
Job Analysis of the Registered Health Information Administrator (RHIA)



Conducted on behalf of

**American Health Information Management
Association (AHIMA)
233 N. Michigan Ave., Suite 2150
Chicago, IL 60601-5800**

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Prepared by:

Nancy Thomas Ahluwalia, SPHR



Test Development: Test Design Team

2000 Lenox Drive; Lawrenceville, NJ 08648 USA

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TABLE OF CONTENTS

LIST OF FIGURES.....	iv
LIST OF TABLES.....	iv
LIST OF APPENDICES.....	v
EXECUTIVE SUMMARY.....	vi
INTRODUCTION.....	1
METHOD.....	3
1. CONDUCT OF PLANNING MEETING(S)	3
2. DEVELOPMENT OF THE SURVEY	3
3. DISSEMINATION OF THE SURVEY.....	7
4. ANALYSIS OF THE SURVEY DATA.....	7
5. DEVELOPMENT OF THE TEST SPECIFICATIONS FOR THE RHIA	9
RESULTS.....	10
SURVEY RESPONSE RATE	10
DEMOGRAPHIC CHARACTERISTICS OF SURVEY RESPONDENTS	10
TASK AND KNOWLEDGE RATINGS BY OVERALL GROUP OF RESPONDENTS	20
TASKS	20
KNOWLEDGE.....	20
SUBGROUP ANALYSIS OF TASKS AND KNOWLEDGE RATINGS.....	21
CONTENT COVERAGE RATINGS.....	22
TEST CONTENT RECOMMENDATIONS.....	23
WRITE-IN COMMENTS	24
DEVELOPMENT OF TEST SPECIFICATIONS FOR THE RHIA.....	25
PRESENTATION OF THE JOB ANALYSIS PROJECT AND RESULTS TO THE TASK FORCE.....	25
TASK AND KNOWLEDGE STATEMENTS INCLUDED ON THE RHIA TEST SPECIFICATIONS	25
TASKS RECOMMENDED FOR INCLUSION.....	25
KNOWLEDGE STATEMENTS RECOMMENDED FOR INCLUSION.....	25
DEVELOPMENT OF TEST CONTENT WEIGHTS.....	27
SUMMARY AND CONCLUSIONS.....	29

LIST OF FIGURES

Figure 1. <i>Response Rates for the Job Analysis Survey of Registered Health Information Administrators (Invitation Surveys Only)</i>	10
Figure 2. <i>Demographic Question 1. Which of the following BEST describes your work activities in relationship to health information administration?</i>	11
Figure 3. <i>Demographic Question 2. Do you currently hold a valid RHIA credential?</i>	11
Figure 4. <i>Demographic Question 5. What is your PRIMARY work setting?</i>	12
Figure 5. <i>Demographic Question 6. Which BEST describes your PRIMARY job function?</i>	13
Figure 6. <i>Demographic Question 7. How many years of experience do you have in the health information administration field?</i>	14
Figure 7. <i>Demographic Question 9. What is the highest level of education you have completed to date?</i>	15
Figure 8. <i>Demographic Question 10. What is your gender?</i>	15
Figure 9. <i>Demographic Question 11. If you were to allocate your time of a typical work week, indicate the percentage of time spent in each of the categories below. Note that the categories below are based on the six domains associated with the next two sections of the survey.</i>	16
Figure 10. <i>Demographic Question 12. What is the mechanism by which your organization manages health record documentation and storage?</i>	17
Figure 11. <i>Demographic Question 8. What is the location of the facility(ies)/business(es) in which you primarily practice? Grouped by individual states.</i>	18
Figure 12. <i>Demographic Question 8. What is the location of the facility(ies)/business(es) in which you primarily practice? Grouped by AHIMA defined Regions.</i>	19

LIST OF TABLES

Table 1. <i>Tasks by Pass, Borderline, and Fail categories (Non-Educators)</i>	20
Table 2. <i>Tasks by Pass, Borderline, and Fail categories (Educators)</i>	20
Table 3. <i>Knowledge Statements by Pass, Borderline, and Fail categories</i>	21
Table 4. <i>Mean, Standard Deviation, and Frequency Distribution Percentage of Task Content Coverage (Non-Educators)</i>	22
Table 5. <i>Mean, Standard Deviation, and Frequency Distribution Percentage of Task Content Coverage (Educators)</i>	23
Table 6. <i>Mean, Standard Deviation, and Frequency Distribution Percentage of Knowledge Content Coverage</i>	23
Table 7. <i>Survey Respondents' Test Content Recommendations by Mean Percentages and Standard Deviations (Current RHIA holders only)</i>	24
Table 8. <i>Knowledge Statements Included/Excluded on the RHIA Test Specifications by the Test Specifications Committee despite Survey Results</i>	26
Table 9. <i>Test Content Weights for the RHIA Recommended by the Test Specifications Committee</i>	27
Table 10. <i>Cognitive Level Ranges by Domain</i>	28

LIST OF APPENDICES

Appendix A. Job Analysis Participants

Appendix B. Job Analysis Survey of Registered Health Information Administrators

Appendix C. Demographic Characteristics of Respondents Who Completed the Job Analysis Survey of Health Information Administrators

Appendix D. Task Means, Standard Deviations, and Frequency Percent Distributions

Appendix E. Knowledge Means, Standard Deviations, and Frequency Percent Distributions

Appendix F. Indices of Agreement for Tasks and Knowledge

Appendix G. Content Coverage Comments

Appendix H. Write-in Comments

Appendix I. Test Content Specifications

EXECUTIVE SUMMARY

The American Health Information Management Association's (AHIMA) mission is "to be the professional community that improves healthcare by advancing best practices and standards for health information management and the trusted source for education, research, and professional credentialing."¹ AHIMA commissioned a job analysis from Prometric for the Registered Health Information Administrator (RHIA) examination.

A job analysis is designed to obtain descriptive information about the tasks performed in a job and the knowledge needed to adequately perform those tasks. The purpose of the job analysis was to:

- develop and validate the listing of the tasks and knowledge related to work performed by health information administrators;
- develop test specifications for the Registered Health Information Administrator (RHIA) examination;
- obtain useful information that can guide educational and professional development initiatives; and,
- ensure that the AHIMA has up-to-date information about expected changes in the health information administrators' job role over the next few years.

Conduct of the Job Analysis

The job analysis consisted of several activities: survey development; survey dissemination; compilation of survey results; and test specifications development. The successful outcome of the job analysis depended on the excellent information provided by health information administrators throughout the study.

Survey Development

Survey research is an efficient and effective way to identify the tasks and knowledge that are important to the work performed by large numbers of health information administrators. The tasks and knowledge included on the survey covered six domains of practice. The development of the survey was based on a previous job analysis study and active health information administrators who served on the Task Force Committee or participated in the pilot response to the survey.

Survey Content

The survey, disseminated in June 2008, consisted of five sections.

Survey Sections
Section 1: Background and General Information
Section 2: Tasks
Section 3: Knowledge
Section 4: Recommendations for Test Content
Section 5: Comments

¹ Obtained from <http://www.ahima.org/about/mission.asp>, August 8, 2008

Results

Survey Response Rate

Of the approximately 1,973 health information administrators invited to participate in the survey, 554 (28%) submitted surveys. An additional 15 respondent participated in the survey using an open invitation. A representative group of RHIA certificants completed the survey in sufficient numbers to meet the requirements for conducting statistical analysis.

Survey Ratings

Participants were asked to rate the tasks and knowledge statements by the importance to their current work role on a five point scale (0=Of no importance to 4=Very important).

Content Coverage

For all of the domains, a majority of the respondents indicated that the content was well to very well covered for all domains, thus supporting the comprehensiveness of the defined domains.

Write in Comments

Survey respondents answered two open-ended questions about professional development and/or continuing education needs and expected changes in their work role.

Test Specifications Development

In August 2008, a Test Specifications Committee was convened to review the job analysis findings and create the test specifications that will guide the development of the RHIA examination.

Summary

In summary, this study used a multi-method approach in identifying the tasks and knowledge that are important to the competent performance of health information administrators. The job analysis process allowed for input from a representative group of health information administrators and was conducted within the guidelines of professionally sound practice.

