Clinical Level Public Health Informatician

Sample Position Description

April 2014
Acknowledgements

Public Health Informatics Institute (PHII) wishes to thank the Association of State and Territorial Health Officials (ASTHO) and the National Association of County & City Health Officials (NACCHO) for partnering on this project. In addition, this project would not have been possible without the engagement of members in both state and local health departments.

This project was supported through cooperative agreement funding from the CDC Division of Scientific Education and Professional Development.

For More Information
Visit www.phii.org
Call (866) 815-9704
Email info@phii.org
Sample Position Description

Clinical Level Public Health Informatician

Summary

*Clinical Level Public Health Informatician* is a sample position description in a classification series of 2-3 positions focused on clinicians.

Scope

The Clinical Public Health Informatician is responsible for understanding and promoting the effective organization, analysis, management, and use of information in public health program areas, including surveillance, prevention, preparedness and health promotion. The incumbent is a licensed clinician (e.g., physician, nurse, psychologist, pharmacist). The incumbent applies informatics theory and practice to the design and use of clinical information system(s) within a public health agency, or in the design of public health information or decision support systems to improve health care and population health outcomes. This position provides specific clinical informatics expertise to establish policies, practices and procedures within a program or across the agency.

This position may be an executive or senior level professional position within a public health agency, depending on the licensure and agency needs. Incumbents serve as a public health informatics subject matter expert within the parameters of the discipline or licensed practice area. Often, these positions are expected to serve as the primary clinical advisor on health information systems development, updates, and implementation.

Budget Authority

Budget authority depends on agency needs and reporting relationships. The incumbent may solicit funding through preparation of grants and solicitation of private and/or government funding sources.

Position Titles

The following list of example job titles was built from existing or proposed positions at state and local health agencies:

<table>
<thead>
<tr>
<th>Position Title</th>
<th>Reporting Relationship</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Medical Informatician</td>
<td>Varies</td>
<td></td>
</tr>
<tr>
<td>Medical Informatician</td>
<td>Varies</td>
<td></td>
</tr>
<tr>
<td>Nurse Informatician</td>
<td>Varies</td>
<td></td>
</tr>
<tr>
<td>Clinical Informatics Specialist</td>
<td>Varies</td>
<td></td>
</tr>
<tr>
<td>Clinical Informatics Analyst</td>
<td>Varies</td>
<td></td>
</tr>
</tbody>
</table>

Relationship

This position may serve at the executive level (e.g., as Chief Medical Informatician) or professional level with a reporting relationship to another licensed clinical professional (e.g., nurses that are required by licensure to report to physicians or mental health professionals).
Decision Making Authority
The incumbent may lead or contribute to the development of a wide range of informatics initiatives and solutions, including identification and use of clinical data standards, issues of security and confidentiality, clinical decision support, integration of data, work flow analysis, and jurisdiction or state level policies and practices. This position may analyze, critique, and recommend agency actions related to public health informatics, adoption, effective use of information, health information exchange, interoperability, technical aspects of clinical information systems to improve community or population health, and organization process and performance.

Major Duties and Responsibilities
This list contains examples of duties and responsibilities that may be associated with clinical level informatics positions. This list is not all inclusive and may vary from position to position. Hiring agencies, depending on the specific nature of the position, may modify the major duties and responsibilities and/or identify additional duties and responsibilities, based on a current position analysis.

