

## AHIMA Graduate Level Health Informatics Curriculum Competencies

<b>Domain I: Health Data Analytics</b>
<i>Definition: Transform health data into useful information utilizing mixed methods, qualitative and quantitative methods, and tools to improve decision making and optimize human health and well-being.</i>
1.1 Evaluate analytics methods and tools (e.g., exploratory, statistical, decision making, and cost effectiveness analyses) to meet organizational needs and ensure such tools, and their use, are consistent with appropriate laws, regulations and organization policies.
1.2 Understand the implications of data models, principles.
1.3 Utilize data visualization tools to summarize and convey information to health system decision makers.
1.4 Evaluate and apply various research methods (examples include literature reviews, surveys, focus groups, and standardized interviews) to assess the impact or value of health information systems.
<b>Domain II: Standards for Data Content, Portability, Information Exchange, and Interoperability</b>
<i>Definition: Knowledge and application of appropriate standards for data content (ontologies), information exchange and interoperability.</i>
2.1 Interpret and apply laws, regulations, best practices, standards, and policies for data content, data governance, information exchange and interoperability.
2.2 List and describe the role of standards development organizations (SDOs) in the creation, maintenance and adoption of health information standards.
2.3 Compare and contrast existing classification systems, terminologies, vocabularies, and ontologies for healthcare data in the context of various individual and population health use cases.
2.4 Recommend best practices for syntactic (technical/structural) and semantic (content) interoperability.
<b>Domain III: Health Data Management</b>
<i>Definition: Develop and execute strategies, policies, practices, and procedures to manage the full health data system life cycle.</i>
3.1 Evaluate and recommend a reliable health data infrastructure to ensure data confidentiality, integrity, availability, and usability consistent with appropriate laws, regulations and organization policies.
3.2 Recommend best practices that ensure data, from the perspective of end users, are complete, accurate, consistent, timely, secure, and fit for use.
3.3 Demonstrate proficiency in the design, implementation, population, manipulation, transformation, and integration of data repositories.
3.4 List and describe the various types of data and information generated or consumed by healthcare organizations.
<b>Domain IV: Health Information Technology</b>
<i>Definition: Managing processes and systems to support appropriate technology design, infrastructure and environment.</i>

4.1 Evaluate and apply principles of the system and application development lifecycle and IT infrastructure to ensure effective decision making, system development and implementation. (e.g., SDLC, Unified Process (applications), assessment, analysis, design, selection and procurement).
4.2 Assess HIT usability and the user experience (e.g., human-technology interaction: consumer and professional, unintended consequences of technology adoption, workflow).
4.3 Propose technology infrastructure, create databases and determine software system components to support organizational and end-user needs.
<b>Domain V: Program and Project Management</b>
<i>Definition: Interpret and apply methods to lead projects and programs (single and multiple related projects) while ensuring appropriate resource management and successful outcomes.</i>
5.1 Evaluate and manage the essential components of the project life cycle.
5.2 Design multiple simultaneous enterprise-wide programs and projects to improve organizational performance.
<b>Domain VI: Health System Improvement</b>
<i>Definition: Transformation of health systems to improve structure, process and outcomes.</i>
6.1 Evaluate and apply the appropriate quality improvement methods and tools to improve healthcare that optimize efficiency and quality.
6.2 Design and develop a health system improvement plan.
<b>Domain VII: Organizational Development, Culture &amp; Leadership</b>
<i>Definition: Create and maintain teams through collective efforts and adaptive strategies that foster positive change. Model essential skills of communication, collaboration, negotiations, professionalism, emotional intelligence, cultural competency, and ethics to help organizations embrace change.</i>
7.1 Model appropriate ethical leadership behaviors necessary to foster organizational development, culture, and performance consistent with appropriate laws, regulations and policies.
7.2 Model appropriate collaboration and leadership behaviors.
<b>Domain VIII: Health Information Security</b>
<i>Definition: Develop practices that protect information assets, minimize risk and create an effective security infrastructure.</i>
8.1 Design a security risk analysis strategy consistent with appropriate laws, regulations, best practices and organization policies.
8.2 Ensure confidentiality, integrity and availability of information including technical, administrative, and physical controls to protect data related to individuals and organizations from external and internal threats.
<b>Domain IX: Health Systems, Delivery and Science</b>
<i>Definition: The use of science, technology, engineering or mathematics (STEM) to enhance the healthcare ecosystem.</i>
9.1 Articulate the roles and responsibilities (including policy, strategies, and challenges) of key stakeholders who influence healthcare delivery as well as population health.

9.2 Assess processes that positively enhance clinical or non-clinical decision making.

9.3 Synthesize evidence-based innovations in care and prevention as well as their impact on healthcare, public health, and population health decision-making.