# **IIS Workforce Development**

Findings from building training across functions and for specific roles

Jessica A. Hill (PHII), Kristopher Hall (PHII), Sarah Gilbert (PHII), Bill Brand (PHII) Mary Beth Kurilo (PHII consultant)



# **IIS Workforce Development**

This project is a component of the *IIS-EHR Environmental Scanning and Outreach Support* project funded by the Centers for Disease Control and Prevention.

### Project goals:

- To conduct meaningful needs assessments of training needs
- To create relevant materials that provide the IIS community with the knowledge, skills and abilities to support recruitment, orientation and retention
- To disseminate best practices
- To support employee and agency success



# A big thank you to the IIS community

PHII worked with members of the IIS community, the American Immunization Registry Association (AIRA) committees, and subject matter experts throughout this project.

Thank you for your contributions and support!



### **Last Year**

Identification and Description of Job Roles
Identification and Definition of Knowledge, Skills and Abilities

### This Year

Conduct Needs Assessment
Develop Competency Models and Learning Plans
Develop and Pilot Learning Solutions



# **Overview of our process**



	Standards and Interoperability	
	Project Management	
	Information Systems	
$\overline{\Box}$	Policy	<b>C</b> 1
Ħ	Communication	Competency Domain
Ħ	Analysis, Visualization and Reporting	
Ħ	Evaluation	
H	Principles and Strategy	
H	Training	

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JOB ROLE

Data Quality Analyst

Testing Analyst

Interface Analyst

Help Desk Technician Tier 1

Help Desk Technician Tier 2

Data Extract Analyst

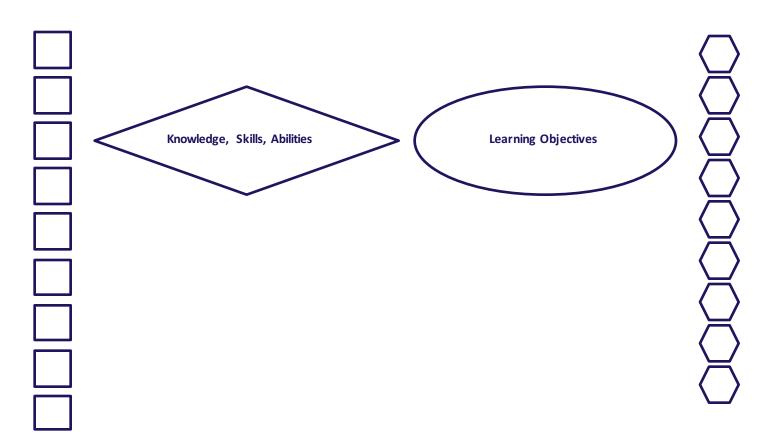
Data Entry/Deduplication Specialist

Manager

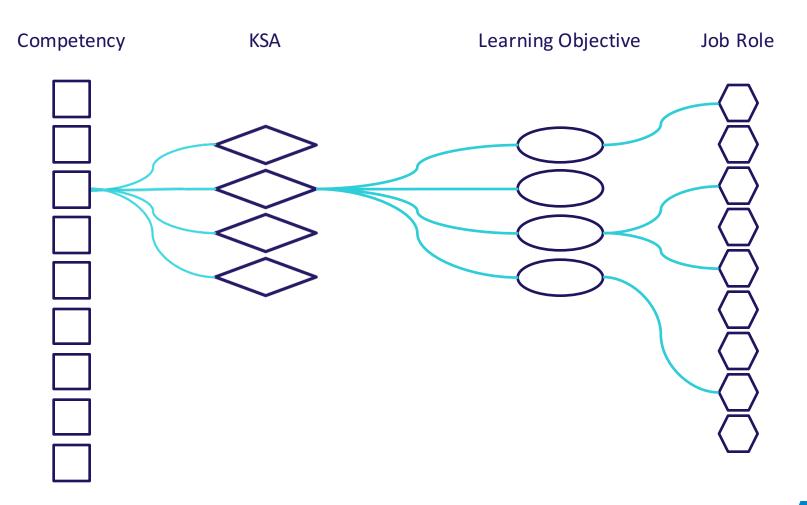
**Trainer** 













### Immunization Information System Workflow Competency Domain Model

















### Knowledge, Skills, and Abilities

This list contains examples of knowledge, skills, and abilities that may be associated with the IIS Data Quality Analyst role. It is not all inclusive and may vary from position to position.

### Standards and Interoperability

Applies informatics standards to ensure interoperability between disparate information systems.