The results of the job analysis can be used by the American Health Information Management Association to develop the RHIA credential and to guide professional development and educational initiatives.

RESULTS AT A GLANCE

WHO COMPLETED THE SURVEY

A total of 569 health information professionals completed the survey. The majority of respondents were RHIA credentialed, who held a bachelors degree, and had for 3 – 5 years of experience.

TASK IMPORTANCE RATINGS

All 38 tasks achieved high importance ratings from non-educators. 34 of 38 tasks achieved high importance ratings from educators. Respondents indicated that the survey covered the important tasks well to very well.

KNOWLEDGE IMPORTANCE RATINGS

141 of 146 knowledge statements achieved high importance ratings. Respondents indicated that the survey covered the important knowledge well to very well.

COMMENTS

Survey respondents indicated several professional development topics:

- *Computer literacy and technology*
- *Management including project management and time management*
- *Coding*

As well, survey respondents indicated that electronic medical/health records will impact their current work roles in the next few years.

INTRODUCTION

About the American Health Information Management Association (AHIMA)

The American Health Information Management Association (AHIMA) is the premier association of health information management (HIM) professionals. AHIMA's 50,000 members are dedicated to the effective management of personal health information needed to deliver quality healthcare to the public. Founded in 1928 to improve the quality of medical records, AHIMA is committed to advancing the HIM profession in an increasingly electronic and global environment through leadership in advocacy, education, certification, and lifelong learning.²

About the Job Analysis of the Registered Health Information Administrator (RHIA)

The major purpose of the job analysis was to identify the tasks and knowledge that are important for competent performance by health information administrators. The development of a content-valid examination is based on validated tasks and knowledge identified through the job analysis process.

This report describes the job analysis including the:

- rationale for conducting the job analysis;
- methods used to define job-related tasks and knowledge;
- types of data analysis conducted and their results; and,
- results and conduct of the test specifications meeting.

Job Analysis and Adherence to Professional Standards

Job analysis refers to procedures designed to obtain descriptive information about the tasks performed on a job and/or the knowledge, skills, or abilities thought necessary to adequately perform those tasks. The specific type of information collected for a job analysis is determined by the purpose for which the information will be used.

For purposes of developing examinations for the RHIA credential, a job analysis should identify important activities, knowledge, skills, and/or abilities.

The use of a job analysis (also known as practice analysis, role delineation, role and function study) to define the content domain is a critical component in establishing the content validity of the credential. Content validity refers to the extent to which the content covered by an examination overlaps with the important components of a job (tasks, knowledge, skills, or abilities).

A well-designed job analysis should include the participation of a representative group of subject-matter experts who reflect the diversity within the profession. Diversity refers to regional or job context factors and to subject-matter expert factors such as experience, gender, and race/ethnicity. Demonstration of content validity is accomplished through the

² Obtained from AHIMA Web site, www.ahima.org, August 8, 2008

judgments of subject-matter experts. The process is enhanced by the inclusion of large numbers of subject-matter experts who represent the diversity of the relevant areas of expertise.

*The Standards for Educational and Psychological Testing*³ (*The Standards*) is a comprehensive technical guide that provides criteria for the evaluation of tests, testing practices, and the effects of test use. It was developed jointly by the American Psychological Association (APA), the American Educational Research Association (AERA), and the National Council on Measurement in Education (NCME). The guidelines presented in *The Standards*, by professional consensus, have come to define the necessary components of quality testing. As a consequence, a testing program that adheres to *The Standards* is more likely to be judged to be valid and defensible than one that does not.

As stated in Standard 14.14,

“The content domain to be covered by a credentialing test should be defined clearly and justified in terms of the importance of the content for credential-worthy performance in an occupation or profession. A rationale should be provided to support a claim that the knowledge or skills being assessed are required for credential-worthy performance in an occupation and are consistent with the purpose for which the licensing or licensure program was instituted...Some form of job or job analysis provides the primary basis for defining the content domain...”
(p.161)

The Job Analysis of the Registered Health Information Administrator (RHIA) was designed to follow the guidelines presented in *The Standards* and to adhere to accepted professional practice.

³ American Educational Research Association, American Psychological Association, National Council on Measurement in Education. (1999). *The Standards for Educational and Psychological Testing*. Washington, DC: American Psychological Association.

METHOD

The Job Analysis of the Registered Health Information Administrator (RHIA) involved a multi-method approach that included meetings with subject-matter experts and a survey. This section of the report describes the activities conducted for the job analysis.

First, subject-matter experts identified the tasks and knowledge they believed were important to the work performed by health information administrators. Then, a survey was developed and disseminated to health information administrators. The purpose of the survey was to obtain verification (or refutation) that the tasks and knowledge identified by the subject-matter experts are important to the work of health information administrators.

Survey research functions as a “check and balance” on the judgments of the subject-matter experts and reduces the likelihood that unimportant areas will be considered in the development of the test specifications. The use of a survey is also an efficient and cost-effective method of obtaining input from large numbers of subject-matter experts and makes it possible for ratings to be analyzed separately by appropriate respondent subgroups.

The survey results provide information to guide the development of test specifications and content-valid examinations. What matters most is that a credentialing examination covers the important knowledge needed to perform job activities.

The methodology used to conduct the job analysis is described in detail below and included the following steps:

STEPS OF THE JOB ANALYSIS PROCESS

1. Conduct a planning meeting
2. Development of the survey
3. Dissemination of the survey
4. Analysis of the survey data
5. Development of the test

1. Conduct of Planning Meeting(s)

A project-planning meeting was held on February 1, 2008, via web conference. Meeting participants included AHIMA staff and the Prometric staff responsible for the conduct of the job analysis.

During the planning meeting, several issues were discussed including selection of the Task Force Committee members and Test Specifications Committee members, meeting dates and logistics, and survey delivery.

2. Development of the Survey

Conduct of the Job Analysis Task Force Meeting

AHIMA convened a Task Force Committee comprised of a representative group of health information administrators. A listing of the Task Force Committee is in Appendix A. The Task Force meeting was conducted April 15-16, 2008, in Chicago, Illinois. The purpose of the meeting was to develop the survey content. Prometric staff facilitated the meeting.

Prior to the meeting, the Task Force received a document to read that contained the meeting agenda, an explanation of the purpose and conduct of a task force meeting, a list of tasks and knowledge validated in the previous job analysis, and a list of the Task Force committee.

Activities conducted during the meeting included reviewing and, as needed, revising the major domains, tasks, and knowledge statements that are necessary for competent performance by health information administrators. Survey rating scales and background and general information questions were presented, discussed, and revised as needed. The linkage of the tasks to the knowledge statements was accomplished by having small groups work on domains and then presenting the results for approval by the entire Task Force.

Survey Construction and Review Activities

Survey Construction

Following the Task Force Meeting, Prometric staff constructed the draft online survey. The following task and knowledge domains were covered on the survey:

1. Health Data Management
2. Health Statistics and Research Support
3. Information Technology and Systems
4. Organization and Management
5. Privacy, Security, and Confidentiality
6. Legal and Regulatory Standards

Survey Review by Task Force Committee

Each Task Force member received a copy of the draft survey. The purpose of the review was to provide the Committee with an opportunity to view their work and recommend any revisions.

Comments were compiled by Prometric staff and reviewed via a web conference on May 6, 2008 with AHIMA staff and the Task Force members. Recommended refinements were incorporated, as appropriate, into the survey in preparation for a pilot test.

Survey Pilot Test

The purpose of the small-scale pilot test was to have health information administrators who had no previous involvement in the development of the survey review it and offer suggestions for its improvement.

A total of nineteen health information professionals participated in the survey pilot test. Pilot participants were asked to review the survey for clarity of wording, ease of use, and comprehensiveness of content coverage. Comments were compiled by Prometric and reviewed via web conference with the Task Force members. The survey was revised and finalized based on the review of the pilot test comments.

Final Version of the Survey

The final version of the online survey consisted of five sections: Section 1: Background and General Information; Section 2: Tasks; Section 3: Knowledge; Section 4: Recommendations for Test Content; and Section 5: Comments.

