

Discover Health Informatics



Is the growing field of health informatics right for you? Curious about what health informatics professionals do? Scan the code to visit our Career Map to learn more about the opportunities this exciting career path offers.



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“Health informatics is the field concerned with health data acquisition, management, representation, and transformation into knowledge that can subsequently be translated into novel health interventions or new healthcare processes.¹

Health informatics harnesses the power of digital technology and applies methods from computer science, information science, and cognitive science for the acquisition, storage, retrieval, use, and sharing of health data, information, and knowledge.^{1”}



Health informatics job roles include:

- [Decision Support Analyst](#)
- [Data Quality Analyst](#)
- [Clinical Data Specialist](#)
- [Clinical Systems Analyst](#)
- [HIM Project Analyst](#)
- [Health Informatics Specialist](#)
- [Clinical Data Developer](#)
- [Health Data Analyst](#)

¹ Zhou & Clack, Introduction to Healthcare Informatics, 3rd Edition, 2023

Common tasks of health informatics professionals include:

- Design, develop, select, test, implement, and evaluate new or modified informatics solutions, data structures, and decision support mechanisms to support patients, healthcare professionals, and their information management and human-computer and human-technology interactions within healthcare contexts.
- Develop, implement, or evaluate health information technology applications, tools, processes, or structures to assist with data management.
- Analyze, manipulate, or process large sets of data using statistical software.
- Apply feature selection algorithms to models predicting outcomes of interest, such as sales, attrition, and healthcare use.
- Apply sampling techniques to determine groups to be surveyed or use complete enumeration methods.
- Clean and manipulate raw data using statistical software.
- Compare models using statistical performance metrics, such as loss functions or proportion of explained variance.
- Create graphs, charts, or other visualizations to convey the results of data analysis using specialized software.
- Deliver oral or written presentations of the results of mathematical modeling and data analysis to management or other end users.
- Design surveys, opinion polls, or other instruments to collect data.
- Identify business problems or management objectives that can be addressed through data analysis.
- Identify relationships and trends or any factors that could affect the results of research.
- Recommend data-driven solutions to key stakeholders.
- Test, validate, and reformulate models to ensure accurate prediction of outcomes of interest.
- Write new functions or applications in programming languages to conduct analyses.
- Use informatics science to design or implement health information technology applications for resolution of clinical or health care administrative problems.



Visit the American Health Information Management Association® (AHIMA®) student resources page to learn more about HI careers.