- Serves as primary clinical advisor for areas of expertise and licensure on clinical information systems, work flow, and health data exchange.
- Ensures clinical information system(s) support the information needs of public health agency, and/or public health programs for policy development, practice, research, and evaluation.
- Evaluates, describes, documents and ensures effectiveness of clinical work flows and documentation to generate quality data and information.
- Establishes study methodologies and protocols for collecting, retrieving, analyzing, and maintaining clinical health data across program areas.
- Works with end users of clinical health data and information to help them articulate their information needs.
- Participates in or leads ongoing clinical information system(s) application testing, implementation, and evaluation with project teams across the public health program.
- Creates accessible reports of clinical health data for agency, stakeholders and partners.
- Designs and implements a clinical information system which provides researcher, educator and practitioners with easier access to patient and population data.
- Recommends enhancements to clinical information systems to interface with existing systems as needed.
- Works with vendors, IT professionals, and public health program areas to plan, develop, and maintain health information systems and to develop system requirements.
- Participates in agency wide implementation of interoperable clinical information systems.
- Analyzes, summarizes, and/or reviews data, reports findings, interprets results, and makes recommendations to constituency.
- Designs and implements clinical information systems that improve documentation accuracy, eliminate unnecessary work, and enable effective analysis of clinical data.
- Evaluates clinical and population data to determine if they are affecting population health outcomes, costs or practice.
- Makes recommendations for work processes that can be supported through automation.
- Anticipates the impact that new or modified software will have on existing standards and systems or workforce and public health programs and makes recommendations for solutions.
- Manages resources and contracts.
- Identifies and procures funding through grants, partnerships and other funding sources.
- Conducts literature reviews, drafts and prepares models, frameworks, legislative briefs and research documents as needed.
- Works with stakeholders for e-health issues to advance agency goals and objectives.
- Coordinates adoption of health data standards that facilitate interoperability between public health and other information systems.

Knowledge, Skills, and Abilities
This list contains examples of knowledge, skills, and abilities that may be associated with clinical level informatics positions. It is not all inclusive and may vary from position to position. Hiring agencies, depending on the specific nature of the position, may modify the knowledge, skills, and abilities and/or identify additional knowledge, skills, and abilities, based on a current position analysis.

Knowledge of:
- Area of clinical expertise and licensure.
- Technologies such as Electronic Medical Records (EMR), Electronic Health Records (EHR), and Computerized Physician Order Entry (CPOE).
- Health information exchange.
- Clinical decision support methods and approaches.
- Clinical documentation.
- Clinical standards and transport (LOINC, SNOMED, HL7, etc.).
- Standardized vocabularies of diagnosis and treatment.
- Public health and healthcare systems and practices.
- Strategies for achieving effective data acquisition, management, quality, storage, use, and application to address clinical and population health needs.
- Applicable laws, statutes and policies regarding health information including security, privacy and management of confidential data.
- Public health reporting and information system standards and public health data.
- Statistical and business analysis.
- Clinical and business operations, methods and practices.
- Workflow engineering.
- Informatics project/product portfolio management.
- IT life cycle and information system design.
- Automated software applications.
- Computer hardware and system development.
- Applicable health care and public health standards, message formats and transport mechanisms.
• Qualitative and quantitative techniques for analyzing and measuring the effectiveness, efficiency and productivity of clinical health services.
• Project management disciplines.
• Principles and practices of epidemiology and statistical analysis.
• Data collection and use methodologies, including survey research, registry operations, usability studies, focus group and interview data collection and analysis.

Skills to:
• Perform various analytic functions which may include business, workflow, and statistical analysis.
• Communicate complex technical information to a wide range of non-technical audiences/constituencies.
• Interpret and evaluate information to analyze, summarize and prepare reports.
• Assess business, clinical and human factors that contribute to effective informatics practice in areas of clinical expertise.
• Assess, understand, redesign and optimize clinical workflow for data capture and improved health care practice.
• Assess user needs.
• Assess and address issues related to user adoption and effective use of clinical information systems.

Ability to:
• Apply technology to areas of clinical practice to improve data and information acquisition, analysis, use and impact.
• Understand and articulate requirements for health information systems.
• Evaluate information and make recommendations about approaches, methods, and practices to meet agency/departmental goals.
• Engage with diverse audiences and multiple stakeholders.
• Assess stakeholder and end user information needs.
• Support use of informatics practices to integrate clinical health, environmental and population health data to improve priority community health outcomes.
• Effectively communicate verbally and/or in writing complex information to inform, persuade, and influence a wide range of audiences.
• Evaluate and articulate the impact of new or modified software on existing workforce, standards, and systems.
• Perform analysis and evaluation of user experience, adoption, and software using appropriate methodology and techniques.
• Provide technical assistance to achieve, statewide program goals and objectives, health information exchange, data linking and system integration, and methods for linking performance measurement and program evaluation to population surveillance.
• Collaborate across agencies and programs to meet shared goals.