Job/Task Analysis:

Certified Health Data Analyst

American Health Information Management Association
(AHIMA)

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INTRODUCTION

About AHIMA

AHIMA is the premier association of health information management (HIM) professionals. AHIMA's 52,000 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.

About the Job / Task Analysis

Job / Task Analysis: Certified Health Data Analyst

The job/task analysis development process focused on identifying performance domains, tasks, and knowledge statements that are critical to effective professional performance. This document describes the processes and data which were used to develop the job/task analysis, including:

* Complying with established standards for job/task analyses;

* Working with subject-matter experts to define relevant domains and task and knowledge statements;

* Defining the process by which a survey of field practitioners was developed;

* Analyzing the data from both subject-matter experts and survey respondents; and

* Drawing conclusions about the results achieved by the job/task analysis process.

Compliance with Standards

Ensuring that a job/task analysis follows established professional standards and is legally defensible is a core component of the development process. The Joint Standards for Educational and Psychological Testing (1999), published by the American Educational Research Association (AERA) and the American Psychological Association (APA), define standard criteria for valid analysis and development of content for test materials. These criteria are widely accepted as a professional standard.

The NCCA Standards specifically state that a Job/Task Analysis "must be conducted to clearly delineate performance domains and tasks, associated knowledge and/or skills, and sets of content/item specifications to be used as the basis for developing each type of assessment instruments." In addition, "a report must be published linking the job/practice analysis to specifications for the assessment instruments." The Joint Standards similarly state "the test specifications should be documented, along with their rationale, and the process by which they were developed." The Joint Standards also state that in credentialing tests, role delineation studies "usually provide the basis for defining the test specifications."

Establishing the content validity of a test approach is one of the purposes of a Job/Task Analysis, and following professional standards helps guarantee content validity by considering the importance, frequency, and criticality of its various aspects. This validation ensures that test materials address the aspects of professional endeavor they are intended to measure.

The development of a valid examination requires that consideration be given to the duties and requirements required to establish a defensible standard of competence in a profession. The inclusion of subject-matter experts in the development process is important in ensuring that key knowledge and skills required in a profession are addressed. The Job/Task Analysis ensures that a test process uses valid content and thoroughly addresses key aspects of a profession as identified by expert practitioners.

PROCESS

Introduction

The process of developing a thorough Job/Task Analysis required several stages of effort, centering around a panel of subject-matter experts meeting to consider the various aspects of professional competence and to create a survey reflecting these aspects.

The initial stages of development involved convening a panel of subject-matter experts to define the domains, tasks, and knowledge statements in which competence would be required by a certified professional in the field. Once these aspects were defined, the panel rated each aspect with regard to its importance, criticality, and frequency. A survey was developed from this information and distributed to a group of practitioners in the field in order to gain further data. The results of the survey were analyzed and considered along with the subject-matter experts' data in order to develop this Job/Task Analysis.

This section of the Job/Task Analysis will examine each of the development stages in further detail.

Development Stages

1. Planning Meeting(s)
2. JTA Panel Meeting
3. Development of Validation Survey
3. Survey Distribution
4. Survey Results Analysis

1. Planning Meeting(s)

Meeting Date(s):	March 3, 2008
Meeting Location(s):	Telephone conference call
Participants:	AHIMA staff and key stakeholders
Tasks:	During this meeting, the participants discussed the objectives of the job/task analysis review process, developed a timeline for completion of the project, and considered methods for selecting JTA panelists and the activities which would be conducted during the panel meeting. They further determined logistics for the conduct of the JTA panel meeting and analyzed the JTA survey process and respondent selection.

2. JTA Panel Meeting

Meeting Date(s):	March 25-27, 2008
Meeting Location(s):	Chicago, IL
Participants:	Listed in Appendix A
Tasks:	During the survey development process, subject-matter experts were asked to come to a consensus in defining the audience for the credential and to determine the duties and requirements of a competent professional in the field.
Target Audience Determination:	The panelists determined the test audience by considering a number of factors related to professional competence. This target audience was defined as follows: A certified professional would be able to provide expertise to acquire, manage, manipulate and analyze data and report results. Responsibilities would include daily operations, data capture, data reporting, and demonstrating proficiency in a number of related knowledge and skill items.
Domain Determination:	The panel considered the major content areas related to the profession to determine the performance domains which would be considered as part of the survey. The following domains were addressed by the survey:
Domains:	Domain 1: Data Management Domain 2: Data Analytics Domain 3: Data Reporting
Task, Knowledge, and Skill Statement Determination:	The panel continued to develop the survey by defining key task, knowledge, and skill statements related to each of these domains. These statements were reviewed to verify that all critical aspects of the competent execution of professional duties would be represented. The list of domains and tasks were validated by the panelists in terms of importance, criticality, and frequency of competent practice within the profession. **The full list of domains, tasks, and knowledge and skill statements can be found in Appendix B.**

3. Development of Validation Survey

Final Version of Survey:

The following sections comprised the final version of the survey:

Section 1: Demographics
Section 2: Domain Ratings
Section 3: Domain 1 - Data Management
Section 4: Domain 2 - Data Analytics
Section 5: Domain 3 - Data Reporting

Section 1: Demographics In this section, respondents were asked to respond to statements according to the following response choices:
Statement: How many years of experience do you have in data analysis? *Response Choices:* Less than 2 years; 2-5 years; 6-10 years; 11-15 years; 16-20 years; More than 20 years *Statement:* How many years of experience do you have in healthcare? *Response Choices:* Less than 2 years; 2-5 years; 6-10 years; 11-15 years; 16-20 years; More than 20 years *Statement:* What is the title of your supervisor? *Response Choices:* CIO; President; Vice President; Director; Manager; Analyst; Other (Specify)
Demographics section continued on next page

Demographics section, continued

Statement:
How large is your organization (i.e., number of employees)?

Response Choices:
1 to 25; 26 to 100; 101 to 500; 501 to 1000; More than 1000

Statement:
How many projects do you currently manage?

Response Choices:
1 to 25; 26 to 100; 101 to 500; More than 1000

Statement:
What is your organization's primary role in the industry?

Response Choices:
Educational Institution; Government; Payor; Provider; Vendor

Statement:
What is the highest level of education that you have completed?

Response Choices:
Some College; Associate; Bachelor; Master; Doctorate

Statement:
How many hours do you spend working on health data analysis per week?

Response Choices:
10 or fewer; 11 to 20; 21 to 30; 31 to 40; More than 40

Demographics section continued on next page

Demographics section, continued

Statement:
Where do you live?

Response Choices:
[List of U.S. States]

Statement:
Gender

Response Choices:
Female; Male

Statement:
Age

Response Choices:
21 to 25; 26 to 33; 34 to 41; 42 to 49; 50 to 60; > 60

Statement:
Annual Income/Salary

Response Choices:
Less than $20,000; $20,000 - $29,999; $30,000 - $39,999; $40,000 - $49,999; $50,000 - $59,999; $60,000 - $69,999; $70,000 - $79,999; $80,000 - $89,999; $90,000 - $99,999; $100,000 - $124,999; $125,000 - $149,999; $175,000+

Statement:
Given the duties and responsibilities outlined for this role, which of the following would be the best title for this credential?

Response Choices:
Certified Health Data Administrator; Certified Health Data Analyst; Certified Health Data Manager; Certified Health Information Analyst; Certified Health Information Professional; Certified Health Informatics Analyst; Certified Healthcare Data Analyst; Certified Professional Health Data Analyst; Certified Professional Health Information Analyst; Healthcare Data Analyst; Other (Specify)

Demographics section continued on next page

Demographics section, continued

Statement:

What certifications/credentials do you currently hold?

Response Choices:

CBAP; CHC; CHE; CHS; CIN; CMPE; CMT; CPA; CPC; CPC_H; CPC_P; CPEHR; CPHIMSS; CPHIT; CPHQ; CTR; FELLOW; JD; LPN; MD; MT; MCP; PMP; RN; Other (Specify)

Statement:

To what professional organizations do you belong? (Check all that apply)

Response Choices:

AAFP; AAMT; AAPC; ACHE; ACP; AHIMA; AIIM; AMIA; ANA; AORN; APHA; CCA; CCS; CCS_P; CHIME; CHPS; HCCA; HFMA; HIMSS; MGMA; MTIA; NAHQ; NCRA; RHIA; RHIT; Other (Specify); No organizations

Statement:

International Respondent?

Response Choices:

Yes; No

Statement:

Country

Response Choices:

Canada; Germany; U.S.

Statement:

Primary Job Role

Response Choices:

Clerical; Clinician; Coding; Consultant; Director; Educator; Exec/Pres/VP; Mgr/Supr; Not Working; Other; Other HIM; Tech

Demographics section continued on next page

Demographics section, continued
Statement: Primary Work Setting *Response Choices:* Acute Care Hosp; Clinic; Consulting; Educ Inst; Integr HDS; Mental Health; Non-provider; Other (Specify) *Statement:* Years Work Experience BA *Response Choices:* 1; 2; 3; 4; 5 *Statement:* Years Work Experience RHIA *Response Choices:* 1; 2; 3; 4; 5 *Statement:* Years Work Experience MA *Response Choices:* 1; 2; 3; 4; 5

Section 2: Domain Ratings In this section, respondents were asked to rate each of the domains with regard to the following statements:
Statements: 1. Importance: How essential are each of the domains? 2. Criticality: If someone fails to do any of these activities, how much HARM will result? (Harm could be physical, emotional, financial, etc.) 3. Frequency: How often are these activities performed?

Section 3: Domain 1 - Data Management

In this section, respondents were asked to rate the following statements according to the given rating scale.

Statements:

1. Assist in the development and maintenance of the data architecture and model to provide a foundation for database design that supports the business' needs.

