



# Immunization Information System (IIS) Interface Analyst

*Sample Role Description*

March 2016

*Note: This role description is meant to offer sample language and a comprehensive list of potential desired responsibilities with corresponding knowledge, skills and abilities (KSAs). Actual position descriptions should filter out information that is not applicable for a specific position or role. Depending on staffing levels, several roles may be combined within a single position, or several positions may fill the same role. The term “Immunization Information System” or “IIS” may be replaced with “Registry” within position titles in some jurisdictions.*

## Summary

Interface Analyst is a role typically found in an experienced, advanced analyst series. It may also reside in an Information Technology series. It often serves as a bridge between the technical and the programmatic teams within an IIS, and coordinates closely with the IIS vendor/implementer as well as external technology vendors.

## Scope

The person fulfilling this role is responsible for recruiting and onboarding provider organizations and vendors in developing electronic uni-directional and bi-directional interfaces between Electronic Health Records (EHRs) and IIS, for coordinating Meaningful Use activities and documentation, for collaborating with Health Information Exchanges (HIEs), where operating, and for coordinating efforts between clinical and technical teams among provider organizations and vendor organizations. The person in this role may also have significant responsibilities for managing IIS-IIS inter-jurisdictional data exchange.

## Budget Authority

If grant funds are awarded (e.g., Prevention and Public Health Fund (PPHF) Interoperability Grants), the person in this role may be responsible for tracking spending of grant awards. This role may offer input into budget issues or contribute to grant writing or reporting efforts that involve current or future funding.

## Position Titles

The following example job titles were gathered from existing positions at state and local health agencies:

- Onboarding Analyst
- Onboarding Technician
- Interface Manager
- Data Analyst
- HL7 Specialist
- Informaticist
- Informatician
- Interoperability Analyst

## Relationship

The person in this role typically reports to the IIS Manager. Internally, this role works very closely with the rest of the IIS team, as well as the vaccine management team, particularly related to inventory decrementing and accountability of public vaccine. Externally, this position works with technical staff in provider settings, Health Information Exchange (HIE) settings, and vendor/Electronic Health Record (EHR) settings, in the development of interfaces to the IIS, as well as with clinical staff who have a role in validating and verifying the accuracy of uni-

directional and bi-directional interfaces. This role may also interface closely with health information exchanges (HIEs).

### **Decision Making Authority**

This position exercises considerable independent judgment in carrying out responsibilities within a highly collaborative environment. Decision-making generally requires substantial negotiation and compromise with a variety of considerations, including the context imposed by applicable laws, statutes, rules, interests of stakeholders, available data, and resources. Decision making authority is commonly characterized as follows:

- Authenticates and validates the identity of entities wishing to create an interface.
- Verifies accuracy of interface through testing and validation, testing both incoming and outgoing data quality.
- Determines appropriate point at which interface is deemed accurate and approved for production environment.
- Tests the interface post-production to authorize continued data exchange.

## **Major Duties and Responsibilities**

This list contains examples of duties and responsibilities that may be associated with an Interface Analyst role. This list offers many possible duties and responsibilities from which to select in order to create a position most appropriate to your program needs and your human resource requirements.

### **Development of Data Exchange Interfaces**

- Provide technical and program support to IIS partners that are onboarding to unidirectional and bi-directional web-based immunization information exchange.
- Collaborate with IIS vendors regarding security certificate management, web-services functionality, and documentation.
- Serve as point of contact for any site transitioning to HL7 data exchange, for both partners/data sources/EHR vendors as well as for the jurisdiction's technical IIS vendor.
- Coordinate with other testing staff to facilitate testing of messaging format, content and transport functionality.
- Following completion of testing process, coordinate transition to production data submission.
- Collaborate with jurisdictional Public Health Informatics Initiatives regarding Meaningful Use and Health Information Exchange (HIE) activities.
- Ensure alignment with all relevant national IIS and health information exchange standards for messaging format, content, and transport functions.