In Section 1: Background and General Information, survey participants were asked to provide general and background information about themselves and their professional activities. The first question in the survey (below) was designed to separate the responses of those who are not actively involved in health information administration from those who perform or supervise the work. Those who selected the first option were forwarded to a unique section of the survey and did not respond to Sections 2 through 5. Individuals who selected “I teach individuals who will perform the work.”, (Educators) responded to the task statements using an importance rating scale tailored to the educator setting.

***1. Which of the following BEST describes your work activities in relationship to health information administration?**

For purposes of this question, regardless of work setting, health information administration is defined as the development, implementation, and management of individual, aggregate and public healthcare data collection and reporting systems. The systems ensure the quality, integrity, availability and preservation of healthcare data in support of patient safety and privacy, as well as the confidentiality and security of health information. Health information administration also includes the management of the human resources responsible for processes and systems needed to support authorized users and decision-makers.

- I neither perform the detailed work associated with health information administration nor supervise others that perform the work.
- I only perform the detailed work associated with health information administration.
- I only hire and supervise individuals who perform the detailed work associated with health information administration.
- I both perform the detailed work associated with health information administration and supervise others who perform the work.
- I teach individuals who will perform the work.

In Section 2: Tasks, survey participants (non-educators and educators) were asked to rate the statements using the Importance and Performance rating scales shown below.

Tasks (Non-Educator)	
Importance: How important is the performance of the task for a health information administrator?	Performance: Indicate whether you perform or supervise the task.
0=Of no importance	0= Neither perform nor manage the task
1=Of little importance	1= Perform the task
2=Of moderate importance	2= Manage the task
3=Important	3= Both perform and manage the task
4=Very important	

Participants identified as educators rated the statements based on the Importance scale shown below. For this group of respondents, the Performance scale was not included.

Tasks (Educator)
Importance: How important is the performance of the task for your students of health information administration?
0=Of no importance
1=Of little importance
2=Of moderate importance
3=Important
4=Very important

In Section 3: Knowledge, survey participants were asked to rate the statements using the Importance scales shown below.

Knowledge
Importance: How important is the knowledge for an entry-level health information administrator?
0=Of no importance
1=Of little importance
2=Of moderate importance
3=Important
4=Very important

Survey participants were asked to indicate how well the statements covered the tasks and knowledge within each domain. Respondents made their judgments using a five-point rating scale (1=Very Poorly; 2=Poorly; 3=Adequately; 4=Well; 5=Very Well). A write-in area was provided for respondents to note any areas that were not covered within a specific domain.

In Section 4: Recommendation for Test Content, survey participants were asked to indicate the content weights that the six knowledge areas below should receive on a certification examination for health information administrators.

1. Health Data Management
2. Health Statistics and Research Support
3. Information Technology and Systems
4. Organization and Management
5. Privacy, Security, and Confidentiality
6. Legal and Regulatory Standards

This was accomplished by distributing 100 percentage points across the six knowledge areas. These distributions represented the allocation of examination items survey participants believed should be devoted to each knowledge area.

In Section 5: Comments, survey participants were provided the opportunity to comment on the following:

- What additional professional development and/or continuing education could you use to improve your performance in your current work role?

- How do you expect your work role as a health information administrator to change over the next few years? What tasks will be performed and what knowledge will be needed to meet changing job demands?

As noted above, those respondents who are not currently performing or supervising the work associated with health information administration were included in the background information questions but were then presented a separate section of questions. These included the following:

- What is your current job title?
- Describe the nature of your current employment
- Why are you not currently involved in health information administration?
- May we contact you to determine how AHIMA may serve your needs?

The responses to the first three questions are summarized in Appendix C10. The information provided by the affirmative respondents to the fourth question was forwarded to AHIMA.

3. Dissemination of the Survey

Prometric disseminated an e-mail invitation on June 11, 2008, to an AHIMA-provided e-mail list. This e-mail list included 1760 health information administrators. Two e-mail reminders were sent during survey administration: the first on June 23, 2008, and the second on July 11, 2008. Additionally, an open version of the survey was forwarded to AHIMA for dissemination to a secondary list. The number of recipients is not available. An additional 280 health information administrators earning certification within the last 5 years were invited to participate on July 10, 2008.

The invitations, reminders, and the online survey are provided in Appendix B.

4. Analysis of the Survey Data

As previously noted, the purpose of the survey was to validate the tasks and knowledge that relatively large numbers of health information administrators judged to be relevant (verified as important) to their work.

These objectives are accomplished through an analysis of the mean importance ratings for tasks and knowledge. The derivation of test specifications from those statements verified as important by the surveyed professionals provides a substantial evidential basis for the content validity (content relevance) of credentialing examinations.

Based on information obtained from the survey, data analyses by respondent subgroups (e.g., job title) are possible when sample size permits. A subgroup category is required to have at least 30 respondents to be included in the mean analyses. This is a necessary condition to ensure that the mean value based upon the sample of respondents is an accurate estimate of the corresponding population mean value.

The following quantitative data analyses were produced:

- Means, standard deviations, and frequency (percentage) distributions for tasks and knowledge importance and content coverage ratings.

- Frequency (percentage) distributions for task performance ratings.
- Means and standard deviations for test content recommendations.
- Index of agreement values for designated subgroups.
- Crosstabs of demographic characteristics.

Criterion for Interpretation of Mean Importance Ratings

Since a major purpose of the survey is to ensure that only validated tasks and knowledge statements are included in the development of test specifications, a criterion (cut point) for inclusion needs to be established.

A criterion that has been used in similar studies is a mean importance rating that represents the midpoint between moderately important and important. For the importance rating scale used across many studies, the value of this criterion is 2.50.

It is believed that this criterion is consistent with the intent of content validity, which is to measure only important knowledge in the credentialing examination. Therefore, for this job analysis, Prometric recommended the value of this criterion should be set at 2.50.

The task and knowledge statements were placed into one of three categories—Pass, Borderline, or Fail—based on their mean importance ratings:

- The Pass Category contains those statements whose mean ratings are at or above 2.50, and are considered eligible for inclusion in the development of test specifications.
- The Borderline Category contains those statements whose mean ratings are between 2.40 and 2.49. The Borderline Category is included to provide a point of discussion for the Test Specifications Committee to determine if the statement(s) warrant(s) inclusion in the test specifications.
- The Fail Category contains those statements whose mean ratings are less than 2.40. It is recommended that statements in the Fail Category be excluded from consideration in the test specifications.

If the Test Specifications Committee believes that a statement rated below 2.50 should be included in the specifications and can provide compelling written rationales, those statements may be considered for inclusion. For example, although a task or knowledge may have a mean rating of less than 2.50, more than 50.00% of the respondents may have rated the statement as important or very important. In this instance, the Test Specifications Committee might recommend the inclusion of the statement on the test specifications. The written rationale would note that a majority of the survey respondents rated the statement as important.

Definition of Pass, Borderline and Fail Categories for Task and Knowledge Mean Ratings

	<u>Means</u>
Pass:	At or above 2.50
Borderline:	2.40 to 2.49
Fail:	Less than 2.40

5. Development of the Test Specifications for the RHIA

A meeting with the Job Analysis Task Force was facilitated by the Prometric staff to develop the test specifications based on the job analysis results. The meeting was conducted August 13, 2008, via web conference.

The meeting focused on:

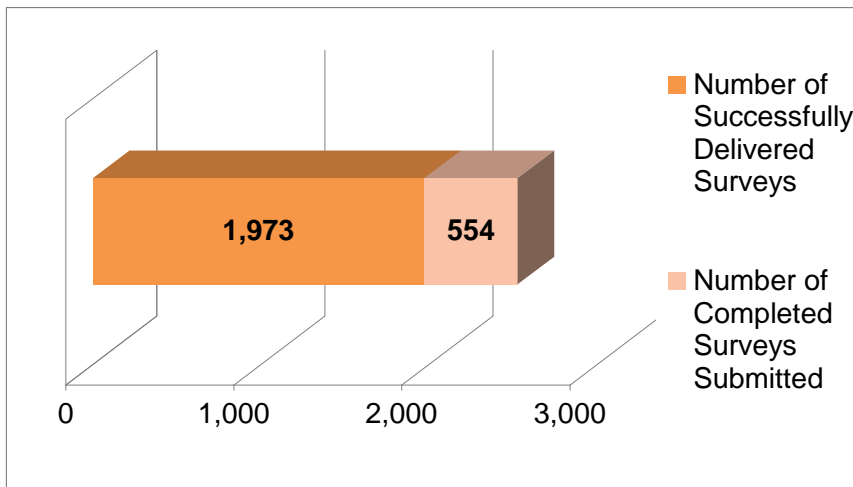
- including the tasks and knowledge statements that are important for the RHIA examination based on the survey results; and,
- establishing the percentage test content weights for each knowledge/skill area on the RHIA examination. These percentage test weights are used to guide examination development activities.

