



# HIM Reimagined

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**HAUGEN**  
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**AHIMA**

American Health Information  
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## HEALTH INFORMATION MANAGEMENT REIMAGINED (HIMR) FOREWORD:

This document is the result of the hard work, commitment, and forward thinking of a team of passionate and dedicated HIM professionals who spent hundreds of hours assessing the current and projected future landscape of the healthcare industry and higher education systems. HIMR is a national initiative and does not make recommendations that are applicable outside the United States. Using the knowledge gained from this assessment, the team has proposed recommendations for consideration. HIMR is an iterative document that provides the framework for continual assessment and improvement of the processes in place to ensure effective delivery of HIM education in a time of rapid change. Continual evaluation of industry changes must inform the need for additional iterative changes to this guiding document.

HIMR is, by design, future-focused and likely does not reflect what many readers are currently observing in their work-place settings. The recommendations in this document are bold and ambitious, and at the same time hold promise for future advancement of the HIM profession. Because of the significant nature of these recommendations, a 10-year, phased implementation plan starting in 2017 is proposed. Those reading this document will appreciate the significant and progressive change initiatives that must accompany these efforts to ensure the HIM profession is prepared to take advantage of the many opportunities and challenges facing us as we move toward the ambitious goals outlined in this document. Bill Gates has suggested that “we always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten. Don’t let yourself be lulled into inaction” (BrainyQuote). This quote helps to frame the difficult nature of describing technology impacts on a changing profession.

A final and important consideration is the need for readers to evaluate any current fears and apprehensions. Fear can often lead to stagnation. Replacing these sensitivities with action allows one to complete the mission at hand. HIMR is geared to move both individuals and the profession forward. Transformation starts with you!

With sincere appreciation and grateful acknowledgement of:

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## HIM REIMAGINED (HIMR): EXECUTIVE SUMMARY

HIM Reimagined is a future-focused initiative and proposes bold recommendations to ensure the continued vitality of the HIM profession in a rapidly changing healthcare environment. The Health Information Management Profession is at a critical juncture, where all choices involve risk and reward. We must choose between significantly revising the traditional approach to HIM education and continuing on with what we have done in the past.

In the healthcare industry today, the skills and abilities of Registered Health Information Technicians (RHIT) and Registered Health Information Administrators (RHIA) are recognized and valued. The HIM profession is likely best known for its expertise and leadership in the coding arena. HIM professionals also lead the way in healthcare privacy matters. These two primary facets set the HIM profession apart from other healthcare professionals. The longtime role of the HIM professional as the bridge between the clinical, financial, technological, and administrative healthcare functions is facilitated by the broad content included in the existing HIM curriculum.

Today, HIM professionals practice in almost every operational area of traditional healthcare (hospital) settings including quality improvement, revenue cycle, risk management, contract management, financial management, data management, project management, information technology, administration, and others. Beyond hospitals, HIM professionals are found in almost every setting imaginable including outpatient, academic, vendor, pharmaceutical, research, and government settings. Many HIM program graduates are securing jobs, and current practitioners are finding opportunities in a wide variety of roles and settings.

A future focused analysis of the changing healthcare environment, HIMR outlines the anticipated changes in healthcare and how those changes will likely affect the HIM profession. For example, preventative, predictive, participatory, and personalized approaches to medicine, increased automation, and aging of the population will all have a significant impact on HIM operations and what employers will need of HIM professionals in the future. To be prepared for these changes, the HIM profession must work diligently now for when these anticipated changes emerge.

We believe all HIM roles will evolve as workflows adapt to technology. The HIM foundational core will serve as the North Star, providing guidance as the profession navigates uncharted water. As new opportunities emerge, HIM professionals may need additional education and skills development to perform in new roles. Traditional HIM roles are already evolving as we have seen coding start to shift to an audit function with the use of computer assisted coding (CAC) technology. Currently, AHIMA membership data suggests nearly half of HIM professionals who enter the profession do so in a coding-related role. As organizations become more electronically linked and tools become more efficient, an entry-level coding role may no longer be an opportunity widely available to all. This in no way means that HIM professionals will not still need to learn coding in school. This need will still exist in order to be able to relate coding to reimbursement, case finding, and for other important reasons; however, the amount of coding may vary from what is present today in HIM programs. In addition, there may be a need for higher level skills built around coding concepts to ensure HIM professionals are available and ready to fill higher level auditing positions. There is also concern around the eroding niche market of HIM as other professionals (e.g., IT, nurses) with competence in our traditional areas of practice are edging into what was previously seen as HIM space.

There are those who feel this analysis of coding is off the mark and that little to no significant change will arise in coding-related positions. As evidence, one may point to the U.S. Bureau of Labor Statistics currently calling for a 15% increase in jobs for health information technicians between 2014 and 2024 (Healthcare Occupational Outlook Handbook, 2014). Why does HIMR suggest a different future for coding professionals given this information?

One need not look too far in our past to see how history provides a grim reminder of what happens to industries and professions that fail to maintain relevance in a changing environment. Disruptive technologies act as catalysts in evolving industries, moving those willing to adapt forward and leaving others behind. Blockbuster, Polaroid, Kodak, and Borders serve as examples of organizations unwilling to make the necessary changes to maintain relevance. Many of the disruptions that led to the demise of these reputable organizations happened quickly (and



in some cases in less than 10 years). The coding function, the value of coding, and its relationship to many other healthcare structures is not in question. The number of rank and file coding positions in the future is where the focus of this discussion centers. HIMR seeks to identify and prepare future professionals with the skills needed to adapt in a changing environment. Yes, auditors and editors will be needed, but the number of auditors, editors, and others is much smaller than the number of day-to-day coders filling positions today.

Making significant changes to existing education content to focus on the future instead of the past can lead the HIM profession to a place where it is valued for new and emerging skills, and at two distinct levels. The technical HIM professional level will be specialized, bringing awareness to employers that associate degree-educated HIM professionals have a deep knowledge in a specific area of HIM practice grounded by a solid core foundation of knowledge and skills that all HIM professionals possess. The goal is to prepare practitioners who will focus on operational support in healthcare and healthcare-related organizations. At the baccalaureate and master's level, HIM professionals will practice at a broader level, assimilating data from multiple sources, creating knowledge, and leading healthcare organizations to use their health data assets to their best advantage for the benefit of the organization, patient, and population. To this end, what follows are the recommendations proposed in HIMR. This executive summary is followed by the full HIMR document where references, data, information, and research that have led to these recommendations are included.

## RECOMMENDATIONS

- 1. Increase the number of AHIMA members who hold relevant graduate degrees, (e.g., HIM, Health Informatics, MBA, MD, MEd, MPH) to 20 percent of total membership within 10 years.**
  - A. Increase funding of academic scholarships to foster access to higher levels of HIM education to members.
  - B. Increase the number of faculty qualified to teach HIM and related graduate education.
  - C. Implement graduate-level health informatics curriculum competencies to improve the value of and increase demand for health informatics graduate education. These competencies have been developed and will be adopted by schools to assist in supporting this goal.
- 2. In collaboration with other health and health-related organizations, in the public and private sectors, build a mechanism to ensure availability of research that supports health informatics and information management.**
  - A. Provide competitive research grants on an annual basis aimed at promoting health informatics and information management practice.
  - B. Provide dissertation scholarships to health information management and health informatics professionals conducting research in doctoral programs.
  - C. Focus on research to support the value of HIM skills and the need for data analytics to manage data for strategic, fiscal, and population health purposes.
- 3. Increase the opportunities for specialization across all levels of the HIM academic spectrum through curricula revision, while retaining a broad foundation in health information management and analytics.**
  - A. Curriculum revisions to support specialization at the associate level (timeline: new curriculum available for use by August 2019 or earlier, although required implementation date will likely be 2021 or later).
    - i. Condensed HIM core at associate level and incorporate specialization opportunities at student and program level. The core will include content from all domains, and the number of competencies in the nonspecialty content area will be significantly reduced.
    - ii. Align HIM accredited academic specialties with future HIM-related credentials; consider and encourage higher level education to achieve higher salaries.
    - iii. Focus effort on creating tracks at two-year program level based on emerging specialties as indicated by employer need (and to be determined by market research in 2017). Program accreditation continues, as does the associate level degree, but it is based on a condensed set of HIM core content and deeper specialty content. Each school determines an appropriate specialty track or the appropriate number of tracks for their program and their regional market needs.



- B. Broader HIM core at baccalaureate level
    - i. Align core HIM competencies with requirements for HIM credential maintenance.
  - C. Condensed core at Master's Health Informatics and Health Information Management with specialization opportunities at program level.
- 4. RHIA credential is recognized as the standard for HIM generalist practice and the RHIT (+Specialty) as the technical level of practice.**
- A. Transition the RHIT credential to a specialty focused associate level over a multi-year, multi-phased approach.
    - i. January 2017–July 2021: Current and new RHITs (those who receive the RHIT designation by July 2021) permanently retain RHIT credential.
    - ii. Ongoing transition support for RHITs who want to transition to the RHIA credential will be provided (2017–2027). For example, consider a new opportunity for RHIA certification through a proviso approach that would allow individuals with a baccalaureate degree, who are also currently RHIT-certified, to take the RHIA exam for a specified period of time consistent with the recommendations of the HIMR taskforce and CCHIIM approval.
    - iii. August 2021–December 2026: Transition of RHIT credential from RHIT to RHIT + (Specialty Designation).
      - a. Develop and distribute materials to communicate this transition to the market.
  - B. Ensure clear pathways exist between associate and baccalaureate HIM programs to encourage existing HIM professionals and new entrants to the HIM profession to earn a baccalaureate degree and a RHIA credential.
    - i. Increase from the existing 26 percent to 40 percent of the current technical level; membership will advance to a minimum of a baccalaureate degree by 2027.
    - ii. Curriculum must be designed to allow seamless transitions from the associate level to the baccalaureate and from the baccalaureate to the master's level.
    - iii. Focus efforts on recruitment to illustrate the value of higher academic preparation.
    - iv. Provide support to educational institutions to transition programs, as appropriate and when possible, from associate level to baccalaureate level and from baccalaureate to master's level.
  - C. Align certification processes with industry and education needs.
    - i. Ensure certification examination process supports the ability of HIM to be more quickly aligned with future industry needs.
    - ii. Align CEU requirements with future-focused employer needs that ensure the recognition of the HIM profession.

