to female HIM professionals regardless of the length of time in their career.

These findings provide insights from women in HIM with strong representation in the current active workforce (AHIMA 2015). The lived experiences of the women who participated in this study may foster the need for increased awareness about HIM as a college degree and career choice to support the increased need to bridge what could be a potential deficit in the HIM workforce come 2020 (BLS, 2015c). This awareness can lead to an increased interest in the many HIM education options (AHIMA, 2017c, 2017d, 2017e) available to this industry of professionals regardless of what stage of life and career they may find themselves.

These study results may contribute to the evaluation and plan efforts to address HIM knowledge gaps in areas such as data analysis and management when developing forms of HIM education. As HIM curriculum, certifications, and continuing education processes are used as channels for the training of individuals entering or existing in the HIM workforce, fueling these channels with content related to future skill needs such as data analytics is of importance. With 31 % of the HIM workforce consisting of women with associate degrees (AHIMA, 2015), and the BLS (2015c) predicting a 22 % increase in HIM employment by year in the next three years, HIM employers need to support the education of their employee population. The outcomes of my study suggest women do

not necessarily perceive a need for education to advance their HIM careers. However, it does highlight women desire and have interest in education for the fulfillment of professional and personal goals. Such fulfillment can lead to positive social change for an employee population seeking to serve their health care organizations, practitioners, physicians, and most importantly patients.

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Appendix A: Interview Tool

Introduction: State researcher name, the study title, purpose of the study, and IRB approval number. Obtain the following demographic information from study participant:

- Gender
- Age Range (20-29) (30-39) (40-49) (50-59) (Over 60)
- Highest Level of Education Completed
- Health Information Management Certification(s)
- Number of years working in HIM
- Professional role or title
- Work setting
- Work location (city and state)

Inform the interview participant the interview may last between 30-45 minutes. Request if permission is granted to record the interview session and inform them of note taking throughout the interview time.

Interview Questions (verbiage of questions may vary slightly or require further explanation based on education level or age of the participant):

1. Describe the various roles you have held professionally in the field of HIM?
2. Explain any changes that have occurred in your current role or past roles within HIM and what influenced these changes?
3. Explain how your HIM associate degree/education did or did not prepare you for these professional roles.
4. What, if any, additional education do you feel you need to perform your current professional role in HIM?
5. Explain how you gain knowledge or are educated to keep up with the demands and skills of your current HIM role.
6. Describe, if applicable, an advanced HIM professional role you feel you could aspire to and what would you need to accomplish in order to obtain this role.

7. Describe any known barriers to obtaining additional education you feel is necessary in HIM.

8. If you had the opportunity to obtain more education that would assist you in advancing your career in HIM, what education would you seek?

Conclusion: Thank the interview participant for their time and contributions to the study. As a token of appreciation for their time, each participant will receive a \$10 gift card.

Debrief: Provide the participant information on the interview data transcription process and next steps which include contacting them to verify the transcribed information.