2. Establish uniform definitions of data captured in source systems to create a reference tool (data dictionary).

3. Formulate validation strategies and methods (i.e., system edits, reports, and audits) to ensure accurate and reliable data.

4. Evaluate existing data structures using data tables and field mapping to develop specifications that produce accurate and properly reported data.

5. Integrate data from internal or external sources in order to provide data for analysis and/or reporting.

6. Facilitate the update and maintenance of tables for organization's information systems in order to ensure the quality and accuracy of the data.

Section 4: Domain 2 - Data Analytics

In this section, respondents were asked to rate the following statements according to the given rating scale.

Statements:

1. Analyze health data using appropriate testing methods to generate findings for interpretation.

2. Interpret analytical findings by formulating recommendations for clinical, financial, and operational processes.

3. Validate results through qualitative and quantitative analyses to confirm findings.

Section 5: Domain 3 - Data Reporting

In this section, respondents were asked to rate the following statements according to the given rating scale.

Statements:

1. Design metrics and criteria to meet the end users' needs through the collection and interpretation of data.

2. Generate routine and ad-hoc reports using internal and external data sources to complete data requests.

3. Present information in a concise, user-friendly format by determining target audience needs to support decision processes.

4. Provide recommendations based on analytical results to improve business processes or outcomes.

Additionally, respondents were given the option to include their own comments in several sections of the survey. **These comments are listed in Appendix C.**

Request for Comment Statement:

Other (Specify)

4. Survey Distribution

Administration Date:	Pilot Survey: May 9-24, 2008; Full Survey: June 23-July 16, 2008
Distribution Method:	Web-based survey
Participants:	1798 practitioners in health data analysis and related professions
Addtl. Information:	The survey was originally sent as a pilot survey to a select group of the participant pool to determine if any changes were needed to the survey. The only change to the pilot survey were two demographic questions that were added. Therefore, the ratings from the 31 pilot survey respondents were combined with the 150 full survey respondents to increase the sample size.

5. Survey Results Analysis

Information:

The survey was designed to verify that key task and knowledge statements related to demonstrating professional competence would be included in test materials developed from this Job/Task Analysis. In order to provide support for the validity of the Job/Task Analysis, the statements were rated in terms of importance, criticality, and frequency of use in competent job performance. Content validation is an important part of the Job/Task Analysis process, as is using objective standards to determine content for inclusion.

Once the survey data was verified, the Job/Task Analysis development team used it to determine the number of items related to each content area that should be included in test materials. A detailed discussion of this issue is found in the "Test Blueprint Development" section of this document.

RESULTS

Introduction

Following the survey administration period, the data was checked for logical consistency and transformation issues. Once the data was determined to be of sufficienct quality, initial frequency and descriptive information were collected on each variable.

Subject-Matter Expert Panel Ratings

During the JTA panel meeting, the subject-matter experts rated each domain and task statement according to importance, criticality, and frequency. The response options for each scale is listed below.

Importance:

0 - Not Important; 1 - Of Little Importance; 2 - Moderately Important; 3 - Very Important; 4 - Extremely Important

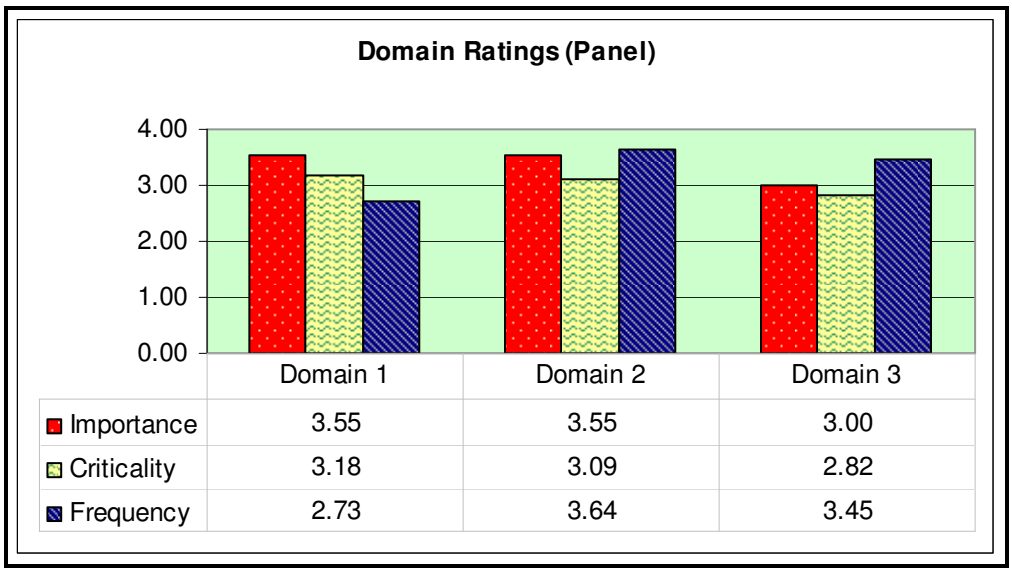
Criticality:

0 - No Harm; 1 - Minimal Harm; 2 - Moderate Harm; 3 - Substantial Harm; 4 - Extreme Harm

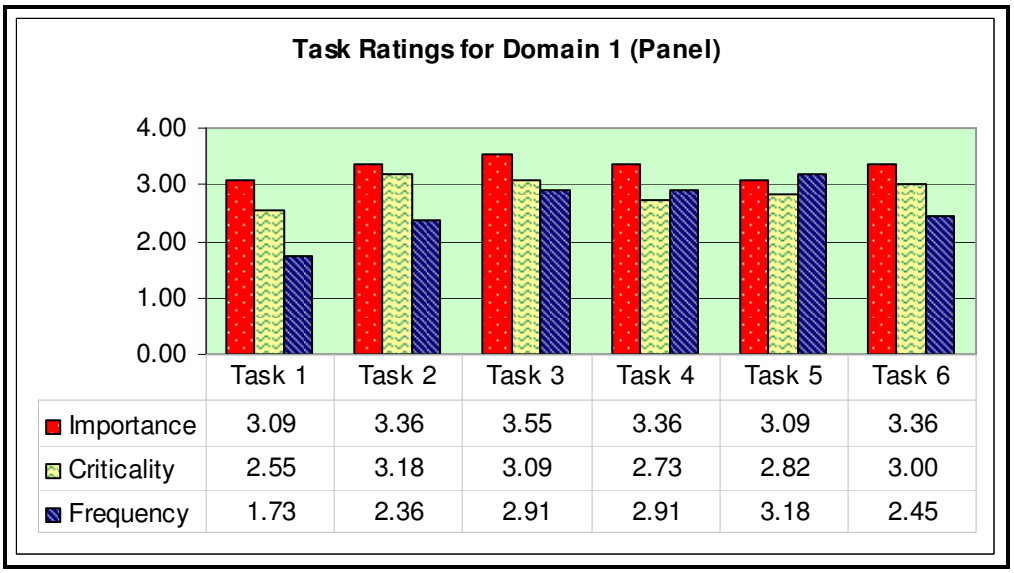
Frequency:

0 - Never Performed; 1 - Rarely Performed; 2 - Sometimes Performed; 3 - Often Performed; 4 - Repeatedly Performed

Beginning on the next page, the following charts indicate the average ratings by domain and task/knowledge statement:



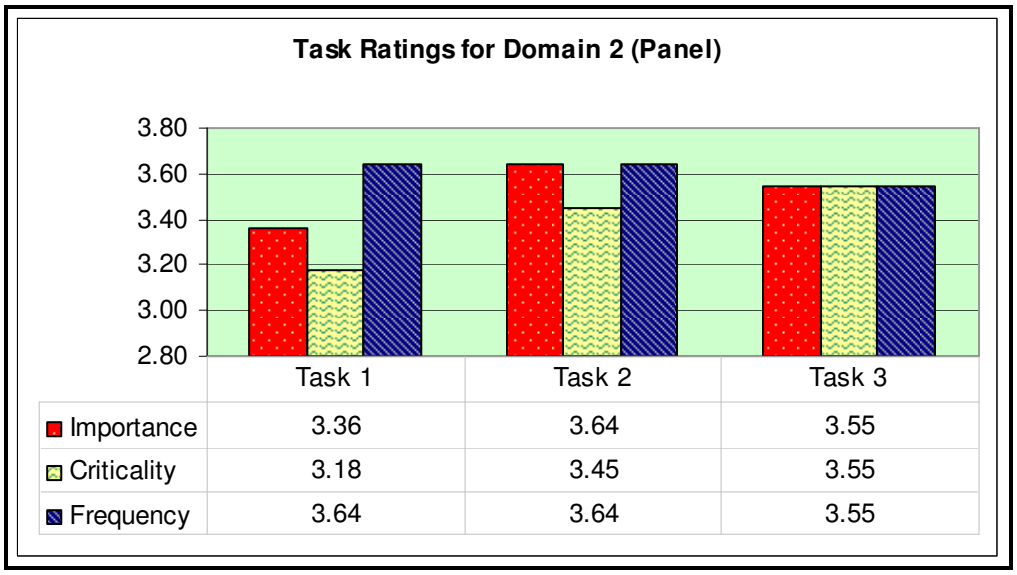
SME Panel Ratings - All Domains					
Domains		*N*	*Std. Error Mean*	*Std. Dev.*	*% of Ratings 2 or Greater*
Importance:	Domain 1	11	0.16	0.52	100%
Importance:	Domain 2	11	0.21	0.69	100%
Importance:	Domain 3	11	0.23	0.77	100%
Criticality:	Domain 1	11	0.23	0.75	100%
Criticality:	Domain 2	11	0.21	0.70	100%
Criticality:	Domain 3	11	0.35	1.17	82%
Frequency:	Domain 1	11	0.19	0.65	100%
Frequency:	Domain 2	11	0.15	0.69	100%
Frequency:	Domain 3	11	0.25	0.82	100%