The AHIMA Vision 2016 white paper, released in 2007, proposed similar recommendations, however the HIMR recommendations have been re-focused based on new knowledge that has emerged. The conclusion of the Vision 2016 white paper included a call to action, citing that it was “time to reach a consensus and take steps to advance HIM education and develop more qualified faculty is now. If we further delay, it will pass us by.” This call to action was loud, yet stopped short of making the important connection between education and the HIM profession as a whole. In retrospect, the progressive tone of Vision 2016 at the time was probably too early for many to “see” the world that was envisioned. Major distinctions from the previous Vision 2016 initiative and its successor, Reality 2016, and HIMR are noted. One such distinction is that the passage of time has made it clear that technology is rapidly advancing to the point where current HIM roles will be performed by computers in the future. According to a 2016 quarterly McKinsey report, “Where Machines Could Replace Humans,” the roles particularly vulnerable to automation are those that involve performing physical activities in a predictable environment. According to the report, there is an “observed tendency for higher rates of automation for activities common in some middle-skill jobs—for example in data collection and data processing” (2016). These important observations support the need for the changes outlined herein.





AHIMA will continue to support and encourage its members to build from their knowledge and couple it with additional skills that will prepare them for the future. Further, the role that AHIMA plays in policy and advocacy will remain strong. However, with awareness that the number of currently held entry-level positions will decrease in the future, AHIMA strives to outline areas for potential advancement to ensure the continued relevance of the HIM profession. This change will not occur by AHIMA support alone. It will occur because individual practitioners see the open doors ahead and are willing to prepare to enter those new spaces.

The education community is central to the success of this plan. More baccalaureate and master's programs are needed to transition the profession from the predominant current workforce of associate-educated professionals. Associate-level education will remain strong for programs already in existence as they focus on specialization options and on preparing students for more seamless transitions to baccalaureate level programs. An emphasis needs to be placed on program growth at the baccalaureate and graduate level to move the profession to a higher level of education rapidly. The immediate goal is to demonstrate recognition for specialty expertise that meets current industry needs, and over the long term fosters a dynamic and adaptive framework for addressing health information management challenges.

## HIM REIMAGINED: A FRAMEWORK FOR TRANSFORMING HEALTH INFORMATION MANAGEMENT

Given the level of change in healthcare, the American Health Information Management Association's Board of Directors gave the Council for Excellence in Education a charge to develop a new educational strategy to ensure current and future professionals are prepared for the future of HIM in the rapidly changing environment resulting from changes in healthcare, technology, and education. Educational strategies are not new to AHIMA. In fact, AHIMA has had an educational strategy since 2007 (it was called Vision 2016), and considerable work has been done to address the three priority areas noted in Vision 2016.

"Vision 2016: A Blueprint for Quality Education in Health Information Management" was published by AHIMA in September 2007, and highlighted the need for Health Information Management (HIM) education to move toward a more evidence-based curriculum. The purpose of the report was to ensure the HIM profession "would be able to further sustain and lead amidst a rapidly changing healthcare delivery system." The report focused on three priority areas: (a) transformation of HIM to a graduate level profession by 2016, (b) realignment of HIM associate degrees by 2016, and (c) preparation of an effective HIM faculty by 2016.

Regarding realignment of associate degrees, the Council on Excellence in Education (CEE) has created optional specialty tracks that may be adopted by associate degree programs. The specialty tracks focus on health data analysis, coding, cancer registry, documentation improvement, and privacy and security. In addition, a significant change was made in 2014 with a focus on new curriculum competencies that were intended to more closely align programs with workforce needs. While these specialty tracks at the associate degree level have been created, they are optional and have yet to be widely adopted by programs. A recent survey of HIM programs revealed that only 30 percent of accredited associate degree programs were considering implementing the optional post-associate specialty tracks, often citing lack of financial aid for students as a reason for not implementing the tracks.

Finally, considerable work has been conducted to assist in the effective preparation of HIM faculty. The Faculty Development Institute (FDI) and the Assembly on Education (AOE) have been redesigned, and now, for example, include specialty tracks with deep content in data analytics and informatics that recognize faculty training needs for expanding curriculum content areas. Scholarship programs have been created by the AHIMA Foundation to support higher educational attainment, and additional webinars and workshops have been instituted to provide timely training on various topics. A large volume of work has been conducted to meet the objectives of Vision 2016; however, it remains a challenge for accredited HIM educational programs to meet the changing needs of the healthcare industry. While the HIM profession has graduate programs, currently less than 12 percent of AHIMA's membership holds a graduate degree (AHIMA, 2016). AHIMA has long supported the need for graduate-level education and continues to do so. There are nearly 400 HIM programs that are currently accredited, or in the



process of accreditation, and the challenge of recruiting and retaining effective faculty to teach ever-changing content is more difficult than ever.

In addition to the changing nature of healthcare and HIM in general, the environment of higher education is rapidly transforming. The cost of higher education continues to make headlines, and the focus on education has shifted to value, competencies, and completion. Technology continues to change the way faculty teach and students learn, and the use of online education has increased tremendously in higher education and in accredited HIM programs since 2007. Accreditation standards and practices are continuously changing, and HIM competencies have been almost completely revamped since Vision 2016 was published. During this time, the breadth and depth of the HIM profession has also continued to grow, resulting in an even more expansive curriculum.

This report, by the HIM Reimagined task force of the Council for Excellence in Education, uses current knowledge, literature, research, and environmental scan data to articulate a comprehensive and future-focused vision of the HIM profession that is based on several key areas:

- Scanning the healthcare landscape
- Trends in higher education
- Workforce changes

As a foundation for this effort, the task force focused on a few works from reputed healthcare experts that culminate in recommendations for the future of the HIM profession within the ever-changing future healthcare market and workplace.

## SCANNING THE HEALTHCARE LANDSCAPE

Since 2007, the healthcare landscape—including delivery systems and reimbursement models—has changed dramatically. There have been advancements in diagnostic tests, drug treatments, genetics, and technologies that minimize invasive surgeries, reduce lengths of stay, and alter how patients (which refers to all healthcare consumers) access medical care with the use of mobile devices, social media, and telecommunication tools. The American Recovery and Reinvestment Act passed in 2009 and the Affordable Care Act (ACA), passed in 2010, continue to have a significant impact on healthcare delivery—how care is accessed and paid for—including options for health insurance exchanges. While additional policy changes may be anticipated at the time of this writing it is too early to predict what those may be.

The Deloitte Centre for Health Solutions, part of Deloitte UK, recently generated a research document titled *Healthcare and Life Sciences Predictions 2020: A bold future?* (Deloitte Center for Health Solutions) that offers insight into the future of healthcare. Their predictions center on the increased use of big data, the changes in the healthcare consumer's needs, and the effects of digitized medicine on regulatory compliance and healthcare delivery systems. Of primary importance in this report is the ever-changing scope of healthcare delivery. With the widespread implementation of electronic health records and related applications across the nation, patients are able to view their health information electronically and are becoming more educated consumers of healthcare services. With greater patient-driven healthcare, it has become more critical than ever to be aware of the P-4 Medicine concepts. P-4 Medicine refers to healthcare and medicine that is:

- Preventative
- Predictive
- Participatory
- Personalized

These P-4 concepts demonstrate the shift to patient-driven healthcare, where patients are more involved with their healthcare decisions. The Deloitte report echoes this, stressing the importance of a greater movement toward patient-centered care in 2020 and beyond. The idea that medicine should be preventative, predictive, participatory, and personalized will have a profound impact on the future delivery of healthcare and will eventually drive the healthcare value proposition.



### Preventative

There are many facets of illness and disease, but the more that is known about the incidence and a patient's susceptibility, the more focused diagnosis and treatment can be. Many Americans and global citizens suffer from chronic disease. The Centers for Disease Control and Prevention (CDC) has a vision similar to the Deloitte report that identifies risky behaviors that may be mitigated by preventative strategies. The CDC lists many factors, including tobacco use, poor diet, physical inactivity, excessive alcohol consumption, high blood pressure, and hyperlipidemia as those behaviors and risk factors that contribute to chronic disease in the United States. Additionally, the public health sector, through its many population health initiatives, focuses on controlling acute outbreaks of infectious disease, immunization coverage for children and adults, healthcare for the underserved, and the whole range of social determinants of health that influence individual and group differences in health status. The latter include many areas outside the health field, for example, education, labor, housing, transportation, environment, food security, social support systems, etc. Concentrating on prevention in 2020 and beyond involves the collaboration of not only organizations such as the CDC and health departments, but also the patient-centered healthcare delivery system and the informed patient. Advances in technology can assist in the patient and the provider's approach to preventing illness and disease. For example, new wearable devices help monitor blood pressure, glucose, fitness and activity, body mass index (BMI), and heart rate. In addition, wearable devices and increases in services such as patient-provider telecommunication and wellness programs offered by communities will allow for further prevention of illnesses and diseases.

Similarly, the ACA focused efforts on preventative medicine by expanding coverage of preventative and pre-screening services across populations. The Act also recommended a broader range of health professionals, such as nurse practitioners and physician assistants, to be available for delivering care. Additionally, the Act contains measures intended to increase the use of information technology and tools, including decision support, alerts, reminders, and reporting requirements.

The emphasis on prevention also opens up opportunities for HIM professionals to collaborate with the public health sector and the many other sectors that influence population health, through their research and data analytics. For instance, the collection, transmission, use, and access to information pulled from wearable devices relates directly to the HIM professional. The increase in data used from wearable devices is also associated with information governance and information security issues, which will become more relevant to HIM professionals as the profession expands. Additionally, research associated with this data, including identifying healthcare trends and preparing reports that might aid in healthcare decision making, could be performed by HIM professionals in the future. HIM professionals are well suited to fill new positions related to educating or advocating on behalf of patients to leverage their personal health information, and to achieve improved health outcomes at the individual and population health levels. In addition to the ability to prevent illness and disease, a similar ability to predict disease will continue to evolve as technology advances beyond 2020.