RESULTS

Survey Response Rate

A total of 554 completed surveys were submitted via an online survey, out of the 1973 invitations successfully delivered, representing a response rate of 28.01%. A small number of emails were rejected. An additional 15 responses were obtained from the open version (non-specific invitees) of the survey. Based on the analysis of survey responses, a representative group of health information administrators completed the survey in sufficient numbers to meet the requirements to conduct statistical analysis.

Figure 1. *Response Rates for the Job Analysis Survey of Registered Health Information Administrators (Invitation Surveys Only)*



Demographic Characteristics of Survey Respondents

The profile of survey respondents is below. All responses to the background and general information section of the survey are provided in Appendix C. In addition to frequency distributions for all of the background information questions, crosstabulations were completed for question 1 and several of the other questions and questions 5 and 6. See Appendix C2 for the results.

Figure 2. Demographic Question 1. Which of the following BEST describes your work activities in relationship to health information administration?

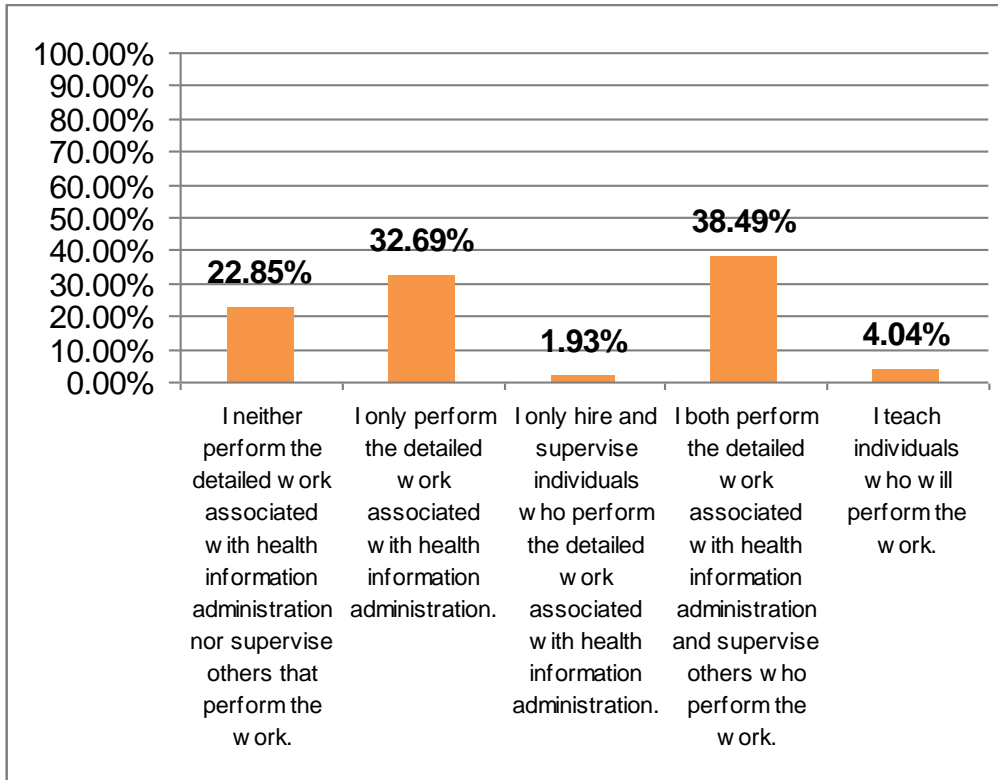


Figure 3. Demographic Question 2. Do you currently hold a valid RHIA credential?

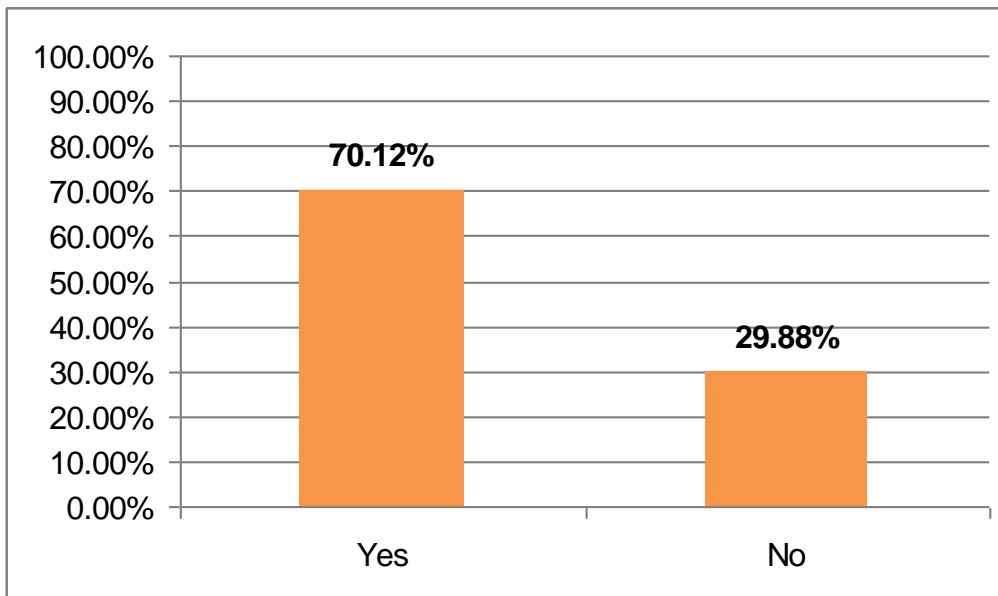


Figure 4. Demographic Question 5. What is your PRIMARY work setting?