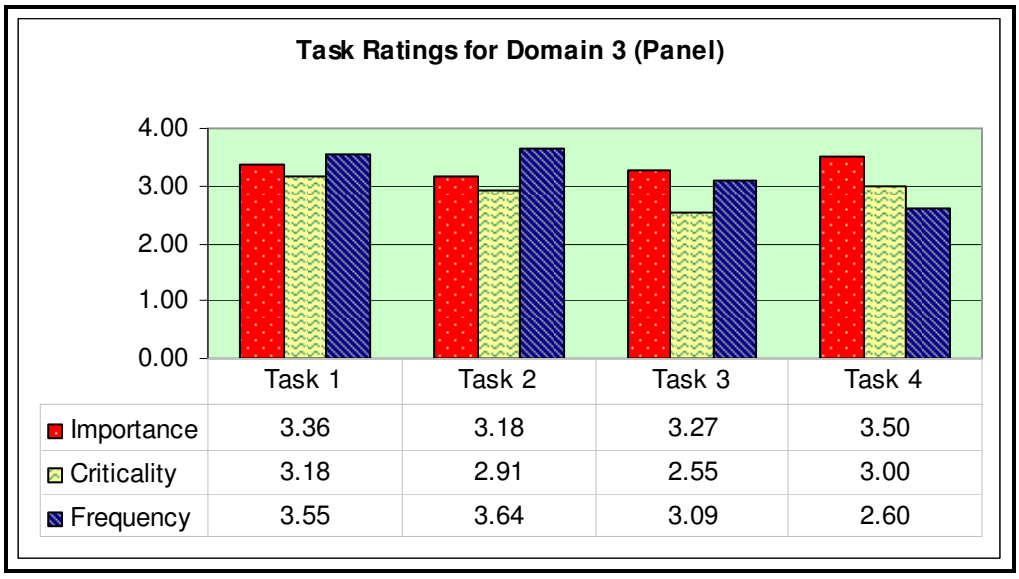
	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6
Importance	3.09	3.36	3.55	3.36	3.09	3.36
Criticality	2.55	3.18	3.09	2.73	2.82	3.00
Frequency	1.73	2.36	2.91	2.91	3.18	2.45

SME Panel Ratings - Domain 1

Domain 1		*N*	*Std. Error Mean*	*Std. Dev.*	*% of Ratings 2 or Greater*
Importance:	D1 Task 1	11	0.21	0.70	100%
Importance:	D1 Task 2	11	0.20	0.67	100%
Importance:	D1 Task 3	11	0.16	0.52	100%
Importance:	D1 Task 4	11	0.20	0.67	100%
Importance:	D1 Task 5	11	0.21	0.70	100%
Importance:	D1 Task 6	11	0.24	0.81	100%
Criticality:	D1 Task 1	11	0.25	0.82	91%
Criticality:	D1 Task 2	11	0.26	0.87	100%
Criticality:	D1 Task 3	11	0.21	0.70	100%
Criticality:	D1 Task 4	11	0.27	0.90	91%
Criticality:	D1 Task 5	11	0.30	0.98	100%
Criticality:	D1 Task 6	11	0.33	1.10	91%
Frequency:	D1 Task 1	11	0.19	0.65	64%
Frequency:	D1 Task 2	11	0.31	1.03	82%
Frequency:	D1 Task 3	11	0.21	0.70	100%
Frequency:	D1 Task 4	11	0.25	0.83	100%
Frequency:	D1 Task 5	11	0.23	0.75	100%
Frequency:	D1 Task 6	11	0.37	1.21	73%



SME Panel Ratings - Domain 2					
Domain 2		*N*	*Std. Error Mean*	*Std. Dev.*	*% of Ratings 2 or Greater*
Importance:	D2 Task 1	11	0.20	0.67	100%
Importance:	D2 Task 2	11	0.15	0.50	100%
Importance:	D2 Task 3	11	0.21	0.69	100%
Criticality:	D2 Task 1	11	0.30	0.98	91%
Criticality:	D2 Task 2	11	0.16	0.52	100%
Criticality:	D2 Task 3	11	0.21	0.69	100%
Frequency:	D2 Task 1	11	0.15	0.50	100%
Frequency:	D2 Task 2	11	0.20	0.67	100%
Frequency:	D2 Task 3	11	0.16	0.52	100%



	Task 1	Task 2	Task 3	Task 4
Importance	3.36	3.18	3.27	3.50
Criticality	3.18	2.91	2.55	3.00
Frequency	3.55	3.64	3.09	2.60

SME Panel Ratings - Domain 3					
Domain 3		*N*	*Std. Error Mean*	*Std. Dev.*	*% of Ratings 2 or Greater*
Importance:	D3 Task 1	11	0.24	0.81	100%
Importance:	D3 Task 2	11	0.26	0.87	100%
Importance:	D3 Task 3	11	0.19	0.65	100%
Importance:	D3 Task 4	10	0.27	0.85	100%
Criticality:	D3 Task 1	11	0.23	0.75	100%
Criticality:	D3 Task 2	11	0.28	0.94	91%
Criticality:	D3 Task 3	11	0.34	1.13	82%
Criticality:	D3 Task 4	10	0.39	1.25	80%
Frequency:	D3 Task 1	11	0.16	0.52	100%
Frequency:	D3 Task 2	11	0.20	0.67	100%
Frequency:	D3 Task 3	11	0.25	0.83	100%
Frequency:	D3 Task 4	10	0.22	0.70	100%

Mean Ratings and Inclusion Criteria

Criteria for Statement Inclusion:

The process for defining valid criteria for whether questions are valid and should be included in test materials involves establishing a cut point based on item ratings. A standard method for determining this cut point relies on identifying the mean importance rating in order to ensure that only relevant information is evaluated by a test.

The Job/Task Analysis development team considered whether each statement met the standard for inclusion based on its mean rating. If a statement did not meet the criteria, it could still be considered if a team member provided a compelling reason for its inclusion.

Rating Scale:

One of the major goals of the Job/Task Analysis is to make a determination of the appropriateness of all content in the daily performance of the job. In order to assist in that decision, the following criteria was be used when reviewing mean survey ratings of the domains and tasks:

Appropriate: 2.00 and above
Borderline: 1.75 - 1.99
Fail: 1.74 and below

Reliability of Scales

Overview:

The reliability of the scales was assessed in order to determine how consistently the sub-domains measured the performance domain of interest. Reliability refers to the degree to which tests or surveys are free from measurement error. Since the mean task ratings for importance and frequency are directly used to determine the number of exam items, it is important that the data be reliable. One of the most common methods used to determine the reliability of a measurement instrument is the Cronbach Coefficient Alpha (Cronbach, 1951). This statistic measures the internal consistency of ratings of importance, criticality, and frequency. A widely used rule of thumb is that the reliability coefficient should be at least 0.70 (Nunnally, 1978). The coefficient alpha reliability estimates for each scale are shown below.

Reliability of Rating Scales	
Scale	*Statistic*
Importance	0.853
Criticality	0.948
Frequency	0.834

Survey Response Statistics

Survey Invitations:	1798
Completed Surveys:	181
Response Rate:	10.07%

Demographic Data for Survey Respondents

Purpose: Data on several key demographic variables were collected during the survey process. Demographic data is important to review, as it provides verification that the survey sample was representative of the target audience for the profession. In addition, demographic data can be analyzed to determine if certain subgroups view the duties and responsibilities differently. The variables were selected by subject matter experts in the profession in the JTA panel meeting and were approved by key stakeholders.

How many years of experience do you have in data analysis?

Options	*Response %*	*Response #*
Less than 2 years	3.9%	7
2-5 years	12.2%	22
6-10 years	**32.0%**	**58**
11-15 years	21.0%	38
16-20 years	14.4%	26
More than 20 years	16.6%	30
	Total Answered:	181

How many years of experience do you have in healthcare?

Options	*Response %*	*Response #*
Less than 2 years	0.6%	1
2-5 years	4.4%	8
6-10 years	10.5%	19
11-15 years	16.6%	30
16-20 years	15.5%	28
More than 20 years	**52.5%**	**95**
	Total Answered:	181

How large is your organization (i.e., number of employees)?

Options	*Response %*	*Response #*
1 to 25	3.9%	7
26 to 100	4.4%	8
101 to 500	11.0%	20
501 to 1000	12.2%	22
More than 1000	**67.4%**	**122**
	1.1%	2
	Total Answered:	181

How many projects do you currently manage?

Options	*Response %*	*Response #*
1 to 25	**86.7%**	**157**
26 to 100	9.4%	17
101 to 500	1.1%	2
500 to 1000	0.0%	0
More than 1000	0.6%	1
	2.2%	4
	Total Answered:	181

What is the title of your supervisor?

Options	*Response %*	*Response #*
CIO	1.1%	2
President	1.1%	2
Vice President	**34.8%**	**63**
Director	32.0%	58
Manager	2.2%	4
Analyst	9.4%	17
Other (Specify)	18.8%	34
	0.6%	1
	Total Answered:	181

What is your organization's primary role in the industry?

Options	*Response %*	*Response #*
Educational Institution	2.2%	4
Government	5.5%	10
Payor	6.6%	12
Provider	**78.5%**	**142**
Vendor	6.1%	11
	1.1%	2
	Total Answered:	181

What is the highest level of education that you have completed?

Options	*Response %*	*Response #*
Some College	5.5%	10
Associate	28.2%	51
Bachelor	**48.6%**	**88**
Master	15.5%	28
Doctorate	2.2%	4
	Total Answered:	181

How many hours do you spend working on health data analysis per week?