### **Interoperability Project Lead and Coordination**

- Provide team leadership and coordination to IIS Onboarding/Interoperability team to meet program and grant goals.
- Coordinate with other IIS workgroups and Immunization Program cross-program groups as needed.
- Develop and maintain Standard Operating Procedures (SOPs) and data exchange specifications.
- Standardize procedures for HL7 data import and approval, review response files and advise partners on error handling.

### **Grant Coordination**

- Manage the Immunization Section’s interoperability grant reports and provide oversight to the high-level budget, coordinating with the IIS Manager as appropriate.
- Interprets policy and regulatory information to plan and coordinate activities.
- Oversee the preparation of revenue and expenditure projections, monitor grant financial performance against plans and projecting needs.
- Coordinate the revision of budgets to reflect changes in grant funding.
- Carry out budget priorities.
- Oversee the preparation of fiscal impact statements for grant management, as needed.
- Identify potential risks and difficulties, and designs strategies to mitigate or avoid them.

### **Standard Setting, National Involvement**

- Engage and provide input to the development of national standards and best practices regarding data exchange, with particular emphasis on HL7 and Web Services standards.
- Represent IIS at national meetings and conferences.

### **Functioning within an interdisciplinary team environment**

- Consistently treat customers, stakeholders, partners, vendors and co-workers with dignity and respect.
- Create and maintain a work environment that is welcoming and respectful of diversity.
- Set clear guidelines and model expected professional behaviors.
- Other tasks as assigned.

## Key Competencies

This list contains the key competency areas with corresponding examples of knowledge, skills, and abilities that may be associated with the IIS Interface 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 support them.
- 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 health information exchange.
- Knowledge of standardized IIS business rules and best practices.
- Knowledge of public health reporting standards.
- IIS Interface Analyst role. It is not all inclusive and may vary from position to position.

#### Abilities Statements:

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

### Project Management

Practices project management and program management techniques to engage stakeholders and team members in achieving goals and expectations.

#### Knowledge Statements:

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

#### Skills Statements:

- 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 techniques.
- 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.

#### Abilities Statements:

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

## 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 Statements:

- 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 health related vendor products such as EHRs.
- Knowledge of analyzing and proposing system development or enhancement tasks.
- Knowledge of information system analysis, design and data management concepts.

### Skills Statements:

- Skill in use of common software products such as Word, PowerPoint and 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 regulations.

### Knowledge Statements:

- Knowledge of applicable laws, statutes, policies and procedures regarding public health and health information.
- Knowledge of types of agreements such as data use agreements and memorandums of understanding that govern data access and sharing.
- Knowledge of policies and Standard Operating Procedures (SOPs) specific to IIS operations.
- Knowledge of records management.
- Knowledge of recommended schedules.

### Skills Statements:

- Skill in appropriately applying IIS policies and procedures to specific situations
- Skill to use relevant information to determine whether events or processes comply with laws, regulations, standards or procedures.
- Skill to develop standard operating procedures.
- Skill in interpreting laws, rules, policies and procedures and applying interpretations to specific situations.

### Abilities Statements:

- Ability to apply public health laws, regulations, and policies specific to the Immunization Program.
- Ability to quickly learn processes, and practices.
- Ability to recommend modifications or enhancements to systems and policies.
- Ability to use relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.
- Ability to establish procedures for diagnosing and solving technical problems.

## Communication

Practices active, effective communication between IT, public health and other relevant stakeholders.

### Skills Statements:

- Skill in use of phone, email, FAX, text messaging, instant messaging, and other telecommunications methods.
- Skill in communicating in writing, orally, electronically and in person with linguistic and cultural proficiency.
- Skill in applying effective communication and group dynamic strategies in interactions with individuals and groups.
- Skill in communicating the role of public health within the health system and community to diverse audiences.
- Skill in effectively communicating the capabilities and limitations of information systems.
- Skill in managing a high-volume of incoming calls and requests from diverse stakeholders and populations.
- Skill in collaborating with a wide range of internal and external stakeholders including policy makers, health care and social services, end users, agency leaders and community.