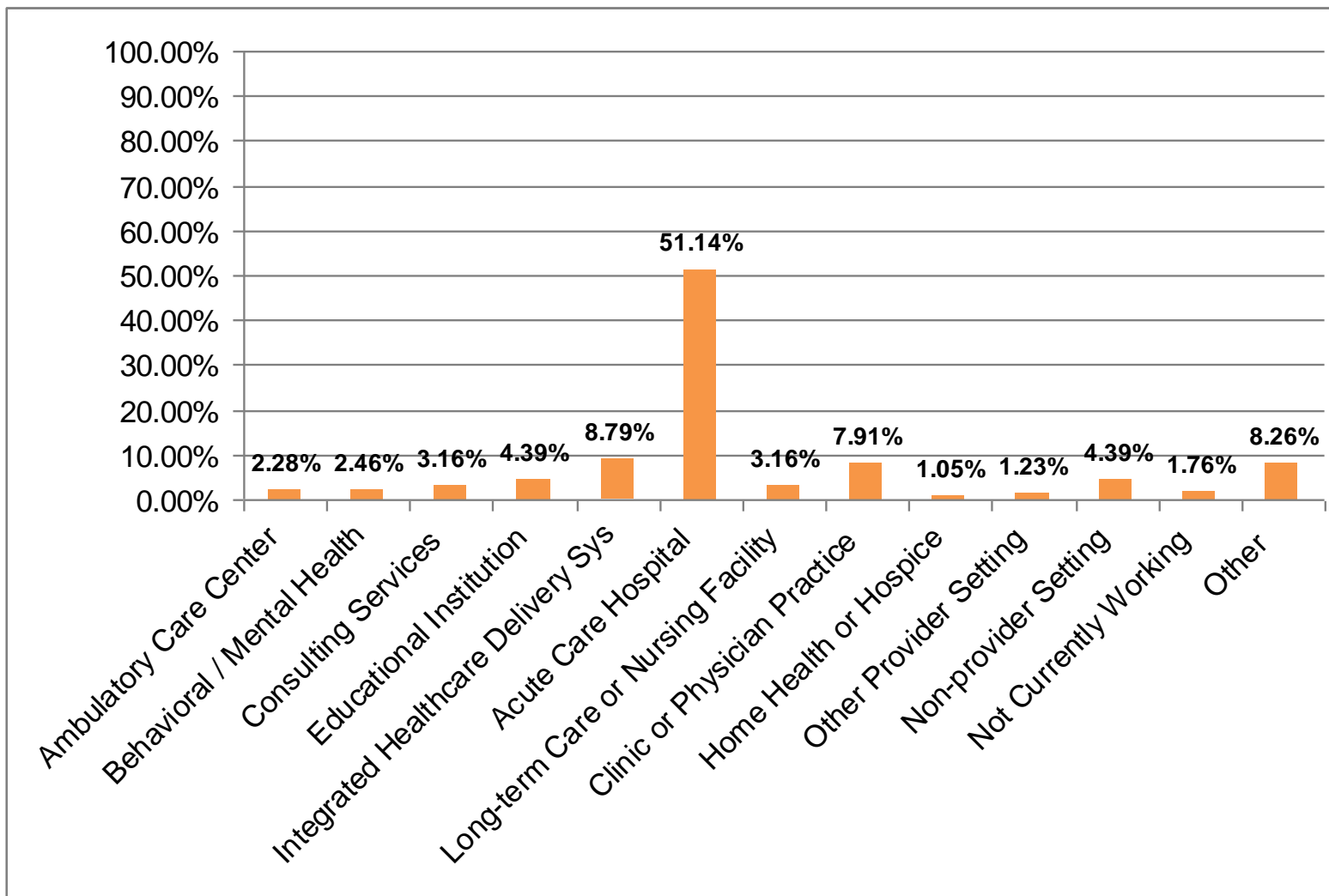
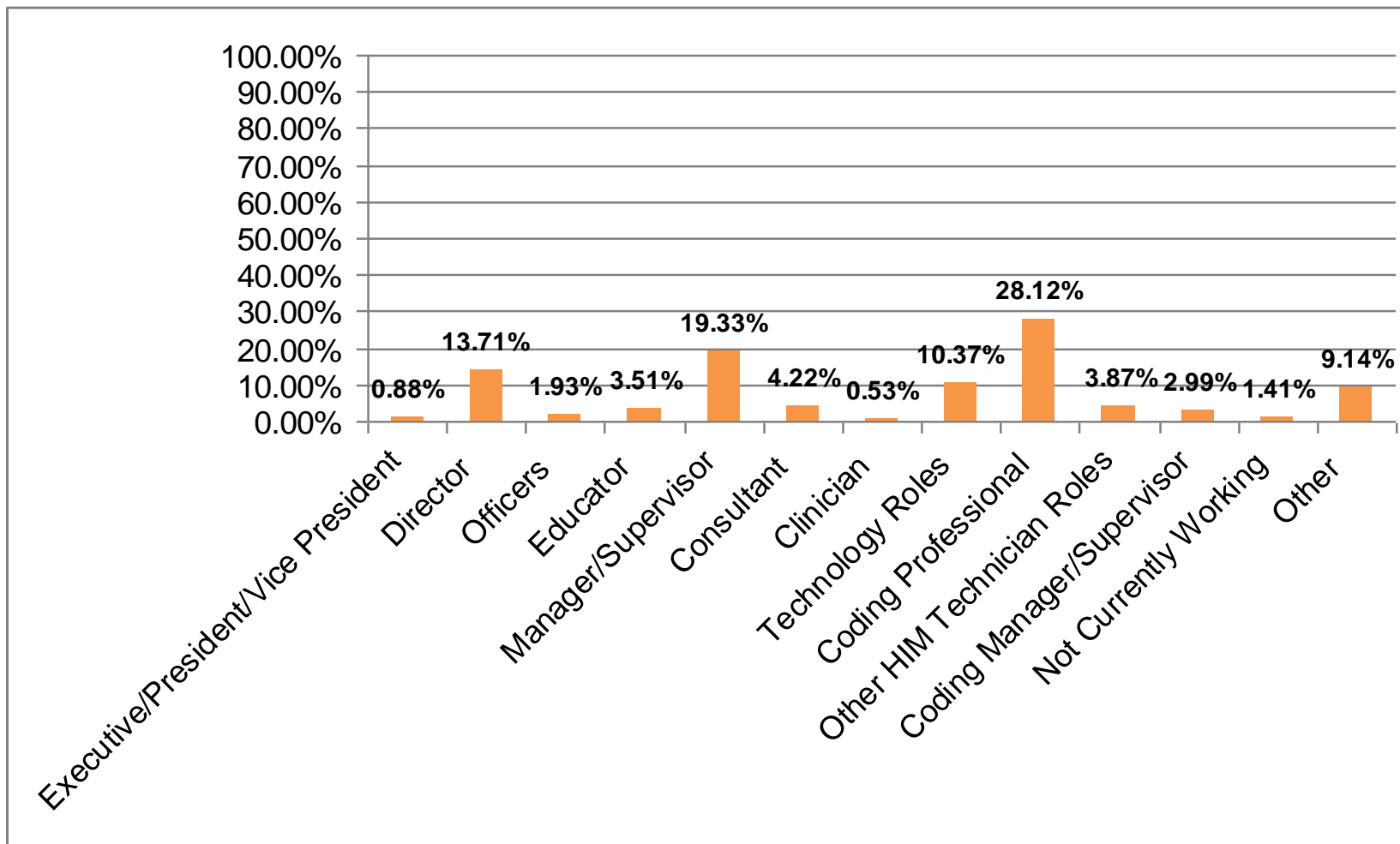


Figure 5. Demographic Question 6. Which BEST describes your PRIMARY job function?



Demographic questions 5 and 6 were designed to provide information about job function in relationship to job setting. Crosstabulations of the two questions show that the largest group, 100 respondents, is comprised of Coding Professionals in an Acute Care Hospital. See Appendix C2 for the complete table.

Figure 6. Demographic Question 7. How many years of experience do you have in the health information administration field?

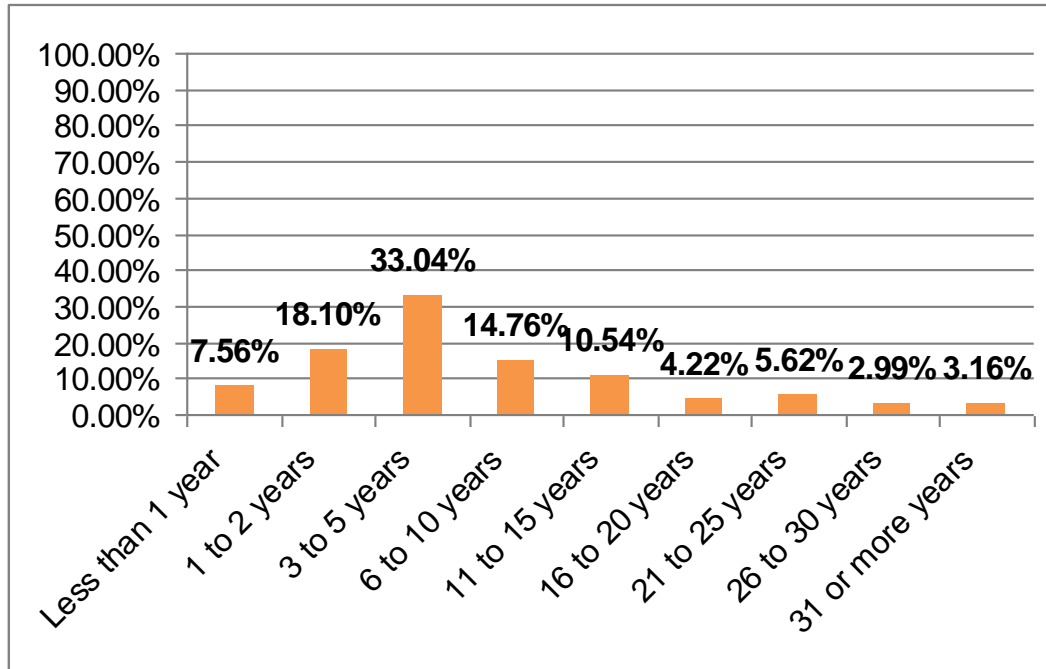


Figure 7. Demographic Question 9. What is the highest level of education you have completed to date?