### Predictive

The healthcare landscape is rapidly changing toward a data-driven and quality outcome-focused delivery system. HIM professionals remain at the forefront of this change as the adoption of electronic health records (EHRs) and data exchange systems become ubiquitous. The next chapter of information management is information governance within the current data-rich environment. The succeeding wave of health information skills will largely focus on managing and interpreting data versus simply producing data. Predictive healthcare is based on new achievements in science that assist in preventing development of disease prior to the appearance of symptoms with the goals of increasing life expectancy and improving quality of life (Sadkovsky et al., 2014). The advancement of health information technologies leading to predictive healthcare, along with industry demands, will further pressure the ability to provide meaningful education related to predictive healthcare.

The exponential growth of data will allow many aspects of healthcare to be more predictive. Benchmarks will be established, reducing healthcare variance with increased use of best practices. The trend in personalized medicine contains branches of preventative measures including diagnosis, drug therapy, genomics, holistic health, patient records, IT systems, technology, and patient outcomes (Sadkovsky et al., 2014). These trends



are dependent on healthcare data and processes associated with the collection, analysis, and storage of data. Essentially, predictive data will drive expanded evidence-based medicine and clinical practice.

Adoption of the concept of P-4 medicine could play a principal role in driving a more predictive environment, eliminating unnecessary costs and improving patient care as well as the patient experience. Predictive data will support this position by reducing readmission rates, identifying existing fraud and abuse, ensuring consistency of reliable big data, continuing to reshape payment reform, generating increased transparency on quality outcomes, and highlighting consumer awareness around value-based healthcare decision making. The concepts related to predictive medicine, as well as the increased focus on participatory care concepts, will help provoke valuable discussion within the HIM academic arena surrounding future curriculum development.

### Participatory

In order to stay up-to-date with the healthcare revolution and the focus on systems medicine, big data, and patient involvement in care, the HIM profession must be able to support these driving forces in our practices (Hood & Auffray, 2013). Societal and technological challenges must be addressed through combining systems medicine and big data to fuel a participatory healthcare system. Analytics tools, networks, and use of personal data clouds will be necessary to accomplish these tasks. According to Hood and Auffray (2013), there are several factors that need to be addressed related to participatory medicine. Many of these factors involve HIM principles and include privacy and security, IT tools, education, digital devices, and data cloud integration. Patient-driven care and collaborative interdisciplinary teams are the trends in healthcare that are leading the way for healthcare professionals.

According to Swan, patient-driven healthcare involves greater flow of information, collaboration, and customization; the trend in the use of health social networks, personalized medicine, and self-tracking can help lead to improved healthcare (2009). Health social networks are being used for patients' emotional support and sharing of information. This information needs to be current, reliable, accurate, protected, and easy to share. Personalized medicine includes the collection and storage of detailed individual biological characteristics which allow therapies, drugs, and treatments to be individualized. Consumers may take part in the collection and synthesis of their own data and help to manage their own healthcare. Quantified self-tracking is possible due to being able to capture, manipulate, and store data easily. These trends indicate a shift to patient-driven healthcare. Patient centricity will require education, consultation, and discussion with practitioners in various roles of the organization. As clinical and nonclinical staff work together to provide quality-focused, value-based care, new roles will emerge to facilitate the triple aim in a way that is meaningful for patients. HIM professionals must be prepared to meet these emerging needs.

Healthcare delivery is becoming more collaborative. Current challenges for healthcare organizations and providers are to provide better care, improve population health, and reduce costs. A suggested solution for these challenges is to produce healthcare workers that work collaboratively across the various disciplines (Kirch & Ast, 2015). The education of healthcare professionals must reflect these challenges and address barriers to interprofessionalism to ensure the inclusion of and appropriate sharing of information between all disciplines. Information systems need to use a process-oriented approach to ensure the availability of information for all. Information systems need to support patients as well as professionals in order to support quality care (Wachlander, 2015). Team-based models of patient care require the appropriate sharing of data and patient information. The HIM professional should play a supporting role in information sharing and interdisciplinary clinical teams, according to a study conducted by Sibbald, Wathen, Kothari and Day (2013).

These identified participatory trends are changing the way healthcare is delivered in our country. The healthcare delivery team now consists of clinical and financial care professionals, representing patient care teams, consumers, patients, professionals from HIM, and financial operations all working together.



## Personalized

In addition to the transition toward more participatory care, there is an increased focus on personalized healthcare. Reimbursement models are changing to place a greater emphasis on team-based and coordinated care, which aims to provide care that is based upon a holistic view of the patient. Accountable Care Organizations, Patient Centered Medical Homes, and Hospital Value-Based Purchasing all emphasize the role of putting the patient and his or her particular needs at the center of the care process. The goal is to improve quality and decrease cost by prioritizing the patient's needs and preferences as part of the care process.

The shift to patient-centeredness is evident with statistics that show 30 percent of a hospital's Total Performance Score under the Hospital Value-Based Purchasing Program is associated with patient experience of care (Medicare Hospital Compare, 2016). The Electronic Health Record Incentive Program also illustrates the focus on personalized care. While the program promotes the adoption and use of patient-centered technologies (such as patient portals and secure email) and personal health information management (such as after-visit summaries and electronic access to discharge instructions), the program also requires the collection of patient-specific communication preferences and the provision of patient specific educational resources (HealthIT.gov). The programmatic requirements indicate that healthcare is moving toward a more personalized approach for information collection and use.

Technology advances are also allowing for healthcare treatment to be tailored based upon an individual's genome. This approach is known as precision medicine and is defined as the integration of all data available on an individual patient allowing a comprehensive and collaborative approach to tailor treatments to the patient (National Institutes of Health, 2016). The number of personalized treatments and products increased ninefold between 2006 and 2014, and the cost of genetic sequencing has reduced dramatically over the past decade—the cost of a sequenced genome is around \$1,000 (National Institutes of Health, 2016). As the cost of genetic sequencing continues to fall and the awareness of the benefits continues to rise, the adoption of personalized medicine for treating different conditions will expand greatly. Abrahams and Silver suggest it is estimated that 17,000 strokes could be prevented per year if a genetic test was used to prescribe warfarin. Similarly, it is estimated that more than \$600 million could be saved if colorectal cancer patients received a genetic test for the KRAS gene prior to treatment (Abrahams & Silver, 2009). This integration and alignment of data from disparate sources will demand oversight from HIM professionals not only to manage this data, but to ensure that all regulatory guidelines are adhered to including the protection of and the integrity of the data.

## TRENDS IN HIGHER EDUCATION

Since the AHIMA Vision 2016 report, the infiltration of online learning in higher education has significantly increased and has dramatically impacted higher education. Due to improved access to higher educational offerings through distance-based delivery methods, prospective students have the opportunity to attend programs without the barriers of geographic space, work-related sacrifices, and other commitments that have historically put higher education outside the reach of many Americans.

Although there has been tremendous growth in higher education in the United States, there has also been a reduction in state appropriations and an increase in tuition rates. Average tuition at public four-year institutions, adjusted for inflation, has increased by more than 60 percent in six states, more than 40 percent in 10 states; and more than 20 percent in 29 states (Mitchell, Palacios, & Leachman, 2014). As state funding decreases, colleges and universities must raise tuition costs to produce sufficient income, posing a problem for the average American student. Studies have shown that the cost of college tuition has increased dramatically relative to inflation rates and the median household income (Oliff et al., 2013). In addition to being an issue for students looking to attend college, reduction in federal and state financial aid has caused public colleges and universities to cut faculty positions, eliminate course offerings, reduce library services, and, in some cases, close campuses. This results in diminished access and quality, a significant dilemma in the world of education (Mitchell et al., 2014).



Additionally, colleges and universities in America are experiencing sliding enrollments. According to the National Student Clearinghouse Research Center (2016), over the last three years, enrollments decreased among four-year for-profit institutions (-14.5 percent), two-year public institutions (-2.6 percent), and four-year private nonprofit institutions (-0.6 percent). Enrollments increased slightly among four-year public institutions (+0.2 percent). Taken as a whole, public sector enrollment (two-year and four-year combined) declined by 1.0 percent in the fall of 2016 (National Student Clearinghouse Research Center, 2016).

In an effort to alleviate the distress of high-priced tuition, reduced state funding, and sliding enrollments, other models of education are being used. One such model is a cooperative education program, which offers extensive on-the-job experience and training. Other colleges are implementing a one-course-at-a-time model to ensure students can afford their courses. A third model that is quickly gaining momentum is a competency-based education (CBE) approach (Mintz, 2014). This form of education allows students to advance based on their ability to demonstrate mastery of a skill or competency and focuses on learning outcomes rather than class times (Gruppen et al., 2012). To further reduce tuition costs, mature students with work experience may be able to receive academic credit for knowledge and skills acquired in their former careers. Many of these CBE programs offer industry-recognized certificates or credentials and align their curriculum with nationally recognized standards (The Competency-Based Education Ecosystem Framework, 2016).

Another emerging trend that is gaining momentum and disrupting higher education is microcredentialing. Simply put, microcredentials validate competency in one or more discrete performance areas (Ellis, Nunn, & Avella, 2016). In this model, students are able to navigate their education pathways in a variety of ways—ranging from associate degrees, apprenticeships, educational certificates, licenses, digital badges, e-portfolios, microcredentials, all the way up to doctoral degrees. The microcredential can then serve as evidence of the competencies and skills acquired during their educational journey as well as a portable electronic transcript (Netzer & Reynolds, 2016). This trend is expected to grow in accordance with government initiatives focusing on cost and opportunities resulting from college education.