Options	*Response %*	*Response #*
10 or fewer	24.9%	45
11 to 20	22.7%	41
21 to 30	13.3%	24
31 to 40	**27.6%**	**50**
More than 40	11.0%	20
	0.6%	1
	Total Answered:	181

Supervisor's Job Title Written in by Respondent

Options	*Response %*	*Response #*
Administrator	0.6%	1
Assistant Administrator	0.6%	1
Assistant Director	0.6%	1
Assistant Professor of Medicine	0.6%	1
Assistant Vice President	0.6%	1
Associate Executive Director	0.6%	1
CEO	1.1%	2
Chief Financial Officer	0.6%	1
Chief Medical Officer	0.6%	1
chief of HIM	0.6%	1
Chief quality and Safety officer	0.6%	1
Clinical Systems Supervisor	0.6%	1
coder/analyst	0.6%	1
coding supervisor	1.1%	2
Coding Supervisor	0.6%	1
Consultant	0.6%	1
COO	0.6%	1
Corporate Privacy Officer	0.6%	1
Data Standards Specialist	0.6%	1
Dean of SAH	0.6%	1
Department Chief	0.6%	1
HIM Medical Director	0.6%	1
Medical Office Controller	0.6%	1
None Self employed	0.6%	1
Pracice Administrator	0.6%	1
Project Coordinator	0.6%	1
Project Manager	0.6%	1
PROJECT MANAGER	0.6%	1
Research Nurse	0.6%	1
Senior VP/President	0.6%	1
Supervisor	1.1%	2
	81.2%	**147**
	Total Answered:	181

Where do you live?

Options	*Response %*	*Response #*
AL	1.1%	2
AR	0.6%	1
AZ	1.1%	2
CA	**8.8%**	**16**
CO	1.1%	2
CT	1.1%	2
DC	0.6%	1
FL	3.9%	7
GA	2.8%	5
IA	0.6%	1
ID	0.6%	1
IL	7.2%	13
IN	1.7%	3
KS	3.3%	6
KY	1.7%	3
LA	1.7%	3
MA	1.7%	3
MD	1.1%	2
MI	6.1%	11
MN	5.5%	10
MO	1.1%	2
MS	0.6%	1
MT	0.6%	1
NC	0.6%	1
ND	0.6%	1
NE	5.0%	9
NJ	1.7%	3
NV	1.7%	3
NY	7.7%	14
OH	2.2%	4
OK	1.1%	2
OR	1.1%	2
PA	5.5%	10
SC	1.1%	2
TN	2.8%	5
TX	3.3%	6
UT	0.6%	1
VA	1.7%	3
WA	1.7%	3
WI	3.3%	6
WV	0.6%	1
	3.9%	7
	Total Answered:	181

Gender

Options	*Response %*	*Response #*
Female	**88.4%**	**160**
Male	10.5%	19
	1.1%	2
	Total Answered:	181

Age [Optional Field]

Options	*Response %*	*Response #*
21 to 25	1.7%	3
26 to 33	7.7%	14
34 to 41	17.1%	31
42 to 49	25.4%	46
50 to 60	**41.4%**	**75**
> 60	6.1%	11
	0.6%	1
	Total Answered:	181

Annual Income/Salary

Options	*Response %*	*Response #*
Less than $20,000	0.6%	1
$20,000 - $29,999	4.4%	8
$30,000 - $39,999	4.4%	8
$40,000 - $49,999	**15.5%**	**28**
$50,000 - $59,999	14.4%	26
$60,000 - $69,999	14.9%	27
$70,000 - $79,999	**15.5%**	**28**
$80,000 - $89,999	10.5%	19
$90,000 - $99,999	7.2%	13
$100,000 - $124,999	7.2%	13
$125,000 - $149,000	2.8%	5
$150,000 - $174,999		
$175,000+	1.1%	2
	1.7%	3
	Total Answered:	181

Given the duties and responsibilities outlined for this role, which of the following would be the best title for this credential?		
Options	*Response %*	*Response #*
Certified Health Data Administrator	7.2%	13
Certified Health Data Analyst	**21.0%**	**38**
Certified Health Data Manager	11.0%	20
Certified Health Information Analyst	9.4%	17
Certified Health Information Professional	2.2%	4
Certified Health Informatics Analyst	7.2%	13
Certified Healthcare Data Analyst	19.3%	35
Certified Professional Health Data Analyst	4.4%	8
Certified Professional Health Information Analyst	1.1%	2
Healthcare Data Analyst	11.6%	21
Other	4.4%	8
	1.1%	2
	Total Answered:	181

Other titles written as "Other"		
Options	*Response %*	*Response #*
Certified Healthcare Data Analyst	1.1%	2
Clinical Data Analyst	0.6%	1
Data Quality Specialist / Coder Abrasctor	0.6%	1
Data Specialist	0.6%	1
Data Validator	0.6%	1
System Analyst	0.6%	1
VP Quality & Performance Improvement	0.6%	1
	95.6%	**173**
	Total Answered:	181

What certifications/credentials do you currently hold?

Options	*Response %*	*Response #*
Attorney (JD)	0.0%	0
Certified Business Analysis Professional (CBAP)	0.0%	0
Certified Cancer Registrar (CTR)	0.6%	1
Certified in Healthcare Compliance (CHC)	0.0%	0
Certified Healthcare Executive (CHE)	0.0%	0
Certified in Healthcare Security (CHS)	0.0%	0
Certified Informatics Nurse	0.0%	0
Certified Medical Practice Executive (CMPE)	0.0%	0
Certified Medical Transcriptionist (CMT)	1.1%	2
Certified Professional Coder (CPC)	5.0%	9
Certified Professional Coder-Hospital (CPC-H)	1.1%	2
Certified Professional Coder-Payer (CPC-P)	0.0%	0
Certified Professional in Electronic Health Records (CPEHR)	0.6%	1

Responses continued at right

Certifications/Credentials held, continued		
Certified Professional Healthcare Quality (CPHQ)	6.6%	12
Certified Professional in Healthcare Information and Management Systems (CPHIMSS)	0.0%	0
Certified Professional in Health Information Technology (CPHIT)	2.2%	4
Certified Public Accountant (CPA)	0.6%	1
Fellow (FAHIMA, FHIMSS, FHFMA, FACHE and others)	0.6%	1
Licensed Practical Nurse (LPN)	0.6%	1
Medical Doctor (MD)	0.0%	0
Medical Transcriptionist (MT)	0.6%	1
Microsoft Certified Professional (MCAD, MCT, MCSE, MCITP and others)	0.0%	0
Project Management Professional (PMP)	1.1%	2
Registered Nurse (RN)	5.5%	10
Other (Specify)	18.8%	34
None	**42.0%**	**76**

Other certifications held

Options	*Response %*	*Response #*
AAS, BBS	0.6%	1
Black Belt; Medical techonolgist (ASCP certified)	0.6%	1
BS	0.6%	1
CCRP (Certified Clinical Research Professional)	0.6%	1
CCS	0.6%	1
ccs, cpc	0.6%	1
certifed adult np/certified managed care nurse	0.6%	1
Certified Health Information Management [Professional] CHIM	0.6%	1

Responses continued at right

Other certifications/credentials held, continued		
Certified Managed Care Executive; Registered Record Administrator	0.6%	1
CSTR, CAISS	0.6%	1
Green Belt - Six Sigma Methodology	0.6%	1
Licensed Health Care Risk Manager	0.6%	1
Managed Healthcare Professional (MHP)	0.6%	1
Medizinische Doku-mentarin Germany	0.6%	1
MHA	0.6%	1
Registered Health Information Administrator (RHIA)	0.6%	1
RHIA	3.9%	7
RHIT	**5.5%**	**10**
RHIT, RT (T)	0.6%	1
	81.2%	147
	Total Answered:	181

To what professional organizations do you belong? (Check all that apply)

Options	*Response %*	*Response #*
AAFP	0.0%	0
AAMT	1.1%	2
AAPC	4.4%	8
ACHE	2.2%	4
ACP	0.0%	0
AHIMA	**75.7%**	**137**
AIIM	0.0%	0
AMIA	3.3%	6
ANA	0.6%	1
AORN	0.0%	0
APHA	0.0%	0
CCA	1.7%	3
CCS	13.3%	24
CCS_P	1.7%	3
CHIME	0.0%	0
CHPS	0.0%	0
HCCA	0.0%	0
HFMA	2.2%	4
HIMSS	5.5%	10
MGMA	0.0%	0
MTIA	0.0%	0
NAHQ	7.7%	14
NCRA	1.1%	2
RHIA	38.1%	69
RHIT	37.0%	67
Other (Specify)	21.0%	38
No Organizations	8.3%	15

International Respondent?