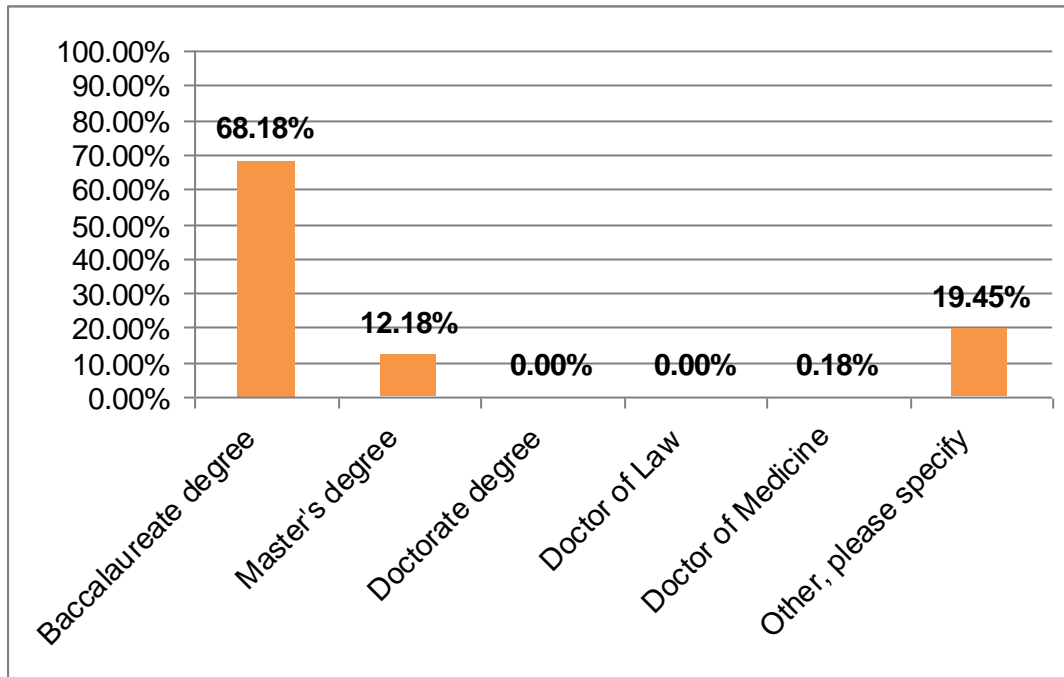


Figure 8. Demographic Question 10. What is your gender?

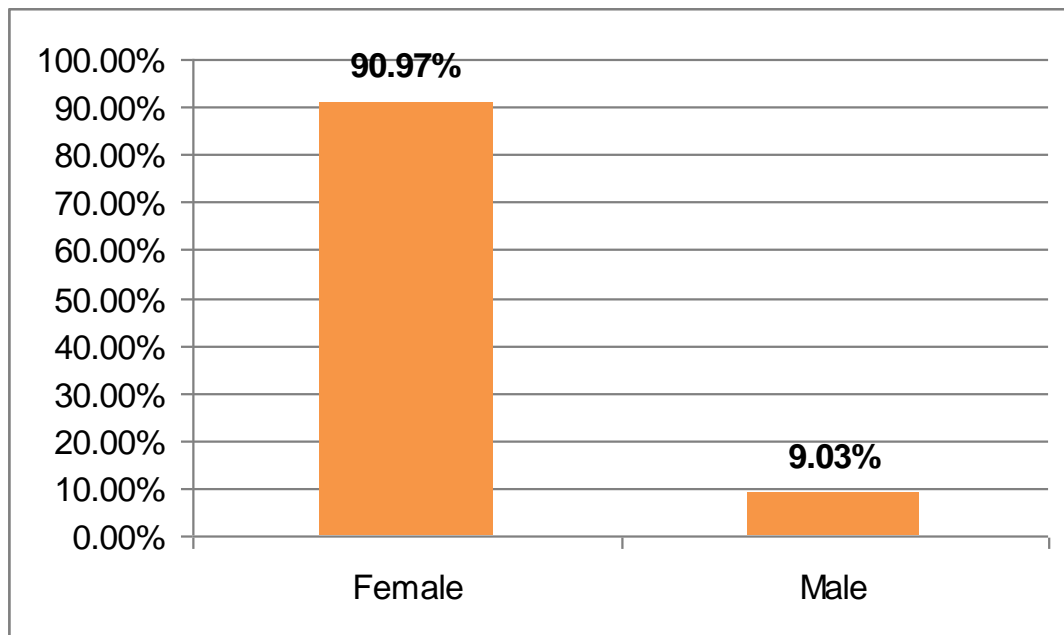


Figure 9 below summarizes the percentage of time respondents spend on each of the major domains. It should be noted that at least one respondent indicated that he/she spends 100 percent in each of the domains.

Figure 9. *Demographic Question 11. If you were to allocate your time of a typical work week, indicate the percentage of time spent in each of the categories below. Note that the categories below are based on the six domains associated with the next two sections of the survey.*

11. If you were to allocate your time of a typical work week, indicate the percentage of time spent in each of the categories below. Note that the categories below are based on the six domains associated with the next two sections of the survey.	Average	Min	Max
Health Data Management: This domain addresses tasks and knowledge statements associated with managing health data by establishing and maintaining policies and procedures for health data elements and sets, coding activities, and presentation of organizational data.	35.17	0	100
Health Statistics and Research Support: This domain addresses tasks and knowledge statements associated with providing statistical and research support by determining information needs and producing desired reports.	12.20	0	100
Information Technology and Systems: This domain addresses tasks and knowledge statements associated with managing technology including applications, databases, and special technology needs.	18.74	0	100
Organization and Management: This domain addresses tasks and knowledge statements associated with managing a department or function including human resources, training, budgets and contracts, meetings and projects.	20.63	0	100
Privacy, Security, and Confidentiality: This domain addresses tasks and knowledge statements associated with safeguarding Protected Health Information and ensuring that privacy policies developed and implemented including investigations of possible breaches.	12.24	0	80
Legal and Regulatory Standards: This domain addresses tasks and knowledge statements associated with organizational compliance and accreditation and licensing processes.	10.43	0	100

Figure 10. Demographic Question 12. What is the mechanism by which your organization manages health record documentation and storage?

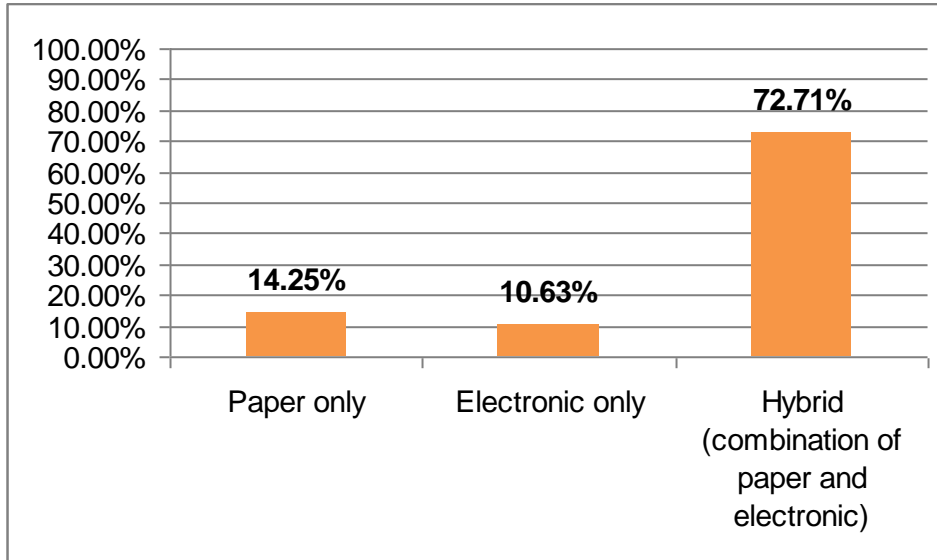


Figure 11. Demographic Question 8. What is the location of the facility(ies)/business(es) in which you primarily practice? Grouped by individual states.