Not only is microcredentialing disrupting higher education, but it extends into the workforce. Six universities, Georgia Institute of Technology, University of California Davis Extension, University of California Irvine Extension, University of Wisconsin-Extension, University of Washington, and University of California, Los Angeles have been working with employers to leverage ways microcredentialing can help fill the skills gap between employer and employee. The State University of New York (SUNY) and its 64-campus system is working on ways to incorporate microcredentials in its system.

Many colleges and universities see a potential to deliver unique educational opportunities and experiences through alternative educational models. As we move forward in the development of an academic vision for health informatics and information management programs, distance education, competency-based education, microcredentialing, and other areas impacting higher education should be explored and analyzed to determine the best course of action for the HIM profession as a whole.

## WORKFORCE CHANGES

Federal and state initiatives related to education and workforce have a direct impact on students, educators, and practitioners. There are many such initiatives currently underway or in development that have the potential to significantly influence education program development, delivery, access, and, ultimately, employability. In considering a future academic and professional vision, it would be remiss to ignore government or quasi-government initiatives involving certification, paid internships, apprenticeships, and competency-based education.

Many industries have a unique body of knowledge that can be gained through formal education, work experience, or other methods. To ensure those practicing in any given industry have the required body of knowledge, a certification process is often used for validation. Employers look to certifications offered by reputable associations, for-profit companies, vendors, and others to ensure the individuals they are hiring have the skills and abilities required for the role.



Concerns related to value, changes in formal continuing education delivery systems, and advancing technologies have caused the government to espouse the need to ensure that certifications can be measured for value. The concept of the value proposition is as much rooted in the age-old doctrine of “buyer beware” as it is in the open market concept upon which the United States economy is built. Too often there are people who spend hard-earned money taking courses and programs that will lead to a certification, and then learn far too late that the certification is not valuable or recognized in their industry. For these reasons, the government is expending considerable resources in order to better understand how certifications can benefit both the certificate holders and employers. Ultimately, a process that allows individuals to demonstrate workplace competence through stackable, latticed, portable, and competency-based methods is in demand (Ganzglass, 2014). Each of these terms provides guidance about what educators and others providing content leading to certifications should consider as they build their curriculum and knowledge delivery models.

Finally, the ability to truly measure learning at a competency level is critical. Current employer concerns voiced about job readiness of college graduates conflicts with the value statement of academic-based certifications (Jaschik, 2015). Methods to assess skills-based learning in addition to age-old testing are necessary inclusions in education redesign as it relates to certifications and validation of learning outcomes. Additionally, the concept of how students can be recognized for lifelong learning through work and other experiences is essential. It is inefficient and expensive for individuals to pay to take courses to learn material in which they are already proficient. To decrease the probability that this will occur, there must be a way to measure what individuals already know. This issue is one that private and public entities are jointly seeking to solve to achieve the goal of appropriate recognition of knowledge and skills, regardless of the source.

Another current initiative receiving great emphasis and financial support from the government is the development of apprenticeship programs. These programs provide opportunities for working learners to build or expand their knowledge and receive payment for doing so (Bureau of Labor Statistics, 2013). Apprenticeship programs have many types, styles, and methods of delivery. With their roots in manufacturing and unionized jobs, apprenticeship programs are now being implemented in other types of settings and are intended to bridge the gap between what is learned in postsecondary education programs and the skills needed on the job. Education alone is not always the answer to preparing job-ready individuals. Apprenticeships are being examined as a way to quell employer concerns about individuals who come straight from education programs but do not have work experience outside the classroom. Should this trend continue, there will be a need for increased collaboration between schools and employers to ensure the education component of the apprenticeship program effectively prepares the apprentice to meet employer demand.

These are but a few of the many ways the actions of the government directly impact the academic community. The current focus on meeting employer needs is likely to continue to drive change. Academia has long fought against the perception of the ivory tower syndrome and clearly must collaborate more effectively with employers to meet their rapidly changing needs. Teaching and assessment methods must ensure the required learning outcomes are skills-based, competency-based, and aligned with employer needs.

Now is an exciting time for the HIM profession. The dramatically changing landscape of healthcare and education over the last 10 years, in conjunction with the analysis of trends in this document, affords our profession the opportunity to make bold changes today to ensure our professionals remain at the forefront of governance of information, compliance, data analytics, revenue cycle management, and the integrity of health data in the future.

The recommendations contained in this document are designed to provide a foundation for the HIM profession and to build educational strategies and pathways for career advancement.



## RECOMMENDATIONS

- 1. Increase the number of AHIMA members who hold relevant graduate degrees, (e.g. HIM, Health Informatics, MBA, MD, MEd, MPH) to 20 percent of total membership within 10 years.**
  - A. Increase funding of academic scholarships to foster access to higher levels of HIM education to members.
  - B. Increase the number of faculty qualified to teach HIM and related graduate education.
  - C. Implement graduate-level health informatics curriculum competencies to improve the value of and increase demand for health informatics graduate education. These competencies have been developed and will be adopted by schools to assist in supporting this goal.
- 2. In collaboration with other health and health-related organizations, in the public and private sectors, build a mechanism to ensure availability of research that supports health informatics and information management.**
  - A. Provide competitive research grants on an annual basis aimed at promoting health informatics and information management practice.
  - B. Provide dissertation scholarships to health information management and health informatics professionals conducting research in doctoral programs.
  - C. Focus on research to support the value of HIM skills and the need for data analytics to manage data for strategic, fiscal, and population health purposes.
- 3. Increase the opportunities for specialization across all levels of the HIM academic spectrum through curricula revision, while retaining a broad foundation in health information management and analytics.**
  - A. Curriculum revisions to support specialization at the associate level (timeline: new curriculum available for use by August 2019 or earlier, although required implementation date will likely be 2021 or later).
    - i. Condensed HIM core at associate level and incorporate specialization opportunities at student and program level. The core will include content from all domains, and the number of competencies in the nonspecialty content area is to be significantly reduced.
    - ii. Align HIM accredited academic specialties with future HIM-related credentials; consider and encourage higher level education to achieve higher salaries.
    - iii. Focus effort on creating tracks at two-year program level based on emerging specialties as indicated by employer need (and to be determined by market research in 2017). Program accreditation continues, as does the associate level degree, but it is based on a condensed set of HIM core content and deeper specialty content. Each school determines an appropriate specialty track or the appropriate number of tracks for their program and their regional market needs.
  - B. Broader HIM core at baccalaureate level
    - i. Align core HIM competencies with requirements for HIM credential maintenance.
  - C. Condensed core at Master's Health Informatics and Health Information Management with specialization opportunities at program level.
- 4. RHIA credential is recognized as the standard for HIM generalist practice and the RHIT (+Specialty) as the technical level of practice.**
  - A. Transition the RHIT credential to a specialty focused associate level over a multi-year, multi-phased approach.
    - i. January 2017–July 2021: Current and new RHITs (those who receive the RHIT designation by July 2021) permanently retain RHIT credential.
    - ii. Ongoing transition support for RHITs who want to transition to the RHIA credential will be provided (2017–2027). For example, consider a new opportunity for RHIA certification through a proviso approach that would allow individuals with a baccalaureate degree, who are also currently RHIT-certified, to take the RHIA exam for a specified period of time consistent with the recommendations of the HIMR taskforce and CCHIIM approval.





- iii. August 2021–December 2026: Transition of RHIT credential from RHIT to RHIT + (Specialty Designation).
  - a. Develop and distribute materials to communicate this transition to the market.
- B. Ensure clear pathways exist between associate and baccalaureate HIM programs to encourage existing HIM professionals and new entrants to the HIM profession to earn a baccalaureate degree and a RHIA credential.
  - i. Increase from the existing 26 percent to 40 percent of the current technical level; membership will advance to a minimum of a baccalaureate degree by 2027.
  - ii. Curriculum must be designed to allow seamless transitions from the associate level to the baccalaureate and from the baccalaureate to the master's level.
  - iii. Focus efforts on recruitment to illustrate the value of higher academic preparation.
  - iv. Provide support to educational institutions to transition programs, as appropriate and when possible, from associate level to baccalaureate level and from baccalaureate to master's level.
- C. Align certification processes with industry and education needs.
  - i. Ensure certification examination process supports the ability of HIM to be more quickly aligned with future industry needs.
  - ii. Align CEU requirements with future-focused employer needs that ensure the recognition of the HIM profession.

## SUPPORTING RATIONALE

**Rationale for Recommendation 1— Increase the number of AHIMA members who hold relevant graduate degrees, (e.g., HIM, Health Informatics, MBA, MD, MEd, MPH) to 20 percent of total membership within 10 years.**

The advancement of professions is not a new concept. This has been a focused concern in areas such as nursing, dental hygiene, and education. If we consider a profession to be an entity that constantly increases its body of knowledge, functions independently in development of policy, and upholds high standards related to conduct and achievement, then advancement in the health information profession is inevitable (Boyleston & Collins, 2012). As other healthcare professions expand and mature, there is an expectation for highly trained professionals in these areas. HIM is no exception. The rigor of HIM programs has steadily increased to meet changes in the environment, and entry into practice needs to reflect these changes. Professions such as physical therapy and physician assistants have advanced their educational models to reflect advances and trends (Boyleston & Collins, 2012). Because healthcare is interdisciplinary and relies on data, healthcare professionals need to advance simultaneously.

Boyleston and Collins (2012) cite a June 2002 multidisciplinary Institute of Medicine (IOM) summit that spoke to health professions not being sufficiently prepared to meet the changing healthcare system needs. Although the committee addressed clinical education and curriculum, it also included informatics in its recommendations. The concept of using core competencies to advance entry-level education of clinicians has been suggested and implemented for professions such as physical therapy, nursing, occupational therapy, respiratory therapy, and physician assistants (Boyleston & Collins, 2012). Following suit, HIM must reform entry-level practice models to keep pace with the changing healthcare environment and ensure viability of the profession.