### Knowledge Statements:

- Knowledge of immunization terminology and practices, and the data elements that
- Knowledge of relevant IIS standards, including HL7.2.x and SOAP/Web Services.
- Knowledge of IIS best practice documentation developed by the Modeling of Immunization Registry Operations Workgroup (MIROW).
- Knowledge of national initiatives such as Meaningful Use, and their impact on IIS and
- Knowledge of standardized IIS business rules and best practices.
- Knowledge of public health reporting standards.

- Ability to apply local and national standards consistently.
- Ability to quickly learn data fields commonly used in clinic practices to record
- · Ability to quickly learn new terminology.

### Project Management

and team members in achieving goals and expectations.

- Knowledge of principles, methods and standards of project management.
- Knowledge of diverse IIS stakeholders and funding mechanisms.

- Skill to develop specific goals and plans to prioritize, organize, and accomplish work.
- Skill to document status and outputs of projects and processes.
- Skill to engage in testing of information solutions using appropriate methodologies and
- . Skill in coordinating diverse activities to ensure completion of projects, tasks and assignments.
- Skill to apply fact-finding and work measurement techniques to organization systems.
- Skill to synthesize diverse facts, opinion and materials into usable work plans.

. Skill to apply quality management and improvement tools and processes to operational problems.

- · Ability to balance multiple, competing program demands.
- Ability to establish long-range objectives and specify the strategies and actions to
- Ability to synthesize voluminous and diverse facts, opinions, and materials into usable

### Information Systems

Applies fundamental knowledge of hardware, software (including business rules and algorithms). and network infrastructure essential to ensuring that public health requirements are met.

- Knowledge of health information systems.
- Knowledge of large databases and database functions/utilities.
- Knowledge of electronic data transfer methods. Knowledge of automated software applications such as IIS.
- Knowledge of relevant software and computer query and reporting tools, such as SQL,
- Crystal Reports, Business Objects or Excel to run reports.
- · Knowledge of testing and troubleshooting techniques.
- Knowledge of information system analysis design and data management concents
- Knowledge of health related vendor products such as EHRs.

- Skill in use of common software products such as Word, PowerPoint, Excel.
- Skill to adopt complex, modern information technology and communication tools.
- Skill in drafting end user and technical documentation.

### Abilities Statements:

. Ability to solve complex issues requiring coordination, technical ability, and knowledge of computer and information systems to evaluate alternatives.

### Policy

Ensures that information projects adhere to relevant laws, rules, policies, procedures, and

### Knowledge Statements:

- Knowledge of applicable laws, statutes, policies and procedures regarding public health
- Knowledge of types of agreements such as data use agreements and memorandums of understanding that govern data access and sharing.

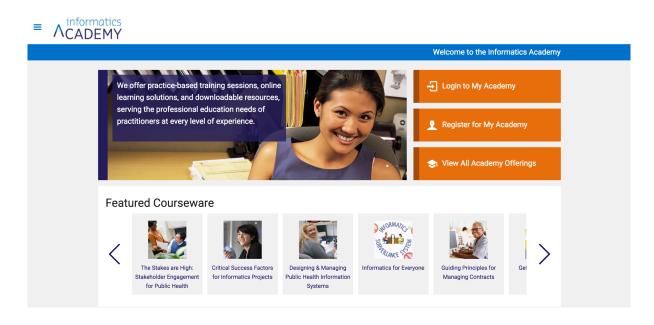


# **Application**

- Guiding documentation for staffing
- Staff development and training
- Study guides
- Personal assessment
- Communicating job roles and the functions of an IIS



# A complete list of job descriptions and KSAs are available on the Academy portal



www.informaticsacademy.org



### **Data Quality**

Contents

Introduction

Unit 1: Data Quality for

Unit 2: The Values Argument

Unit 3: Core Concepts

Unit 4: The Path Data Takes

Unit 5: Principles of Data Quality

Maintaining high quality data in an Immunization Information System (IIS) is a complex challenge, but one that is critical to ensure full use of the IIS by clinical providers and public health alike. As a consolidator of hundreds, if not thousands of data sources, IIS must be diligent to ensure that data quality issues have minimal opportunities to be introduced into the database and, when found, can be quickly remedied.

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**Begin Module** 



"It's not just dates and shots; It's complex."









Links Toolkit Forum



## What did we learn in the process?

There is interest among the IIS community for more consistent/standardized training for staff.

Some training needs are common across job classifications, including:

- Data quality and use
- Overview of electronic medical records (EMRs)
- Overview of health information exchanges (HIEs)
- Overview of HL7

Priorities for training may look different in different jurisdictions, depending on variables such as:

- Job role
- Specific information system and vendor relationship
- Laws of specific jurisdictions
- State/agency priorities