Options	*Response %*	*Response #*
Yes	1.7%	3
	98.3%	**178**
	Total Answered:	181

Country

Options	*Response %*	*Response #*
Canada	0.6%	1
Germany	0.6%	1
USA	0.6%	1
	98.3%	**178**
	Total Answered:	181

Other Organizational Membership

Options	*Response %*	*Response #*
AAHAM	0.6%	1
AAHIM	0.6%	1
ACHCM	0.6%	1
AHDI not AAMT	0.6%	1
AHIMA,	0.6%	1
AHQA	0.6%	1
ARMA	0.6%	1
ASCP	0.6%	1
ASHRM	0.6%	1
ASQ	0.6%	1
ASTM	0.6%	1
CAHQ	0.6%	1
CCS	0.6%	1
CHCA, NACHRI	0.6%	1
CHIA	0.6%	1
CHIMA	0.6%	1
CHIMA, HIMAA, COACH	0.6%	1
DDNA	0.6%	1
DVMD (Germany equivalent to AHIMA), IFHRO	0.6%	1
MdHIMA	0.6%	1
MHIMA	1.1%	2
MHIMA, SEMHIMA	0.6%	1
MSHIMA	0.6%	1
National Trauma Society and Alliance of Ohio Trauma Registrars	0.6%	1
NHIMA (State Association)	0.6%	1
nihima	0.6%	1
NYHIMA	0.6%	1
OHIMA	0.6%	1
PAHQ, CPAHQ	0.6%	1
phia	0.6%	1
PHIMA, SePHIMA	0.6%	1
PMI	0.6%	1
SoCRA	1.1%	2
SWIMA	0.6%	1
UHIMA	0.6%	1
X12, NAHDO	0.6%	1
	79.0%	**143**
	Total Answered:	181

Primary Job Role

Options	*Response %*	*Response #*
Clerical	1.7%	3
Clinician	1.1%	2
Coding	11.0%	20
Consultant	3.9%	7
Director	10.5%	19
Educator	3.3%	6
Exec/Pres/VP	2.8%	5
Mgr/Supr	16.0%	29
Not Working	0.6%	1
Other	21.0%	38
Other HIM	2.2%	4
Tech	**25.4%**	**46**
	0.6%	1
	Total Answered:	181

Other Job Role (Written In)

Options	*Response %*	*Response #*
ACHCM	0.6%	1
Administrator, Office Practice Services	0.6%	1
Cancer Registrar	0.6%	1
Case Management	0.6%	1
clinical data analyst	0.6%	1
Clinical Data Manager	0.6%	1
Clinical Decision Support Analyst	0.6%	1
Clinical Research	0.6%	1
clinical research associate	0.6%	1
Clinical Research Coordinator	0.6%	1
Clinical Research Data Manager	0.6%	1
clinical research specialist	0.6%	1
Clinical Trial Coding Specialist	0.6%	1
Compliance Analyst	0.6%	1
coordinator	0.6%	1
Corporate Systems Trainer	0.6%	1

Responses continued at right

Other Job Role (Written In), continued		
data abstraction / analysis	0.6%	1
Data Analyst	1.1%	2
Data Integrity Analyst	0.6%	1
Data Integrity Coordinator	0.6%	1
Data Mining Analyst	0.6%	1
Data Quality Manager	0.6%	1
Data Quality Reviewer / Coding	0.6%	1
Data Quality Specialist	0.6%	1
Documentation Trainer	0.6%	1
Health Care Economics	0.6%	1
HEALTH FACILITIES EVALUATOR NURSE	0.6%	1
IS Lead Project Analyst	0.6%	1
Medical Management Liason	0.6%	1
Operations Analyst	0.6%	1
Program Development	0.6%	1
Project Manager	1.1%	2
Quality analyst	0.6%	1
research analyst	0.6%	1
Senior Analyst	0.6%	1
Would have leaned towad the tech roles title but I am not an IS person-just have to have IS knowledg	0.6%	1
	79.0%	**143**
	Total Answered:	181

Primary Work Setting

Options	*Response %*	*Response #*
Acute Care Hosp	**50.8%**	**92**
Clinic	3.3%	6
Consulting	1.1%	2
Educ Inst	1.1%	2
Integr HDS	18.2%	33
Mental Health	1.1%	2
Non-provider	7.7%	14
Other	14.9%	27
	1.7%	3
	Total Answered:	181

Other Work Setting (Written In)

Options	*Response %*	*Response #*
Administrative	0.6%	1
Ambulatory Oncology Center	0.6%	1
Clinic and Hospital	0.6%	1
Clinical Research Organization	0.6%	1
Critical Access Hospital, SNF and Clinic	0.6%	1
Health Insurance	2.2%	4
Health Insurer	0.6%	1
Healthcare Corporate Office	0.6%	1
Home	0.6%	1
Home Office / Health Care System	0.6%	1
IT	0.6%	1
Managed Care Operation	0.6%	1
Military Hospital Orderly Room	0.6%	1
Organ Procurement Organization	0.6%	1
payer	0.6%	1
Payor	1.1%	2
Pediatric Hospital	0.6%	1
Pharmaceutical company	0.6%	1
Pharmaceutical Industry	0.6%	1
Pharmaceutical Research	0.6%	1
Professional Liability Insurance Company	0.6%	1
Remote from home	0.6%	1
SNF, ICF-DD, GACH, HOME HEALTH,	0.6%	1
	85.1%	**154**
	Total Answered:	181

Given the duties and responsibilities outlined for this role, how many years of related work experience should be required for this credential (based on the following levels of education and/or credential)?

A) Individuals who hold a Bachelor's degree (any field)

Years Required	*Response %*	*Response #*
1	7.7%	14
2	**24.9%**	**45**
3	23.8%	43
4	8.3%	15
5	17.1%	31
	18.2%	33
	Total Answered:	181

Given the duties and responsibilities outlined for this role, how many years of related work experience should be required for this credential (based on the following levels of education and/or credential)?

B) Individuals with a Registered Health Information Administrator (RHIA) credential

Years Required	*Response %*	*Response #*
1	20.4%	37
2	**28.7%**	**52**
3	21.5%	39
4	2.2%	4
5	7.2%	13
	19.9%	36
	Total Answered:	181

Given the duties and responsibilities outlined for this role, how many years of related work experience should be required for this credential (based on the following levels of education and/or credential)?

C) Individuals who hold a Master's degree or higher (any field)

Years Required	*Response %*	*Response #*
1	23.8%	43
2	**29.3%**	**53**
3	15.5%	28
4	3.9%	7
5	6.6%	12
Other	1.1%	2
	19.9%	36
	Total Answered:	181

Survey Results:

DOMAIN RATINGS:

Importance: How essential are each of the domains?							
Domain	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Data Management	0.0% (0)	0.0% (0)	12.6% (22)	**44.8% (78)**	42.5% (74)	174	100%
Data Analytics	0.0% (0)	1.1% (2)	10.3% (18)	41.4% (72)	**47.1% (82)**	174	99%
Data Reporting	0.0% (0)	1.1% (2)	10.9% (19)	36.8% (64)	**51.1% (89)**	174	99%

Criticality: If someone fails to do any of these activities, how much HARM will result? (Harm could be physical, emotional, financial, etc.)							
Domain	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Data Management	1.7% (3)	12.7% (22)	34.1% (59)	**41.0% (71)**	10.4% (18)	173	86%
Data Analytics	1.2% (2)	11.6% (20)	32.4% (56)	**41.6% (72)**	13.3% (23)	173	87%
Data Reporting	1.2% (2)	9.8% (17)	29.5% (51)	**38.2% (66)**	21.4% (37)	173	89%

Frequency: How often are these activities performed?							
Domain	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Data Management	1.2% (2)	0.6% (1)	14.4% (26)	**40.3% (73)**	39.2% (71)	173	98%
Data Analytics	1.2% (2)	1.2% (2)	9.8% (17)	38.7% (67)	**49.1% (85)**	173	98%
Data Reporting	0.6% (1)	0.0% (0)	12.7% (22)	34.7% (60)	**52.0% (90)**	173	99%

DOMAIN 1:
Data Management

Data Management: Assist in the development and maintenance of the data architecture and model to provide a foundation for database design that supports the business' needs.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	0.6% (1)	3.7% (6)	29.6% (48)	**38.9% (63)**	27.2% (44)	162	96%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	5.6% (9)	17.3% (28)	**35.2% (57)**	32.1% (52)	9.9% (16)	162	77%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	1.2% (2)	6.8% (11)	33.3% (54)	**38.3% (62)**	20.4% (33)	162	92%

Data Management: Establish uniform definitions of data captured in source systems to create a reference tool (data dictionary).							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	1.2% (2)	2.5% (4)	13.6% (22)	**42.0% (68)**	40.7% (66)	162	96%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	5.6% (9)	14.2% (23)	**38.9% (63)**	29.6% (48)	11.7% (19)	162	80%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	1.9% (3)	5.6% (9)	27.8% (45)	**39.5% (64)**	25.3% (41)	162	93%

Data Management: Formulate validation strategies and methods (i.e., system edits, reports, and audits) to ensure accurate and reliable data.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	0.0% (0)	1.9% (3)	9.9% (16)	36.6% (59)	**51.6% (83)**	161	98%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	3.1% (5)	8.7% (14)	30.4% (49)	**36.0% (58)**	21.7% (35)	161	88%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	0.0% (0)	1.2% (2)	18.6% (30)	**40.4% (65)**	39.8% (64)	161	99%

Data Management: Evaluate existing data structures using data tables and field mapping to develop specifications that produce accurate and properly reported data.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	0.0% (0)	1.2% (2)	24.2% (39)	**38.5% (62)**	36.0% (58)	161	99%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	4.3% (7)	12.4% (20)	32.9% (53)	**34.2% (55)**	16.1% (26)	161	83%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	0.0% (0)	6.2% (10)	25.5% (41)	**41% (66)**	27.3% (44)	161	94%

Data Management: Integrate data from internal or external sources in order to provide data for analysis and/or reporting.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	0.0% (0)	1.9% (3)	18.6% (30)	**46.6% (75)**	32.9% (53)	161	98%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	3.1% (5)	11.2% (18)	37.3% (60)	**38.5% (62)**	9.9% (16)	161	86%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	0.0% (0)	1.9% (3)	19.3% (31)	**44.7% (72)**	34.2% (55)	161	98%

Data Management: Facilitate the update and maintenance of tables for organization's information systems in order to ensure the quality and accuracy of the data.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	0.0% (0)	3.1% (5)	17.4% (28)	**41.0% (66)**	38.5% (62)	161	97%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	5.0% (8)	11.2% (18)	32.9% (53)	**37.3% (60)**	13.7% (22)	161	84%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	1.2% (2)	4.3% (7)	29.2% (47)	**33.5% (54)**	31.7% (51)	161	94%