Darby (2009) indicates that many health professions are now at the graduate level due to advances in technology, knowledge, and new scientific evidence. In addition, there exists a need to avoid curricula that surpass credit and time limits for a baccalaureate degree and to award a degree that is appropriate to the challenging academic preparation and intricacy of practice (Darby, 2009). This applies to the profession of HIM as well as clinical professions. According to Darby (2009), practitioner models that include specialty graduate degrees have been able to improve patient access to primary care. The Monthly Labor Review issue of December 2013, published by the Bureau of Labor Statistics, suggests that from 2012–2022, occupations requiring a master's degree for entry are expected to grow to 18.4 percent.



At present, less than 12 percent of AHIMA’s total membership hold an advanced degree of any type (see Figure 1). Advanced degrees are more commonly held by RHIA’s than any other credential—44 percent of AHIMA’s advanced degree holders hold a RHIA, followed by CCS (21 percent), and RHIT (11 percent). At present, 11.7 percent of the total AHIMA membership hold master’s level degrees or higher, while 1.7 percent of AHIMA’s total membership holds a doctoral degree (e.g., MD, JD, PhD, etc.). More than half of all AHIMA members hold an associate degree or less as their highest degree. To meet the challenges of an increasingly complex healthcare system, the current HIM profession educational level must also increase.

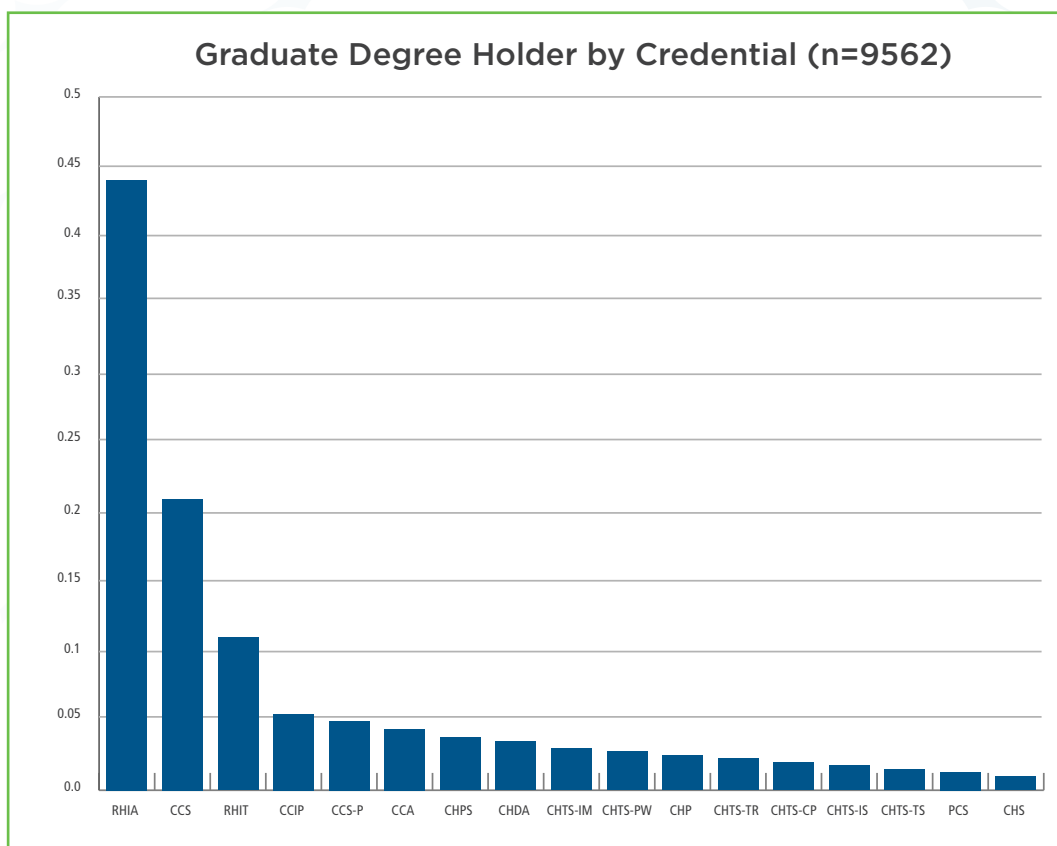


Figure 1

### OTHER PROFESSIONS

Several other health professions have instituted higher educational standards to advance their professions. The American Physical Therapy Association (APTA) indicated in its Vision 2020 that by the year 2020, physical therapy will be delivered by therapists who hold a doctorate in physical therapy. The American Occupational Therapy Association (AOTA) transitioned occupational therapy professionals from being known as occupational therapy aides to being known as therapists by developing programs with educational standards for the two entry-level degrees of master’s and doctoral. In physician assistant programs, the move toward the entry-level master’s degree began in the 1980s due to a desire to have well-educated candidates and rigorous curriculum, and to follow other health professions that moved toward a master’s level profession. Nursing has moved from a hospital-based training program to suggesting the minimum standard be at the baccalaureate level. The Tri-Council for Nursing in 2010 called for nurses to advance their education to the baccalaureate level and beyond (Boyleston & Collins, 2012). Although the above-mentioned professions are clinical and require licensure, we cannot segregate this trend from health professions that are technical or administrative in nature. One factor to consider is the necessity of HIM growth and expansion in order to keep pace with and support clinical and technical advances. For example, evidence-based practices need the support of EHR data and incorporation of



standardized data sets to improve quality care. Clinical professions are using these tools to improve efficiency and quality, but these advances need the support of HIM professionals with advanced knowledge in this area (Sweeny, 2010). Due to the globalization of healthcare, there is an increasing demand for health outcomes data (Abbott & Coenen, 2008). HIM can support this increased need for data by clinical professionals through advances in health data analytics. The number of HIM professionals with advanced degrees necessary to teach in master's programs was an insurmountable hurdle. With dedicated effort, the number of HIM professionals who hold advanced degrees has increased from 8 percent to 12 percent since Vision 2016 was released; this is not yet sufficient for recommending an entry-level master's in HIM at this time.

## REASONS FOR ADVANCEMENT

The scope of the HIM profession is now too broad to include all the content in one entry-level curricula. According to Darby (2009), this is the case with dental hygiene as well. It is not possible to master all there is to learn by adding it to the existing associate or baccalaureate level degrees. Other aforementioned healthcare professions have progressed to advanced or specialized roles using graduate degree programs (Darby, 2009). According to Darby's 2009 article, there are seven main categories that justify the need for an Advanced Dental Hygiene Practitioner at the master's level. Five of these categories can be directly applied to the HIM profession as well. The first is the complexity of the profession. The scope of practice has expanded so greatly that the entry-level competencies can no longer be covered at the associate level, or perhaps even the bachelor's level. This is related to the second category of curriculum creep, or trying to fit too much into entry-level curricula. Adding more to an associate or bachelor's degree program is not the answer, yet as new jobs emerge related to new content, the temptation to add it to the curriculum is great. Next is the level of responsibility associated with higher-level skills. Asking a practitioner to know and perform these skills should be at an appropriate level and associated with the appropriate degree. In addition, collaborative practice is necessary in healthcare today and HIM professionals need to collaborate with physicians and other master's- and doctorate-level professionals. Last, HIM professionals need to be in executive positions to be represented at the policy table. Government and institution policy boards that make decisions about healthcare should include HIM professionals; individuals are more likely to be included if they possess a master's degree or higher (Darby, 2009).

Technology has made a huge impact on healthcare. For example, as a result of the EHR and the ONC initiatives to improve quality and access, the role of HIM professionals has evolved. Access to information, interoperability, improved security, and improved quality of care has broadened the role and knowledge necessary. Escobedo, Kirtane, and Berman (2013) support the need for health information technology as a path to improved care transitions. The need to leverage technology and use core knowledge of EHRs will improve patient and practitioner involvement in healthcare. Escobedo, Kirtane, and Berman (2013) encourage the involvement of health professionals, providers, and consumers to invest in and integrate technology to support healthcare, which is another area where HIM professionals need advanced knowledge to support healthcare. Similarly, Goddard et al. (2004) indicates that a transition has taken place from merely providing data to providing information or knowledge, which will allow for improved decision making and emerging roles for HIM such as data stewards, analysts, and others.

Globalization and advances in information communication have made an impact on healthcare. Sharing health information globally allows access to new knowledge that can improve healthcare. Telehealth, interoperable EHRs, and telecommunication expand healthcare and promote the health of all (Abbott & Coenen, 2008). HIM professionals need to expand their skills and knowledge in order to support all aspects and all health professions.

HIM curricula have expanded to include six primary domains and 32 subdomains. According to AHIMA's membership database, advanced degrees held by AHIMA members only increased 1 percent from January 2014 to January 2016. Master's degrees held by AHIMA members increased during the same time period from 9.32 percent of membership to 10.08 percent of membership (a less than 1 percent increase). Vision 2016 discussed broader professional roles, including new tasks and knowledge requirements for HIM, as well as a more global vision. This is supported by the literature, and if we are to continue on this path, advanced degrees are necessary for professionals in order to obtain the necessary knowledge.



All across the nation, higher education is faced with faculty shortages. This is true for HIM as well. Despite the projected growth of HIM professionals over the next decade, there is an underlying challenge facing the profession, which is finding qualified faculty to teach. A recent report from the Association of Academic Health Centers (AAHC) reveals that 94 percent of the 31 reporting CEOs declared faculty shortages as a problem in health profession schools.

Data from previous white papers on HIM education (1986, 1999, Vision 2016) reveal faculty shortages as a major issue (Vision 2016). Most HIM programs include a wide range of specific content grouped in the domains of health information data management, clinical classification systems, information technology and systems, and organization leadership. As the field advances with the implementation of the EHR and more complex organizational structures and information technologies, the breadth and depth of training for the HIM professional expands even further. The faculty expertise needed to teach these varied and complex topics must be drawn from a number of specific disciplines, as well as from HIM practitioners. Finding faculty who have the content expertise, the willingness to apply that expertise to HIM academic programs, and advanced academic degrees at the master's and doctoral levels is challenging (AHIMA Vision 2016).