### Abilities Statements:

- Ability to build mutual trust, respect and cooperation among team members.
- Ability to communicate effectively to technical and non-technical audiences in both written and oral methods.
- Ability to contribute as a strong member of a self-directed work team.
- Ability to develop constructive and cooperative working relationships with others, and maintain them over time.
- Ability to effectively express ideas orally and in writing using appropriate language and organizing ideas in an objective manner.
- Ability to translate or explain what information means and how it can be used.
- Ability to effectively communicate the capabilities and limitations of information technologies.
- Ability to represent the Program as a staff person for project, advisory, or technical committees.
- Ability to work effectively with senior-level decision-makers and their immediate staff members.
- Ability to apply tact and diplomacy to gain cooperation of others.

## Analysis, Visualization & Reporting

Translates data to information and knowledge that leads to action using consistent analytic and reporting tools and techniques.

### Knowledge Statements:

- Knowledge of techniques sufficient to collect, analyze, interpret and summarize data in a narrative or graphical format.
- Knowledge of the methods for analyzing and proposing system development tasks.
- Knowledge of business process analysis.

### Skills Statements:

- Skill to analyze business needs and product requirements to create or design a system enhancement.
- Skill to analyze business needs and product requirements to create or design a system enhancement.
- Skill in writing clear and concise narratives and statistical summaries.
- Skill in use of database analysis software and applications.
- Skill to determine how a system should work and how changes in conditions, operations and the environment will affect the outcomes.
- Skill to conduct statistical analyses of program data and interpret the results of the analyses.

**Abilities Statements:**

- Ability to apply general rules to specific problems.
- Ability to exercise appropriate judgment in determining when an issue or problem needs referral to management or other staff.
- Ability to read and interpret technical materials to better assist end users.
- Ability to analyze, evaluate and solve procedural problems.
- Ability to interpret technical materials to evaluate alternative technical solutions to address agency needs.
- Ability to research and design the techniques, methods, and principles used in complex data analysis.
- Ability to understand the implications of new information for both current and future problem-solving and decision-making.
- Ability to combine pieces of information to form general rules or conclusions.

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 **Evaluation**

Applies rigorous methods to evaluate the effectiveness of workflows and information technology.

**Knowledge Statements:**

- Knowledge of general data quality concepts.
- Knowledge of detailed quality assurance and improvement methodology.

**Skills Statements:**

- Skill to identify complex problems and review related information to develop and evaluate options and implement solutions.
- Skill to identify measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.

**Abilities Statements:**

- Ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Ability to evaluate information against a set of standards of information integrity and comparability.
- Ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

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 **Principles & Strategy**

Applies informatics principles, strategic thinking, and leadership techniques to public health information needs.

**Knowledge Statements:**

- Knowledge of the development of IIS systems over time.

- Knowledge of the multiple purposes and audiences that leverage IIS data and functionality, and the methods by which they access IIS data.
- Knowledge of the basic concepts of vaccine management, such as inventory and accountability.
- Knowledge of healthcare systems and practices.

**Abilities Statements:**

- Ability to work independently with little or no supervision.
- Ability to work well in a high-pressure environment.
- Ability to apply high attention to detail to work products.
- Ability to use independent judgment, decision making and problem resolution to perform technical, operational, or administrative functions.
- Ability to learn the organizational structures, roles, and interrelationships of local public health agencies, private health care organizations, private practices, school health and health plans.
- Ability to correctly assess the political and institutional environment in which decisions are made and implemented.



**Training**

Effectively applies concepts of adult learning theory to educating a broad range of technical, programmatic and clinical audiences.

**Abilities Statements:**

- Ability to prepare, present and train on highly complex technical material and issues to non-specialists.