DOMAIN 2:
Data Analytics

Data Analytics: Analyze health data using appropriate testing methods to generate findings for interpretation.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	0.6% (1)	0.6% (1)	17.5% (28)	**46.9% (75)**	34.4% (55)	160	99%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	3.8% (6)	10.0% (16)	**37.5% (60)**	33.8% (54)	15.0% (24)	160	86%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	1.3% (2)	1.3% (2)	18.1% (29)	**46.9% (75)**	32.5% (52)	160	98%

Data Analytics: Interpret analytical findings by formulating recommendations for clinical, financial, and operational processes.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	0.6% (1)	1.9% (3)	23.1% (37)	**40.6% (65)**	33.8% (54)	160	98%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	3.8% (6)	10.0% (16)	32.5% (52)	**38.8% (62)**	15.0% (24)	160	86%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	0.6% (1)	2.5% (4)	32.5% (52)	**37.5% (60)**	26.9% (43)	160	97%

Data Analytics: Validate results through qualitative and quantitative analyses to confirm findings.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	0.0% (0)	0.0% (0)	15.0% (24)	39.4% (63)	**45.6% (73)**	160	100%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	3.8% (6)	9.4% (15)	**36.3% (58)**	32.5% (52)	18.1% (29)	160	87%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	0.0% (0)	1.9% (3)	17.5% (28)	40.0% (64)	**40.6% (65)**	160	98%

DOMAIN 3:
Data Reporting

Data Reporting: Design metrics and criteria to meet the end users' needs through the collection and interpretation of data.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	1.3% (2)	1.3% (2)	21.4% (34)	**41.5% (66)**	34.6% (55)	159	97%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	6.9% (11)	13.2% (21)	**40.3% (64)**	29.6% (47)	10.1% (16)	159	80%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	2.5% (4)	2.5% (4)	21.4% (34)	**46.5% (74)**	27.0% (43)	159	95%

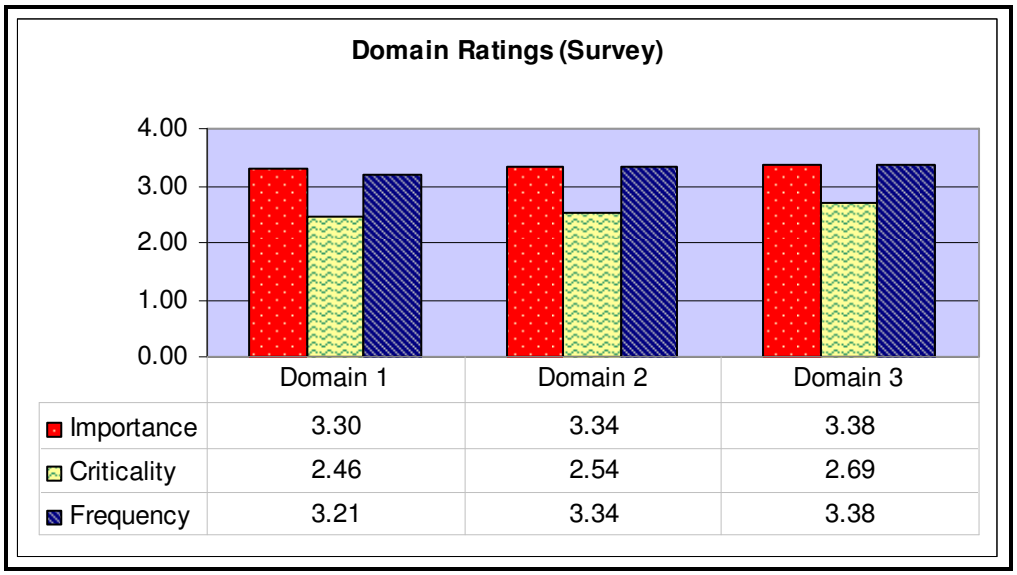
Data Reporting: Generate routine and ad-hoc reports using internal and external data sources to complete data requests.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	0.0% (0)	0.6% (1)	22.6% (36)	35.8% (57)	**40.9% (65)**	159	99%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	3.1% (5)	15.1% (24)	**36.5% (58)**	34.0 (54)	11.3% (18)	159	82%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	0.0% (0)	2.5% (1)	21.4% (34)	30.2% (48)	**45.9% (73)**	159	99%

Data Reporting: Present information in a concise, user-friendly format by determining target audience needs to support decision processes.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	0.0% (0)	0.6% (1)	14.5% (23)	**45.3% (72)**	39.6% (63)	159	99%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	4.4% (7)	16.4% (26)	**35.8% (57)**	30.8% (49)	12.6% (20)	159	79%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	0.0% (0)	1.9% (3)	20.8% (33)	34.6% (55)	**42.8% (68)**	159	98%

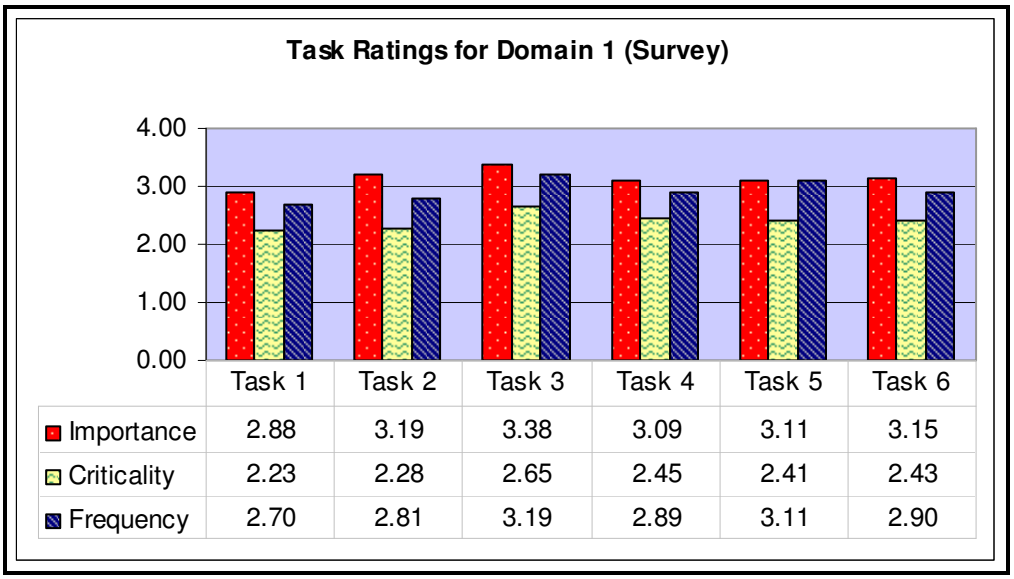
Data Reporting: Provide recommendations based on analytical results to improve business processes or outcomes.							
-	0 - Not Important	1 - Of Little Importance	2 - Moderately Important	3 - Very Important	4 - Extremely Important	Response Count	% 2 or greater
Importance	0.6% (1)	3.1% (5)	29.6% (47)	**37.7% (60)**	28.9% (46)	159	96%
-	0 - No Harm	1 - Minimal Harm	2 - Moderate Harm	3 - Substantial Harm	4 - Extreme Harm	Response Count	% 2 or greater
Criticality	3.1% (5)	18.9% (30)	**34.0% (54)**	29.6% (47)	14.5% (23)	159	78%
-	0 - Never Performed	1 - Rarely Performed	2 - Sometimes Performed	3 - Often Performed	4 - Repeatedly Performed	Response Count	% 2 or greater
Frequency	0.0% (0)	6.3% (10)	34.0% (54)	**39.0% (62)**	20.8% (33)	159	94%

Survey Mean Ratings

Overview: The survey respondents were asked to evaluate each domain and task, rating each on importance, criticality and frequency. The ratings are presented in the figures below.

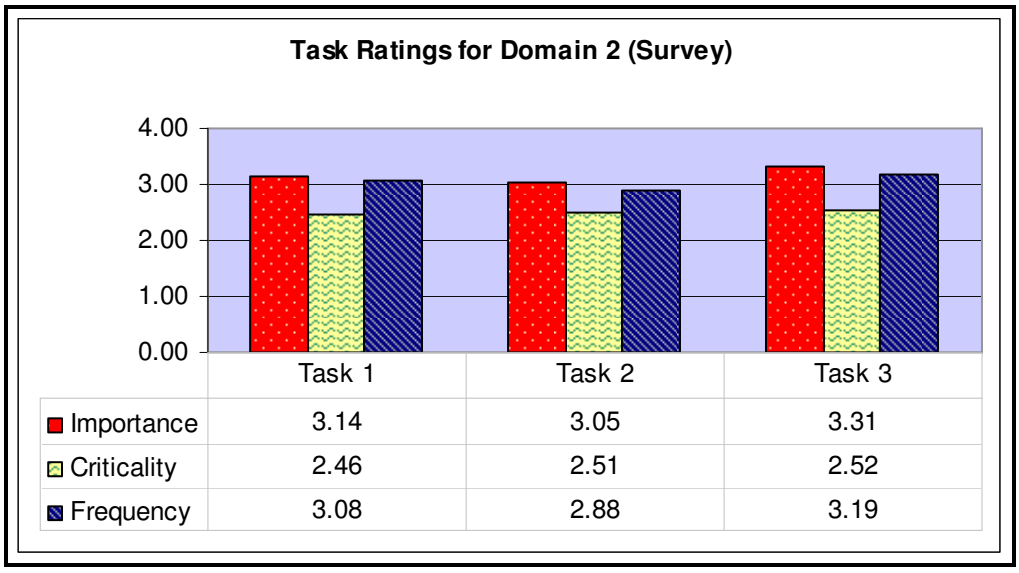


Domains		*N*	*Std. Error Mean*	*Std. Dev.*	*% of Ratings 2 or Greater*
Importance:	Domain 1	174	0.052	0.682	100%
Importance:	Domain 2	174	0.054	0.710	99%
Importance:	Domain 3	174	0.055	0.725	99%
Criticality:	Domain 1	173	0.069	0.905	86%
Criticality:	Domain 2	173	0.069	0.905	87%
Criticality:	Domain 3	173	0.073	0.956	89%
Frequency:	Domain 1	173	0.061	0.804	98%
Frequency:	Domain 2	173	0.060	0.794	98%
Frequency:	Domain 3	173	0.057	0.749	99%