Having enough doctoral-prepared faculty to teach in graduate HIM programs continues to be an issue. Currently, there are 2,563 HIM credentialed professionals who indicate their primary place of employment is an educational setting. The AHIMA membership database reveals that 8,341 AHIMA members now hold an advanced degree (master's or higher). Clearly, many HIM professionals with advanced degrees are working in practice-based settings rather than in educational settings. In addition to increasing the number of HIM professionals with advanced degrees, there is also a need to create an appealing pathway to attract competent and academically prepared HIM professionals to higher education as a career.

**Rationale for Recommendation 2—In collaboration with other health and health-related organizations, in the public and private sectors, build a mechanism to ensure availability of research that supports health informatics and information management.**

In order to advance any profession to a “discipline,” a significant body of knowledge and research must exist. In the future, if a doctoral degree in HIM is proposed, it may be established as a research-based discipline, or a professional doctorate with a focus on mastery of subject matter and techniques extending the current knowledge in the field. Increasing support for research for publications and contributions to the HIM body of knowledge is critical and also a way to advance the membership and encourage master's and doctoral-level research. In professions, as well as organizations, survival and success center on the ability to adjust and remain relevant. According to Fabian (2010), “The commitment to relevance is honored when an organization looks daily at its environment to see where new trends or circumstances are emerging that hold meaning for the organization.” New trends require research in order to develop curriculum and educate practitioners.

In order for any practice to be considered a profession, an organized body of knowledge must exist (Agresti, 2008). One of the fundamental characteristics of a profession is control over a discrete body of knowledge (Morris, Crawford, Hodgson, Shepard, & Thomas, 2006). A discrete body of knowledge will help distinguish the HIM profession from other related professions. Agresti (2008) discusses a necessary body of knowledge for the information technology profession indicating a body of knowledge should express internal relationships and external relationships. According to Agresti (2008), internal relationships include topics related to curriculum and professional practice; external relationships link practice of the profession with society as a whole. The body of knowledge needed in the HIM profession should include these relationships as well. Master's- and doctoral-level research would greatly contribute to the necessary body of knowledge and help support practitioners in their current and future roles.

Developments in healthcare have been driven mainly by developments in technology and biomedical research (Jaja, Gibson, & Quarles, 2013). Genomic medicine is one example of how scholarly research in a new area is necessary not only for clinical progress, but as it relates to the collection, analysis, identification, protection, and storage of health information. This is an area of medicine that will be growing in the future and will have future ramifications for HIM professionals. As new fields emerge, it is important for the profession to have a



path of education (professional doctorate) intended for researching the impact on HIM. Research resulting from the professional doctorate will assist HIM practitioners as the profession continues to evolve and new opportunities are presented.

As roles in HIM expand, so does the curriculum and knowledge needed to support these. One of these new roles is next-generation analytics. According to Krumholz (2014), using big data and next-generation analytics in population health and clinical research requires new data sources, new training, new tools, and new thinking. Challenges in doing so are current major gaps in the existing quality and quantity of data as well as privacy issues related to sharing of this data (Krumholz, 2014). This is an example of the need for higher level education and research to support solutions to new challenges. Institutions looking to hire master's prepared individuals able to address such issues may hire those in other professions if the HIM field cannot fill their needs. By increasing the pool of master's- and possibly doctorate-level prepared professionals in HIM, we can ensure the availability of research that will add to our discrete body of knowledge. This body of knowledge will support research as well as practitioners in the field.

**Rationale for Recommendation 3—Increase the opportunities for specialization across all levels of the HIM academic spectrum through curricula revision, while retaining a broad foundation in health information management and analytics.**

Two primary factors motivate this proposed recommendation. First, employer demand for in-depth, specialized skills and more foundational skills in communication, teamwork, and other aspects contributing to workplace success. According to Jaschik, “Application of knowledge and skills in real-world settings, critical thinking skills, and written and oral communication skills are areas in which fewer than 3 in 10 employers think that recent college graduates are well prepared” (2015). A survey conducted by The Economist Intelligence Unit noted a disconnect between academia and industry, and employer expectations for students graduating with critical thinking, collaboration, communication, and technical skills associated with the job are not being met (2014). Dissatisfaction with the performance of new college graduates is echoed in a study by internships.com that revealed “nearly 1 in 4 employers say recent college grads are unprepared for entry-level positions, with 37 percent of employers finding it difficult or very difficult to find qualified candidates” (Internships.com). Findings such as these are indicative of the need for increased focus in academia on job-specific skills and the need to ensure students have the time to appropriately develop critical thinking, communication, collaboration, and other valuable career skills. A 2016 AHIMA Foundation study showed “that a skills gap has been recognized by both employers and educators in the field of health information,” suggesting that the HIM profession is not immune to the kinds of concerns noted earlier in this paragraph (Jackson, Lower, & Rudman, 2016).

The foundation of the HIM profession—ensuring complete and accurate clinical information for effective treatment and management of healthcare organizations—will continue to be essential for healthcare in general. In fact, survey results from the 2014 AHIMA Workforce Study (a survey of 3,370 HIM and non-HIM professions conducted in 2014) lends support to this idea of the rapidly changing work environment for HIM professionals. The study indicated that HIM and non-HIM professionals agree that a core set of skills will be vital to the HIM professional of the future. However, the report concludes that “the level and sophistication of performance of many existing skills will significantly increase as HIM professionals become less involved with coding and more involved with interpreting, analyzing, and supporting clinical and business decisions across the healthcare spectrum.” Interestingly, the survey found that the majority of HIM professionals are expected to perform four or fewer tasks in the future (2014, p. 21). Healthcare will continue to transition in the coming decades, thus, forcing significant change on the HIM profession. Coupled with the widening breadth of scope of the HIM profession as a whole, the ability of HIM educational programs at the associate level to effectively meet employer demands is endangered. A primary benefit of the generalist nature of the existing HIM curricula is that students can potentially find employment in a wide variety of roles; however in many cases, associate degree students are not obtaining the requisite employer desired skills due to the breadth of competencies currently required in the associate curriculum (Jackson, Lower, & Rudman, 2016). The expansion of curricula requirements has been a growing concern in the HIM academic community as well, with educators lamenting their



inability to cover all the content requirements in the limited time they have with students. In addition, there are an increasing number of states regulating a decrease the total number of credit hours allowed for various degree levels.

The challenge of balancing the dichotomies that exist between industry and education is significant and not contained to the formal education process, but extends also to certification mechanisms used to validate learning. AHIMA's strong entry-level certifications offer the opportunity to ensure students exiting associate programs have the ability to demonstrate their specialized skills. Alignment of the certification exams to meet employer needs is another important factor in this discussion. Looking toward the future, employers are interested in certification testing that validates specific rather than general knowledge attainment and assesses critical thinking, communication, collaboration, and other career success skills. This is a prime opportunity to ensure specialty exam alignment with the curriculum and employer needs, and at the same time to increase awareness of the value of specialty certifications in the marketplace.

Associate degrees will continue to be in high demand; however, the current generalist structure can no longer provide the level of competency required to meet the demands of the rapidly changing healthcare market. Knowledge workers, defined as “employees such as data analysts, product developers, planners, programmers, and researchers who are engaged primarily in acquisition, analysis, and manipulation of information as opposed to in production of goods or services, are in higher demand, and are at reduced risk of this automation replacement” (businessdictionary.com). Transitioning HIM to a knowledge worker level is critical for the advancement of the HIM profession. A recent Pew Research Center analysis supports this finding and indicates “that for the past several decades, employment has been rising faster in jobs requiring higher levels of preparation—that is, more education, training and experience” (Pew Research Center, 2016).

In 2013, Frey and Osborne studied the susceptibility of various occupations to computerization. Of note are the additional relationships observed in this study related to wages and off-shoring of work in various occupational settings. The results of this study suggest that medical records and health information technicians (the standard occupational classification (SOC) where health information coders are classified) are at 91 percent risk of computerization. While a unique SOC for informatics professionals did not exist at the time this study was conducted, automation for these types of roles would likely be far less since these roles typically fall into a knowledge worker level. Similarly, results of the 2014 AHIMA Workforce Study validate this risk. According to results of focus groups and telephone interviews with 24 healthcare professionals (HIM and non-HIM), “Almost all participants who commented on the future demand of coding professionals foresaw significant decline in demand in the next 10 years. Some thought that the demand would go up in the short term and then decline as the conversion to ICD-10 was undertaken and completed. Most thought that demand for coders would decline significantly in the next decade” (AHIMA 2014). These findings were consistent with results of a survey of HIM and non-HIM professionals related to reported importance of specific skills currently and in the future, as well as reported time spent on tasks currently and in the future. Coding was projected to have the largest decline in percentage of time spent on the task in the future. The survey also asked respondents to rank the importance of specific skills today and in the future. The results show that “coding skills [had] the greatest movement in terms of rank order for both employers and health information management professionals moving from rank order 1 for today to rank order of 21 and 25 respectively for the future” (AHIMA.com). Finally, for SOC 11-9111, which represents medical and health services managers, and where many RHIA's are classified, the susceptibility of the job to computerization is less than 1 percent (0.73). AHIMA data suggests that nearly 43 percent of RHITs work in HIM technician roles (e.g., coding) and over 15 percent of RHIA's fall into this same category (see Figure 2).