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Figure 12. Demographic Question 8. What is the location of the facility(ies)/business(es) in which you primarily practice? Grouped by AHIMA defined Regions.



The regions represented are:
 Region 1: CT, ME, MA, NH, NJ, NY, PA, RI, VT
 Region 2: IL, IN, MI, OH, WI
 Region 3: IA, KS, MN, MO, NE, ND, SD
 Region 4: DE, DC, FL, GA, MD, NC, SC, VA, WV
 Region 5: AL, AR, KY, LA, MS, OK, TN, TX
 Region 6: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY

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Task and Knowledge Ratings by Overall Group of Respondents

The following provides a summary of survey respondents' ratings of the tasks and knowledge statements. Of the tasks and knowledge statements, most achieved high means (at or above 2.50), thereby validating their importance to competent performance for health information administrators.

Tasks

Means and standard deviations for the tasks included on the survey are provided in Appendix D. Of the 38 tasks, all achieved high importance means when rated by non-educators (N=544). For survey respondents identifying themselves as educators, 34 of the 38 tasks achieved high importance ratings (N=25). Tables 1 and 2 show the tasks that were placed in Pass, Borderline, and Fail categories by domain.

Table 1. *Tasks by Pass, Borderline, and Fail categories (Non-Educators)*

Task Domains	No. of Tasks	Pass (Mean 2.50 or Above)	Borderline (Mean 2.40 to 2.49)	Fail (Mean Less than 2.50)
Health Data Management	7	7	0	0
Health Statistics and Research Support	4	4	0	0
Information Technology and Systems	7	7	0	0
Organization and Management	14	14	0	0
Privacy, Security, and Confidentiality	4	4	0	0
Legal and Regulatory Standards	2	2	0	0
Total	38	38	0	0
Percentage	100.00%	100.00%	0%	0%

Table 2. *Tasks by Pass, Borderline, and Fail categories (Educators)*

Task Domains	No. of Tasks	Pass (Mean 2.50 or Above)	Borderline (Mean 2.40 to 2.49)	Fail (Mean Less than 2.50)
Health Data Management	7	7	0	0
Health Statistics and Research Support	4	4	0	0
Information Technology and Systems	7	7	0	0
Organization and Management	14	10	0	4
Privacy, Security, and Confidentiality	4	4	0	0
Legal and Regulatory Standards	2	2	0	0
Total	38	34	0	4
Percentage	100.00%	89.47%	0%	10.53%

Knowledge

Means and standard deviations for the knowledge statements included on the survey are presented in Appendix E. Of the 146 knowledge statements, 141 (96.58%) achieved high

importance means. Table 3 shows the tasks that were placed in Pass, Borderline, and Fail categories by domain.

Table 3. *Knowledge Statements by Pass, Borderline, and Fail categories*

Knowledge Domains	No. of Knowledge Statements	Pass (Mean 2.50 or Above)	Borderline (Mean 2.40 to 2.49)	Fail (Mean Less than 2.50)
Health Data Management	27	26	0	1
Health Statistics and Research Support	20	17	1	2
Information Technology and Systems	23	23	0	0
Organization and Management	47	46	0	1
Privacy, Security, and Confidentiality	21	21	0	0
Legal and Regulatory Standards	8	8	0	0
Total	146	141	1	4
Percentage	100.00%	96.58%	0.68%	2.74%

Subgroup Analysis of Tasks and Knowledge Ratings

The index of agreement (IOA) is a measure of the extent to which subgroups of respondents agree on which tasks and knowledge statements are important. Using the mean importance ratings for task and knowledge statements, indices of agreement were computed:

- If the subgroup means are above the critical importance value (mean ratings at or above 2.50), then they are in agreement that the content is important.
- If the subgroup means are below the critical importance value (mean ratings less than 2.50), then the subgroups are in agreement that the content is considered less important.
- By contrast, if one subgroup's (for example, female) mean ratings are above the critical importance value and another subgroup's (for example, male) means are below the critical importance value then the subgroups are in disagreement as to whether the content is important.

The index of agreement provides a method of computing the similarity in judgments between groups that is more tailored to the purpose of a job analysis than the correlation coefficient. Although the correlation coefficient measures the tendency toward agreement along the full range of possible ratings, the agreement index focuses on whether two groups agree that the content should (or should not) be included in an examination.

As one of the major purposes of this job analysis is to identify appropriate test content, the agreement index provides a statistical method to address this question at the subgroup level. Furthermore, the agreement index requires only 30 respondents per subgroup for computation, whereas the correlation coefficient requires at least 100 respondents per subgroup to provide a reliable measure of agreement.

An illustrative example for two groups on a survey with 100 knowledge statements shows how the index is computed. If two groups passed the same 96 knowledge statements and failed the same 2 knowledge areas (out of the 100 total knowledge areas in the survey), the consistency index would be computed as: $Agreement = (96 + 2)/100 = 0.98$. Values of 0.80 or less are considered to have significant disagreement.

The index of agreement coefficients for tasks and knowledge are provided in Appendix F. There was a high agreement among respondents regarding the importance of both tasks and knowledge, which included the following subgroups with IOA values ranging from 0.83 to 1.00: RHIA credential, year earned credential, primary work setting, primary work role, years in field, gender, and state/province (US and Canada only). The index of agreement for educator tasks ranged from 0.61 to 1.00, but the results are less reliable as the sample size was less than 30 per subgroup.

Content Coverage Ratings

The survey participants were asked to indicate how well the statements within each of the task and knowledge domains covered important aspects of that area. These responses provide an indication of the adequacy (comprehensiveness) of the survey content.

The five-point rating scale included 1=Very Poorly, 2=Poorly, 3=Adequately, 4=Well, and 5=Very Well. The means and standard deviations for the task and knowledge ratings are provided in Tables 4 through 6. For the task domains, the means ranged from 4.07 to 4.19. The means across the knowledge domains ranged from 4.08 to 4.24. These means provide strong evidence that the tasks and knowledge were well covered on the survey.

Table 4. Mean, Standard Deviation, and Frequency Distribution Percentage of Task Content Coverage (Non-Educators)

Task Domain Non-Educators	Content Coverage						
	Mean	SD	Frequency Percentage				
			Very poorly	Poorly	Adequately	Well	Very well
1. Health Data Management	4.12	0.77	0.24%	0.00%	22.38%	41.85%	35.52%
2. Health Statistics and Research Support	4.07	0.76	0.24%	0.00%	23.84%	44.28%	31.63%
3. Information Technology and Systems	4.10	0.74	0.00%	0.24%	21.76%	45.48%	32.52%
4. Organization and Management	4.19	0.77	0.00%	0.98%	18.54%	40.73%	39.76%
5. Privacy, Security, and Confidentiality	4.19	0.73	0.00%	0.25%	18.18%	44.23%	37.35%
6. Legal and Regulatory Standards	4.08	0.75	0.00%	0.50%	22.92%	45.09%	31.49%

Table 5. Mean, Standard Deviation, and Frequency Distribution Percentage of Task Content Coverage (Educators)

Task Domain Educators	Content Coverage						
	Mean	SD	Frequency Percentage				
			Very poorly	Poorly	Adequately	Well	Very well
1. Health Data Management	4.28	0.74	0.00%	0.00%	16.00%	40.00%	44.00%
2. Health Statistics and Research Support	4.20	0.71	0.00%	0.00%	16.00%	48.00%	36.00%
3. Information Technology and Systems	4.28	0.74	0.00%	0.00%	16.00%	40.00%	44.00%
4. Organization and Management	4.28	0.74	0.00%	0.00%	16.00%	40.00%	44.00%
5. Privacy, Security, and Confidentiality	4.32	0.75	0.00%	0.00%	16.00%	36.00%	48.00%
6. Legal and Regulatory Standards	4.33	0.76	0.00%	0.00%	16.67%	33.33%	50.00%