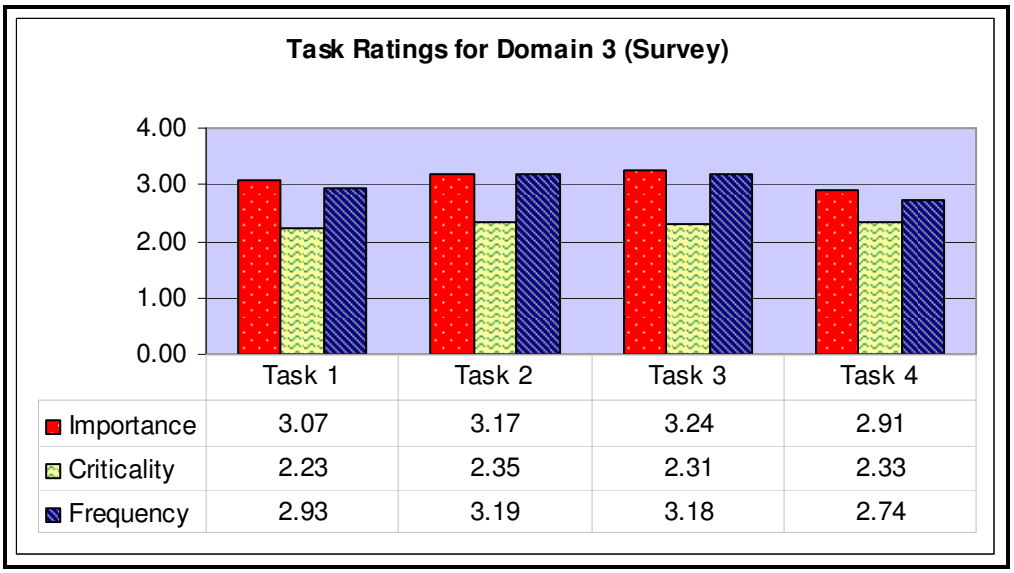


	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6
Importance	2.88	3.19	3.38	3.09	3.11	3.15
Criticality	2.23	2.28	2.65	2.45	2.41	2.43
Frequency	2.70	2.81	3.19	2.89	3.11	2.90

Domain 1	*N*	*Std. Error Mean*	*Std. Dev.*	*% of Ratings 2 or Greater*
Importance: D1 Task 1	162	0.069	0.873	96%
Importance: D1 Task 2	162	0.067	0.850	96%
Importance: D1 Task 3	161	0.058	0.741	98%
Importance: D1 Task 4	161	0.063	0.805	99%
Importance: D1 Task 5	161	0.060	0.763	98%
Importance: D1 Task 6	161	0.064	0.816	97%
Criticality: D1 Task 1	162	0.081	1.031	77%
Criticality: D1 Task 2	162	0.081	1.029	80%
Criticality: D1 Task 3	161	0.080	1.015	88%
Criticality: D1 Task 4	161	0.082	1.043	83%
Criticality: D1 Task 5	161	0.073	0.925	86%
Criticality: D1 Task 6	161	0.081	1.023	84%
Frequency: D1 Task 1	162	0.072	0.913	92%
Frequency: D1 Task 2	162	0.074	0.943	93%
Frequency: D1 Task 3	161	0.061	0.776	99%
Frequency: D1 Task 4	161	0.069	0.878	94%
Frequency: D1 Task 5	161	0.061	0.775	98%
Frequency: D1 Task 6	161	0.074	0.943	94%



Domain 2		N	Std. Error Mean	Std. Dev.	% of Ratings 2 or Greater
Importance:	D2 Task 1	160	0.060	0.765	99%
Importance:	D2 Task 2	160	0.066	0.838	98%
Importance:	D2 Task 3	160	0.057	0.718	100%
Criticality:	D2 Task 1	160	0.078	0.990	86%
Criticality:	D2 Task 2	160	0.078	0.990	86%
Criticality:	D2 Task 3	160	0.080	1.015	87%
Frequency:	D2 Task 1	160	0.065	0.816	98%
Frequency:	D2 Task 2	160	0.068	0.860	97%
Frequency:	D2 Task 3	160	0.062	0.789	98%



Domain 3		*N*	*Std. Error Mean*	*Std. Dev.*	*% of Ratings 2 or Greater*
Importance:	D3 Task 1	159	0.067	0.850	97%
Importance:	D3 Task 2	159	0.063	0.797	99%
Importance:	D3 Task 3	159	0.057	0.716	99%
Importance:	D3 Task 4	159	0.069	0.874	96%
Criticality:	D3 Task 1	159	0.082	1.031	80%
Criticality:	D3 Task 2	159	0.077	0.975	82%
Criticality:	D3 Task 3	159	0.082	1.031	79%
Criticality:	D3 Task 4	159	0.083	1.041	78%
Frequency:	D3 Task 1	159	0.071	0.901	95%
Frequency:	D3 Task 2	159	0.068	0.860	99%
Frequency:	D3 Task 3	159	0.065	0.826	98%
Frequency:	D3 Task 4	159	0.068	0.858	94%

Survey Results

Overview: While respondents were asked to provide tasks not present in the survey that they felt were important to competent job performance, there was no clear pattern or obvious task missing. In fact, a review of the comments provided indicated that the majority of items mentioned as missing by the survey respondents were included in the knowledge/skills statements. The survey respondents did not have access to the knowledge/skills statements; however, these are provided as part of the final detailed test blueprint.

TEST BLUEPRINT DEVELOPMENT

Overview

Following the survey results analysis, the Job/Task Analysis development team worked to identify the number of items which should be included in a certification test along with relevant statistics such as domain percentage, task percentage, and test percentage. These percentages are used to ensure comprehensive coverage of all content areas on a test.

This section provides the combined data from the subject-matter experts panel and survey respondents.

Test Format

Examination formats vary by provider. Multiple-choice tests are generally used to evaluate examinee knowledge, while performance-based tests are generally used to evaluate examinee skills and job execution. However, certifying agencies must decide on a case-by-case basis what test format they prefer to use. This examination will consist of 150 multiple-choice questions. The validation ratings for each task and the number of test questions required as a result of those ratings is provided in the tables below.

Total Items

150

Combined Ratings from SME Panel and Survey Respondents

Information: The following tables present the combined mean ratings from the SME panel and survey respondents for each of the content categories.

Combined Ratings:

Domain / Task	*I*	*C*	*F*	*% Domain*	*% Test*	*# of Items*
Domain 1 - Data Management	**3.30**	**2.46**	**3.21**	**-**	**32.46%**	**49**
1.1 - Assist in the development and maintenance of the data architecture and model to provide a foundation for database design that supports the business' needs.	2.88	2.23	2.70	15.37%	4.99%	8
1.2 - Establish uniform definitions of data captured in source systems to create a reference tool (data dictionary).	3.19	2.28	2.81	16.27%	5.28%	8
1.3 - Formulate validation strategies and methods (i.e., system edits, reports, and audits) to ensure accurate and reliable data.	3.38	2.65	3.19	18.11%	5.88%	9
1.4 - Evaluate existing data structures using data tables and field mapping to develop specifications that produce accurate and properly reported data.	3.09	2.45	2.89	16.60%	5.39%	8
1.5 - Integrate data from internal or external sources in order to provide data for analysis and/or reporting.	3.11	2.41	3.11	16.97%	5.51%	8
1.6 - Facilitate the update and maintenance of tables for organization's information systems in order to ensure the quality and accuracy of the data.	3.15	2.43	2.90	16.69%	5.42%	8

Domain / Task	*I*	*C*	*F*	*% Domain*	*% Test*	*# of Items*
Domain 2 - Data Analytics	**3.34**	**2.54**	**3.34**	-	**33.38%**	**50**
2.1 - Analyze health data using appropriate testing methods to generate findings for interpretation.	3.14	2.46	3.08	33.21%	11.09%	17
2.2 - Interpret analytical findings by formulating recommendations for clinical, financial, and operational processes.	3.05	2.51	2.88	32.28%	10.77%	16
2.3 - Validate results through qualitative and quantitative analyses to confirm findings.	3.31	2.52	3.19	34.51%	11.52%	17

Domain / Task	*I*	*C*	*F*	*% Domain*	*% Test*	*# of Items*
Domain 3 - Data Reporting	**3.38**	**2.69**	**3.38**	-	**34.17%**	**51**
3.1 - Design metrics and criteria to meet the end users' needs through the collection and interpretation of data.	3.07	2.23	2.93	24.44%	8.35%	13
3.2 - Generate routine and ad-hoc reports using internal and external data sources to complete data requests.	3.17	2.35	3.19	25.90%	8.85%	13
3.3 - Present information in a concise, user-friendly format by determining target audience needs to support decision processes.	3.24	2.31	3.18	25.93%	8.86%	13
3.4 - Provide recommendations based on analytical results to improve business processes or outcomes.	2.91	2.33	2.74	23.73%	8.11%	12

SUMMARY

Summary

The process of developing this Job/Task Analysis relied on the efforts of a number of participants in order to comprehensively examine content areas with the goal of providing a resource for developing test materials related to the following professional certification:
Certified Health Data Analyst

Participants complied with established professional standards while developing the Job/Task Analysis in order to maintain a comprehensive approach to the development process. Subject-matter experts helped develop a survey that was distributed to professional practitioners, and a number of project facilitators relied on data generated by these activities to develop this document as well as the test blueprint. The nature of this thorough approach ensures that this resource adequately addresses the key content areas required in testing qualifications for professional certification.