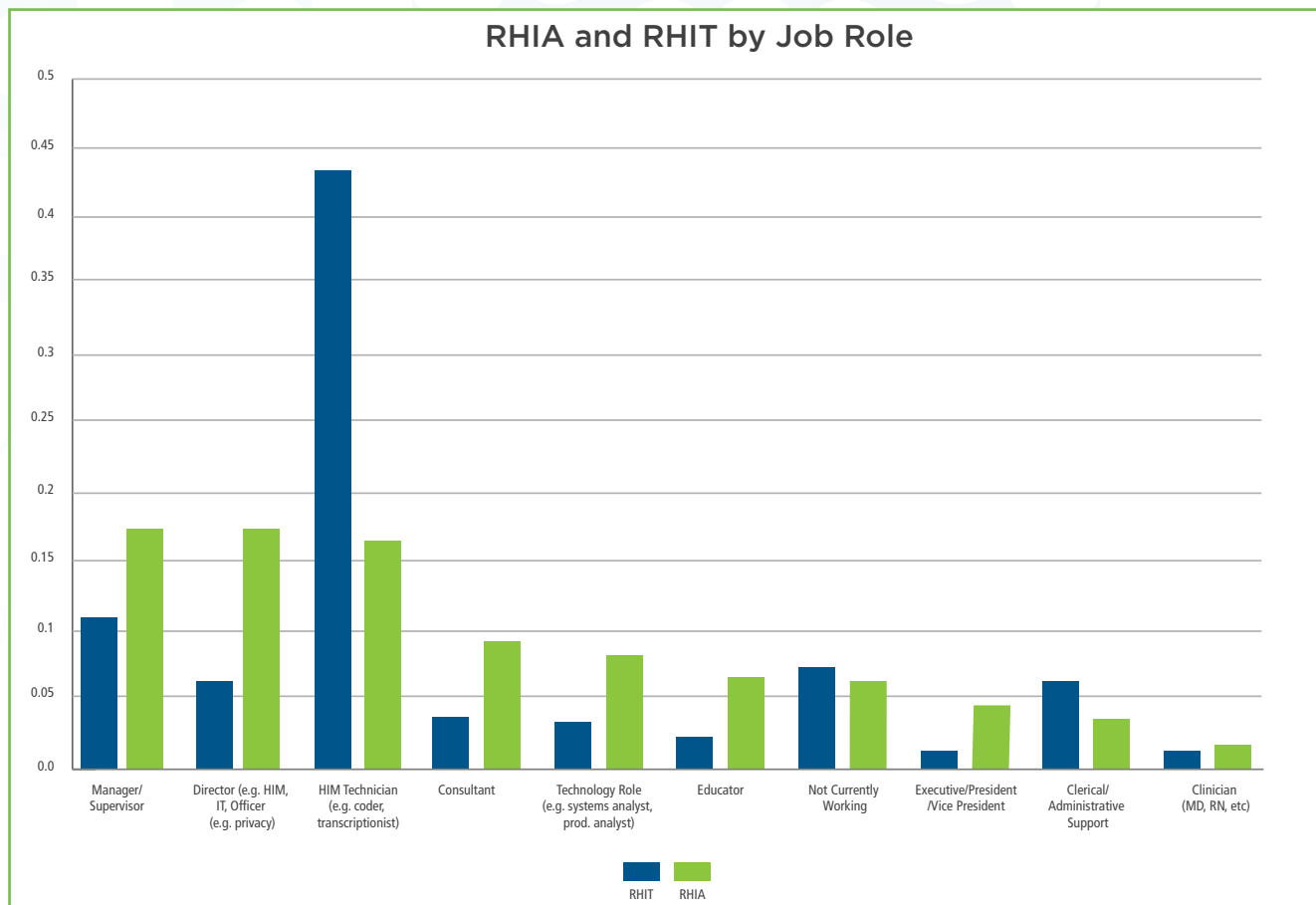


Figure 2

Future jobs in ambulatory settings, or those where application of specialized and deep knowledge is used to create actionable information from data, are areas of growing need (Sandefur, Marc, Mancilla, Hamada, 2015). Others have discussed how the increased use of technology will create new roles for HIM professionals, such as coding auditors, data quality management specialists, analytics specialists, and patient advocates (K. Grant, personal communication, April 19, 2017). While the future cannot be foreseen, we can certainly look for strong predictors to be prepared for whatever it may hold. Previous research has indicated that the most important roles for HIM professionals fall into the domains of technical business, financial, information technology, compliance, and analytics, as well as increased need for competence in the nontechnical areas of leadership, communication, and consumer engagement (AHIMA, 2014). In fact, HIM professionals rated big data analysis, informatics, data mining, and system development as the most important competencies for the future of health information professionals in the future (Sandefur, Marc, Mancilla, & Hamada, 2015). This is echoed by others in the industry who predict “the nature of the HIM managerial role is shifting from department management and supervision to management of HIM knowledge workers” (Kloss, 2012). Others have noted a growing convergence of health information management and health informatics competencies that will drive specialized skill development in an age of rapid implementation health information technology (Gibson, Dixon, & Abrams, 2015).

A plethora of supporting evidence is noted in the introductory section of this paper that suggests healthcare is expected to become more preventative in nature. Prevention starts in a patient’s home, and at an individual level where outpatient and ambulatory settings are the venue of choice to achieve the goals of increased prevention. These transitions occurring in healthcare will create new opportunities for appropriate management of health information in settings where HIM professionals can further demonstrate their expertise. Having the ability to specialize through curricula that is more flexible and responsive to changing industry needs will allow educators and graduates to be prepared to fill these new roles.



The baccalaureate level of HIM education is also not immune to the need to become more specialized. A notable difference at this level of education is that there is more time to prepare students to meet curricula competencies, although with more general education coursework often required in baccalaureate level education, it is not always a lot more. During a baccalaureate-level program there is additional (and often state-mandated) focus on many of the skills that employers are identifying as current areas of weakness. For example, additional coursework in oral and written communications is often required at a baccalaureate level of education. Since the types of work-related positions that require a baccalaureate degree are often managerial and leadership focused, the HIM core content should be broader than what is found in the associate level. Managers and leaders must have this broad core to be able to effectively function in settings that are becoming far more interdisciplinary and cross-collaborative.

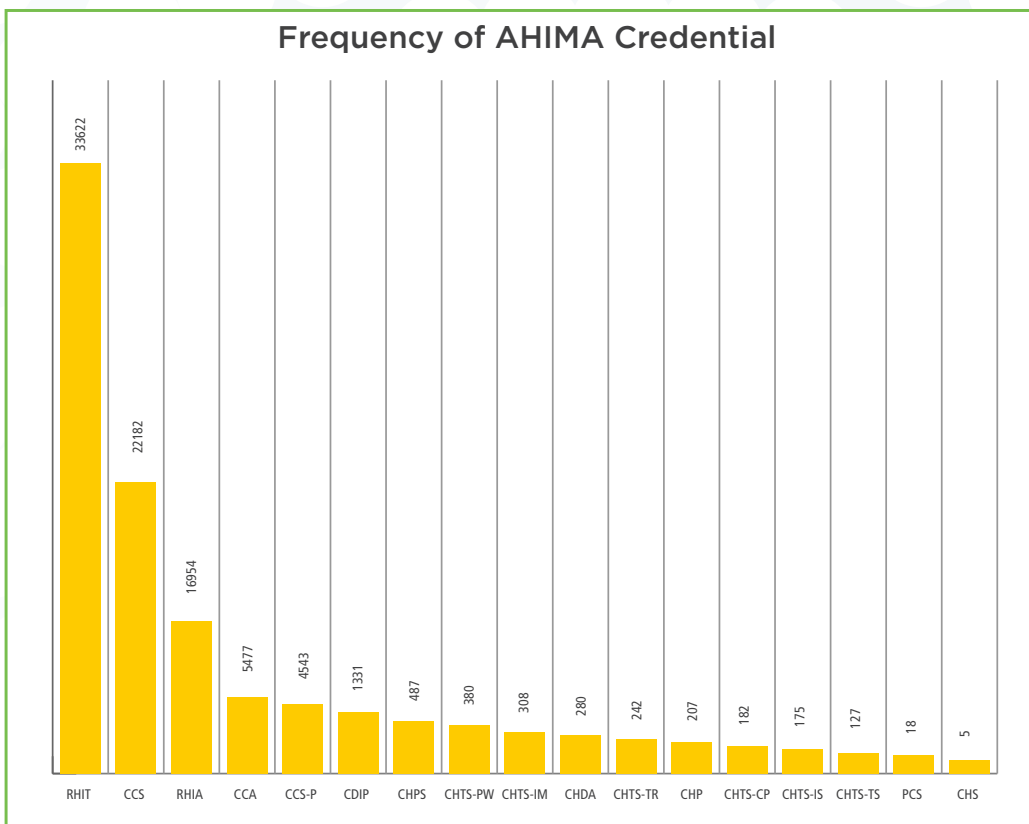
As curricula redesign is conceived in the future, the challenge will be to ensure appropriate differentiation between the academic levels and clear content for specialization. Knowing the significant impact that curricula revisions have on educators and students, a careful and thoughtfully planned approach is necessary. Curricula redesign work will begin very early in the HIMR proposed timeline. Frequent communication, requests for input, accreditation and certification alignment, and an overall change and communication strategy will be followed. The important work done in the 2014 curriculum revision process has placed HIM well ahead of the demand for programs based on measureable student competencies. This same competency focus will continue to expand as the result of state and federal initiatives to ensure learning is relevant, transferable, and measureable.

**Rationale for Recommendation 4—RHIA credential is recognized as the standard for HIM generalist practice and the RHIT (+Specialty) as the technical level of practice.**

Automation, advancements in technology, consolidation, and outsourcing are influencing the healthcare landscape and impacting employment for various roles held by RHITs. Computer-assisted coding is an area of particular concern, given the large proportion of HIM professionals who report coding as their primary role. ICD-11 is another complicating factor as it is a code set designed to be completely embedded in the electronic record as described by the World Health Organization (WHO); the codes in ICD-11 will be selected by the provider and moved through to billing, eliminating the need for separate code selection. Organizations may choose to include quality monitoring protocols to verify proper code selection and to provide education as well. Although the WHO has announced a 2018 release date for ICD-11 outside of the United States, it is recognized that the timeline may be far extended, particularly in light of how the United States chose to implement previous code sets outside of the suggested timelines.