Table 6. Mean, Standard Deviation, and Frequency Distribution Percentage of Knowledge Content Coverage

Knowledge Domain	Content Coverage						
	Mean	SD	Frequency Percentage				
			Very poorly	Poorly	Adequately	Well	Very well
1. Health Data Management	4.20	0.75	0.00%	0.23%	18.97%	41.22%	39.58%
2. Health Statistics and Research Support	4.08	0.74	0.00%	0.23%	22.90%	45.09%	31.78%
3. Information Technology and Systems	4.20	0.74	0.00%	0.47%	17.92%	42.69%	38.92%
4. Organization and Management	4.22	0.71	0.00%	0.00%	16.63%	45.20%	38.17%
5. Privacy, Security, and Confidentiality	4.24	0.71	0.00%	0.00%	16.01%	44.08%	39.91%
6. Legal and Regulatory Standards	4.24	0.70	0.00%	0.00%	15.46%	44.73%	39.81%

Survey respondents were also asked to write-in tasks or knowledge statements that they believe should be included in the listing of important tasks and knowledge statements. See Appendix G for the content coverage write-in comments.

Test Content Recommendations

In survey Section 4: Recommendations for Test Content, participants were asked to weigh each domain out of 100 possible items for an RHIA examination. The weights made by current RHIA holders was used by the Test Specifications Committee as an aid in making

decisions about how much emphasis the knowledge domains should receive on the test content outline. The mean weights across all survey respondents are presented in Table 7.

Table 7. *Survey Respondents' Test Content Recommendations by Mean Percentages and Standard Deviations* (Current RHIA holders only)

Topic Areas	Mean (%)	SD (%)	Range	
			Minimum	Maximum
1. Health Data Management	18.72	7.99	5	50
2. Health Statistics and Research Support	11.93	5.27	0	30
3. Information Technology and Systems	16.77	7.98	0	80
4. Organization and Management	20.07	8.58	0	60
5. Privacy, Security, and Confidentiality	16.90	6.11	5	45
6. Legal and Regulatory Standards	15.62	5.94	5	50

Write-In Comments

Many survey respondents provided responses to the open-ended questions about expected changes in their job role over the next few years and professional development/continuing education needs. These comments are presented in Appendix H.

DEVELOPMENT OF TEST SPECIFICATIONS FOR THE RHIA

A test specifications meeting for the RHIA exam was conducted on August 13, 2008. The steps involved in the development of test specifications included:

- presentation of the job analysis project and results to the test specifications committee;
- identification of the task and knowledge statements to be included on the RHIA test specifications; and,
- development of the test content weights for the RHIA examination.

Presentation of the Job Analysis Project and Results to the Task Force

The first activity involved in the test specification development was to remind the Task Force of the job analysis activities that were conducted and to present the results of the study. An explanation of the passing, borderline, and failing categories for the tasks and knowledge statements.

Task and Knowledge Statements Included on the RHIA Test Specifications

The test specifications committee reviewed the task and knowledge statement results to make final recommendations about the content (domain) areas that should be included on the RHIA examination (see Appendix I).

The survey results served as the primary source of information used by the test specification committee members to make test content decisions. Recommendations were based on the following criteria:

- the mean task and knowledge ratings for current RHIA respondents, non-educators and educators; and
- the appropriateness of the content for the examination.

The test specifications committee recommended the inclusion of 38 tasks and 142 knowledge statements for the RHIA examination.

Tasks Recommended for Inclusion

- A total of 38 of the 38 tasks achieved mean ratings at or above 2.50 (Pass category) and were included on the RHIA test specifications.

Knowledge Statements Recommended for Inclusion

- A total of 140 of the 146 knowledge statements achieved mean ratings at or above 2.50 (Pass category) by current RHIA's and were included on the RHIA test specifications.
- The test committee decided to exclude 4 knowledge statements by the Test Specifications Committee.
 - 4 of the 4 excluded statements had failing mean ratings
- A total of 2 knowledge statements that achieved mean ratings less than 2.50 (Fail/Borderline categories) were included on the RHIA test.
- Two knowledge statements were revised to include comments suggested by the survey respondents.

A summary of the knowledge statements where the committee included or excluded topics despite mean rating results is included in Table 8.

Table 8. Knowledge Statements Included/Excluded on the RHIA Test Specifications by the Test Specifications Committee despite Survey Results

Domain	Knowledge	Included on the RHIA?	Rationale
1: Health Data Management	19. prospective payment methodologies (e.g., IPPS, MS-DRGs, OPPI, RBRVS, APC/OCE, MCE, RUGS, ASC, physician professional fees)	Yes	Revised to include survey respondents' comment (Addition in red)
2. Health Statistics and Research Support	4. Institutional Review Board process	Yes	Mean rating of 2.49 just below passing
2. Health Statistics and Research Support	5. epidemiology concepts (e.g., specificity, sensitivity, incidence and prevalence)	Yes	Growth in emphasis in Public health, want to include
5. Privacy, Security, and Confidentiality	1. HIPAA regulations for privacy and security (including amendments and disclosures)	Yes	Revised to include survey respondents' comments (Addition in red)

Development of Test Content Weights

The test specifications committee participated in an exercise that required each member to individually assign a percentage weight to each of the knowledge domains. Weights were then entered into a spreadsheet and shown to the committee. The committee members were able to compare the test content weights derived from the survey responses to their own estimates. This resulted in a discussion among the committee members regarding the optimal percentages for the RHIA. Table 9 presents the test specifications recommendations including the percentage content weights by domain and the target number of questions for the RHIA. The complete test specifications are presented in Appendix I.

Finally, the committee decided that the RHIA exam should consist of 28% of the questions at the recall level, 47% at the applied level, and 25% at the higher thinking level. Table 10 shows the approved ranges for each cognitive level by domain.

Table 9. *Test Content Weights for the RHIA Recommended by the Test Specifications Committee*

Content Areas	Number of Knowledge Statements	TS Committee Percentage Recommendations	Number of Test Items
1. Health Data Management	26	20%	36
2. Health Statistics and Research Support	18	11%	19
3. Information Technology and Systems	23	20%	36
4. Organization and Management	46	30%	54
5. Privacy, Security, and Confidentiality	21	13%	24
6. Legal and Regulatory Standards	8	6%	11
Total	142	100%	180

Table 10. Cognitive Level Ranges by Domain

Domain	Recall/ Understanding	Application	Higher Thinking
1. Health Data Management	9-11	14-16	6-8
2. Health Statistics and Research Support	6-8	5-7	3-5
3. Information Technology and Systems	9-11	14-16	6-8
4. Organization and Management	7-9	23-27	14-16
5. Privacy, Security, and Confidentiality	6-8	9-11	3-5
6. Legal and Regulatory Standards	2-4	3-5	2-4
Total	39-51	68-82	34-46

SUMMARY AND CONCLUSIONS

The Job Analysis of the Registered Health Information Administrator (RHIA) was conducted to:

- identify and validate tasks and knowledge important to the work performed by health information administrators;
- create test specifications that may be used to develop the RHIA examination; and,
- identify professional development/continuing education needs and anticipated changes in the work role of health information administrators.

The tasks and knowledge statements were developed through an iterative process involving the combined efforts of AHIMA, subject-matter experts, and Prometric staff. These statements were then entered into survey format and subjected to verification/refutation through the dissemination of a survey to health information administrators.

The survey participants were asked to rate the importance of performing specific tasks and the importance of specific knowledge to perform their job tasks.

The results of the job analysis support the following:

- The tasks and knowledge were verified as important through the survey and provide the foundation of empirically derived information from which to develop test specifications for the RHIA examination.
- Evidence was provided in this job analysis that the comprehensiveness of the content within the task and knowledge domains was adequately covered.
- A variety of professional development/continuing education needs and expected changes in job activities over the next few years were identified.

In summary, the job analysis used a multi-method approach to identifying the tasks and knowledge important to the work performed by health information administrators. The results of the study can be used to develop the examination for the AHIMA credentialing examinations.