Upon completion and acceptance of the Job/Task Analysis, the test blueprint should not be changed without conducting another JTA Study. In particular, the domains and tasks and the assigned percentages should not be modified once accepted and approved. While the associated knowledge and skills statements can be expanded, if needed, the modification should not change the percentage values for the domains and tasks.

NCCA standards state that role delineations should be current and updated as needed. The frequency varies per profession, with some professions with rapid changes to process or technology needing updates annually. As a minimum, it is advisable that at a mimimum, the job analysis be revisited every five years to assess any changes to the relevance of the duties and requirements.

APPENDIX A

Subject-Matter Expert Panelists

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APPENDIX B

Performance Domains / Knowledge and Task Statements

Domain 1	**Data Management**

D 1 - Task 1	Assist in the development and maintenance of the data architecture and model to provide a foundation for database design that supports the business' needs.
Knowledge of:	• Relationship between the data and the organization's strategic goals and priorities • Data models (conceptual, logical, and physical) • Basic knowledge of various architecture platforms (e.g., Oracle, SQL server) • Relational database structure (primary key, secondary key) • Electronic Health Record (EHR) systems • Database language (SQL, XML, etc.)
Skill in:	• Designing (limited) small scale databases • Utilizing various query tools (e.g., SAS, COGNOS, Business Objects) • Communicating with multiple levels internal and external to the organization • Managing priorities

D 1 - Task 2	Establish uniform definitions of data captured in source systems to create a reference tool (data dictionary).
Knowledge of:	• Applicable data standards (e.g., ASTM, CDISC, HL7) • Reference classification/terminology systems and industry data sets requirements (e.g., ICD-9-CM, CPT, UB-04, SNOMED, LOINC)
Skill in:	• Using interpersonal skills to communicate with multiple levels internal and external to the organization • Presenting complex information in an understandable and compelling manner • Organizing and documenting information to facilitate communication

D 1 - Task 3	Formulate validation strategies and methods (i.e., system edits, reports, and audits) to ensure accurate and reliable data.
Knowledge of:	• Systems testing (integration, load, interface, user acceptance) • Industry standards (regulatory requirements) • Best practices for auditing (audit guidelines, system audit trails, and audit logs)
Skill in:	• Developing system edits • Thinking critically • Creating audit reports • Developing and implementing a data integrity report card • Generating reliable results using audit methodologies

D 1 - Task 4	Evaluate existing data structures using data tables and field mapping to develop specifications that produce accurate and properly reported data.
Knowledge of:	• Standard administrative healthcare data (e.g., UB-04, CMS form 1500) • Classification systems data (e.g., ICD-9-CM, CPT, SNOMED, LOINC)
Skill in:	• Applying medical terminology • Developing and implementing data collection systems and other strategies • Identifying opportunities for additional data collection • Communicating information effectively orally and in writing

D 1 - Task 5	Integrate data from internal or external sources in order to provide data for analysis and/or reporting.
Knowledge of:	• Source systems (HIS systems, pharmacy, radiology, financial, etc.) • Reference classification/terminology systems and industry data sets requirements (e.g., ICD-9-CM, CPT, UB-04, SNOMED, LOINC) • Relational database structure (primary key, secondary key) • Software applications (e.g., word processing, spreadsheet, presentation, and databases)
Skill in:	• Creating data specifications • Mapping data fields from one system into another using data specifications • Integrating data from disparate systems

D 1 - Task 6	Facilitate the update and maintenance of tables for organization's information systems in order to ensure the quality and accuracy of the data.
Knowledge of:	• Applicable data standards (e.g., ASTM, CDISC, HL7) • Source systems (HIS systems, pharmacy, radiology, financial, etc.) • Reference classification/terminology systems and industry data sets requirements (ICD-9-CM, CPT, UB-04, revenue codes, etc.) • Classification systems and their history (e.g., retirement of codes and their allowed reuse with new descriptors) • Structure of the data tables • Scheduled updates of source system content • Industry standard maps between classification systems
Skill in:	• Updating and maintaining data tables • Entering data using manual or automated methods • Interpreting data across systems

Domain 2	**Data Analytics**

D 2 - Task 1	Analyze health data using appropriate testing methods to generate findings for interpretation.
Knowledge of:	• Basic principles of clinical, financial, and operational data • Basic understanding of database query syntax (such as SQL) • Basic understanding of SAS, or SPSS procedures • Appropriate use of data mining techniques
Skill in:	• Using interpersonal skills to communicate with multiple levels internal and external to the organization • Thinking critically and analyzing complex problems • Using software to access data (e.g., Business Objects, COGNOS, SAS, IBM Query) • Analyzing data using statistical test methods (e.g., descriptive statistics, hypothesis testing, predictive modeling, sampling, variation analysis) • Analyzing large data sets using data mining techniques and procedures

D 2 - Task 2	Interpret analytical findings by formulating recommendations for clinical, financial, and operational processes.
Knowledge of:	• Quality standards, processes, and outcome measures • Risk adjustment techniques • Business processes (e.g., workflow, system limitations, regulatory and payor guidelines) • Medical terminology • Healthcare reimbursement methodologies • Classification systems • Industry-standard terms of clinical, financial, and operational data
Skill in:	• Using problem-solving skills and analytical techniques • Synthesizing large amounts of data into meaningful conclusions • Thinking critically and analyzing complex problems

D 2 - Task 3	Validate results through qualitative and quantitative analyses to confirm findings.
Knowledge of:	• Source data content and field attributes • Qualitative and quantitative analysis techniques • Healthcare operations to improve clinical and financial outcomes
Skill in:	• Adhering to policies and procedures regarding confidentiality, privacy, and security (HIPAA, federal and state statutes and regulations, etc.) • Detecting data errors • Using problem-solving skills and analytical techniques • Evaluating test results against performance specifications • Comparing results to expected outcomes

Domain 3	**Data Reporting**

D 3 - Task 1	Design metrics and criteria to meet the end users' needs through the collection and interpretation of data.
Knowledge of:	• Standard healthcare data sets • Classification systems and clinical vocabularies and nomenclature (ICD, CPT, HCPC, LOINC, SNOMED-CT, NDC, etc.) • Basic principles of clinical, financial, and operational data • Quality standards and outcome measures
Skill in:	• Interpreting algorithms • Developing datasets • Interpreting vendor data extract specifications • Communicating information effectively orally and in writing

D 3 - Task 2	Generate routine and ad-hoc reports using internal and external data sources to complete data requests.
Knowledge of:	• Database programs such as Access or SQL Server • Basic understanding of database query syntax (such as SQL) • Basic understanding of SAS, or SPSS procedures
Skill in:	• Using software to access data (Business Objects, COGNOS, SAS, IBM Query, etc.) • Developing queries and reports • Using Excel or other spreadsheet software • Managing priorities • Adhering to policies and procedures regarding confidentiality, privacy, and security (HIPAA, federal and state statutes and regulations, etc.) • Interpreting the needs communicated by the requestor

D 3 - Task 3	Present information in a concise, user-friendly format by determining target audience needs to support decision processes.
Knowledge of:	• Stakeholders within healthcare delivery system • Software applications (Microsoft Word, Excel, PowerPoint, Access) • Appropriate modes of presentation (Web conferencing, teleconferencing, AV, etc.)
Skill in:	• Identifying target audience • Developing graphs, reports, and presentations • Interpreting and communicating statistical results • Communicating information effectively orally and in writing • Adhering to policies and procedures regarding confidentiality, privacy, and security (HIPAA, federal and state statutes and regulations, etc.) • Managing priorities

D 3 - Task 4	Provide recommendations based on analytical results to improve business processes or outcomes.
Knowledge of:	• Healthcare industry • Stakeholders within healthcare delivery system
Skill in:	• Using interpersonal skills to communicate with multiple levels internal and external to the organization • Communicating with key stakeholders • Delivering the message with credibility • Managing priorities

APPENDIX C

Survey Comments

Survey Section:
Domain 1

Comments:
* ability to relay, critically interpret and convey meaning, implications and relevance to data to various populations/diverse individuals
* Analyst must constantly be aware of updates and new educational materials
* Appears to be all encompassing
* Basic knowledge of project management
* Facilitate action planning to remedy serious validation problems in source system
* From the question design it seems that there are two paths, one of a more technical role in data base design / setup / data integrity, and one of analysis of the data.
* Help in defining, establishing and validating the valid meta-data values. For example, valid list of discharge dispositions, valid list of billing codes etc.
* Might also include the export of data, such as exports to external quality and government agencies.
* processes for correcting data fields, mappings, reports, edits, designs and definitions are extremely important as well. These correction processes can cause minimal harm and are often done as there are always corrections and improvements that can be made.

Survey Section:
Domain 2

Comments:
* Apply hospital policies and procedures for PHI
* Conducts hypothesis testing to support executive decision-making and physician performance improvement
* Timeliness is also another critical factor
* To some extent come up with the appropriate type of analysis for the different types of data.
* Trending, using control charts, using data to assist in performance improvement techniques such as Plan, Do, Study, Act, etc. Knowledge of software applicability in a general sense (due to so many being availabe)is a great help (EXCEL, ACCESS, CONTROL CHARTING, etc.)

Survey Section:
Domain 3

Comments:
* Again, software applications such as Power Point and the ability to use Software to develop Dashboards, or Scorecards is extemely helpful.
* Design report instruments Organize and define analytical requirements
* For #4, usually it is the stakeholders who develop recommendations based upon the results to modify business processes or outcomes.
* Knowledge of software applications, such as Excel, Business Objects, etc.
* What about the programs needed to analyze the data? I believe a well understood working knowledge of necessary programs needed to analyze then report the data are important. For example, SAS is a very widely used analysis and reporting program.