According to analysis conducted by Frey and Osborne (2013), 702 occupations are susceptible to automation from computer technology. Many HIM roles are at great risk of automation over the next decade which will significantly impact the HIM profession as a whole. The study also finds there is a strong, negative relationship between education level, wages, and the risk for automation. In an effort to maintain the relevance and integrity of the RHIT, a re-alignment of the credential to the industry is required. Market research will be conducted in 2017 to understand where opportunities exist in order to provide support to providers and employers as well as to add value to the organization. Changes in healthcare require different skill sets and areas of concentration. The mandate of the HIMR taskforce is to determine which skill sets are necessary for roles that have not yet been created. Isolating specializations will take place after analysis of technological impact to HIM, demographic and geographic considerations, as well as an investigation of HIM roles in alternative delivery systems. The current curriculum competencies focus on acute care, yet currently only 32 percent of healthcare spending is in hospitals (CMS.gov), and we know that predictions for the future of healthcare are looking to acute care as a last resort for most cases. Specialization may include competency-based credentials or curriculum changes in education-based credentials. Areas of specialization will be finalized once market research is concluded. AHIMA's 2015 workforce study notes HIM professionals recognize data analysis as the top-needed skill in the future, yet currently only 280 individuals hold the CHDA credential (see Figure 3).





**Figure 3**

Of CHDA holders, 54.8 percent also hold a RHIA credential, 15.4 percent also hold a RHIT credential, and 39.4 percent either only hold the CHDA or also hold an AHIMA credential other than the RHIA or RHIT. Figure 4 displays the top 30 AHIMA credentials and credential combinations. AHIMA continues to recruit a great proportion of noncredential holders to sit for specialty credentials, and that work needs to be done to continue to train and prepare current credential holders to obtain the specialty credentials.

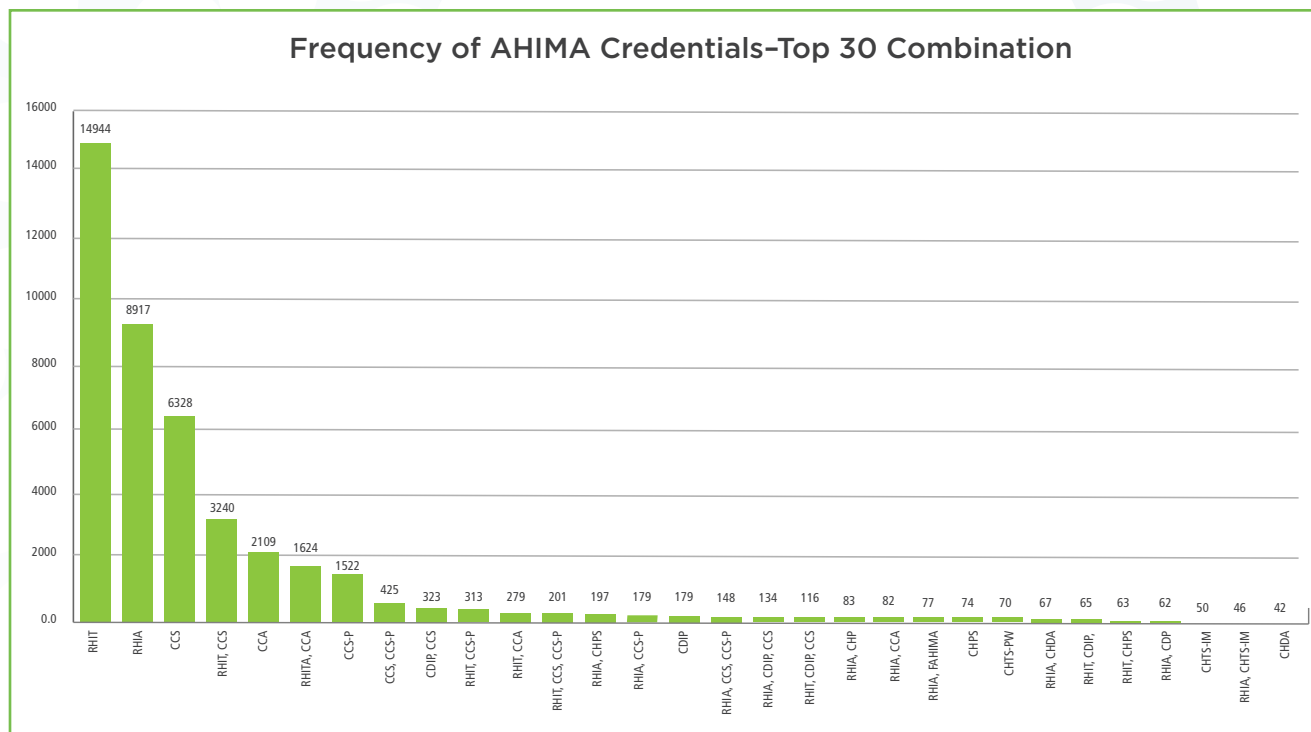


Figure 4

Initiatives like information governance (IG) reinforce the foundational principles of health information management while also expanding the need for knowledge in other IG competencies including data analytics, data governance, enterprise information management, information technology, privacy, and security. These additional skills are necessary to support an “organization-wide framework for managing information throughout its lifecycle and supporting the organization’s strategy, operations, regulatory, legal, risk, and environmental requirements” (AHIMA.com). Information governance roles highlight HIM professional skill sets but also expand the roles to ensure relevance across the entire organization. As HIM roles are enhanced, educational competencies will need to reflect a higher level of learning to align with an enterprise focus and skills beyond medical records.

Education alignment with future roles is critical to the success of the health information profession. Through curriculum development and adoption, heightened education competencies will balance industry demand as healthcare becomes more and more complex. An increase in educational requirements has been noted across professions. A bachelor’s degree (or higher) is necessary for many allied health professions in the inpatient environment. Establishing a bachelor’s degree requirement for the generalist HIM credential will expand the visibility of health information professionals within healthcare enterprises and promote an education ladder to encourage professional development through education and to create meaningful pathways for career advancement. According to the results of the 2013 RHIA Job Analysis conducted by KNAPP & Associates, nearly half of all respondents holding the RHIA credential were in a management or director-related position, whereas the RHIT job analysis (prepared by Pearson) indicates approximately 18 percent of respondents holding a RHIT credential reported working in a management or director-related position. More than 75 percent of all respondents holding a RHIT credential reported currently working in a HIM technician role (i.e., coding or transcription).



According to the results of the RHIT job analysis, only 8.4 percent of RHIT credentialed respondents reported plans to earn the RHIA credential. A strategy to provide HIM students with educational pathways leading to advanced degrees and credentials is crucial to the survival of the profession. Career progression and advancement will be easier to obtain with clear pathways to higher degree levels. Currently, the Commission on Accreditation for Health Informatics and Information Management (CAHIIM) accredits, or is in the process of accrediting, 378 HIM academic programs. The vast majority of these academic programs are associate degree programs (80 percent). Baccalaureate programs account for 18 percent of the total programs. For this academic transition strategy to be successful, emphasis must be focused on creating curriculum competencies that effectively and efficiently transfer between associate and baccalaureate programs. Academic and career laddering will allow for a student to progress through education and achieve certification leading to promotion and career advancement.

Differentiated curriculum at all three levels of education based on research identifying areas of specialization will allow students to expand their knowledge base. Health information professionals will be able to come into the education/certification pathways at multiple levels, increasing the opportunity to enhance skill sets and master additional competency. Agreements between educational institutions will pave the way for pathways to ensure affordable relevant education and lay the groundwork for student success. Changes in future market needs motivate the profession to advance our education base as quickly and efficiently as possible. Technology, delivery settings, demographic and geographic considerations impact how HIM is conducted. Given these considerations, the competencies necessary to manage HIM within these rapidly changing environments must add value.

An additional pathway to achieve the RHIA credential is included in recommendation 4 and focuses on implementing a proviso that would allow those RHITs with a bachelor's or higher degree to sit for the RHIA exam during a specified window of time. This is similar to a proviso that was offered from 1999 through 2004 and was very successful. AHIMA's membership database reflects that 3,902 RHITs have transitioned from RHITs to RHIAs as far back as data has been collected. Eligibility criteria for this pathway would be recommended by the HIMR task force and CEE and considered for approval by CCHIIM. There are currently 4,620 AHIMA members that would potentially be eligible for using this proviso to obtain the RHIA credential.



## CONCLUSION

The future success of the HIM profession will depend on how responsive the profession can be with regard to changes in the delivery of healthcare and the ability to respond to the P-4 medicine concepts—preventative, personalized, predictive, and participatory—by addressing the HIM competencies inherent in each of the following four pillars: data analytics, entrepreneurship, patient advocacy, and IG, as well as addressing the privacy and security of the data in these four pillars.

The recommendations in this document also seek to respond to the changes and demands in the workforce by focusing education on skills, abilities, and leadership needed to advance the HIM profession, streamlining educational pathways, and providing opportunities for HIM professionals to advance at every level. A key difference in the ability to operationalize these recommendations from Vision 2016 is the ever-increasing availability of online programs offering certificates and degrees specific to HIM and the growing informatics field. These offerings will likely continue to expand and grow as technology continues to advance in the delivery of education and healthcare delivery. This educational delivery mechanism is particularly useful to career changers and those advancing from associate to baccalaureate levels and from baccalaureate to master's levels.

The recommendations called for in this paper are being implemented with forethought and planning. Foundational market research must identify the skills needed by employers in the future. In addition, understanding employer preferences for specialization and how to best implement them is an important part of the work ahead. If the market research results do not support the HIMR recommendations, then additional revisions will be made to address the concerns in contemporary HIM education. At the root of the situation, curriculum competencies must be relevant to meet workforce needs. The processes that have been in place for years to ensure that curriculum competencies are informed by research will continue, though we must get better at preparing for future changes in a timely manner. Given the changes noted in HIMR related not only to healthcare but also to education and credentialing, academic program design features must also be revised. Simply stated, HIMR recommends both curriculum and program design revisions.

This is an exciting time for HIM professionals as we pave the way for a future of HIM professionals to serve healthcare in ways that are more relevant and contributory than ever before. This excitement may be accompanied by fear of the unknown. As a profession, let's move forward together to provide the workforce with what they need from HIM professionals of tomorrow. According to a Greek proverb, "Society grows great when old men plant trees whose shade they know they shall never sit in." HIM professionals are proud of their heritage and need to do all that can be done to plant the seed for the next generation of HIM professionals.



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