

## CAHIMS Competency Gap Assessment

HIMSS' Competency Gap Assessment will help you determine your readiness for the CAHIMS<sup>SM</sup> certification exam. It can also help you identify personal strengths and areas for growth to support your professional development objectives and help you acquire or strengthen skills and competencies required for success as a 21st century healthcare information technology leader.

The certification exam and this Competency Gap Assessment is prepared using the Outline of Exam Topics for the CAHIMS program, which details the knowledge, skills and abilities needed to be a viable and effective information and management professional in today's healthcare environment.

### **1. HEALTHCARE AND TECHNOLOGY ENVIRONMENTS — 27%**

- A. Healthcare Environment
- B. Technology Environment

### **2. CLINICAL INFORMATICS — 26%**

### **3. HEALTHCARE INFORMATION SYSTEMS MANAGEMENT — 33%**

- A. Analysis
- B. Design
- C. Selection, Implementation, Support, and Maintenance
- D. Testing and Evaluation
- E. Privacy and Security

### **4. MANAGEMENT AND LEADERSHIP — 14%**

Under each of these essential skill areas are specific competencies identified in the Exam Content Outline. This Competency Gap Assessment is constructed from those competencies.

In each section of the Competency Gap Assessment, you should review the competency required. Using the keys provided, consider your current level of understanding and experience in each task area. This is your personal assessment of your competence, honesty with yourself is important. Then, determine the gap, if any, that exists and whether any additional development on your part is needed. This exercise will help you assess your current readiness for the CAHIMS certification exam and identify areas where additional experience, study, or mentoring would be beneficial.

Completing this Competency Gap Assessment does not ensure mastery of the competencies required for the CAHIMS certification exam but helps you assess your readiness, identify your current strengths, and chart a plan for gaining knowledge and skills in areas of desired growth.

1 – Healthcare and Technology Environments - 27%		
<b>Task Statements</b>		
<b>A. Healthcare Environment</b>	<b>Competence</b>	<b>Gap</b>
Recognize basic characteristics, interrelationships and services of different types of healthcare organizations (e.g., hospitals, clinics, physician practices, ambulatory centers, community health organizations, healthcare payers, regulators, research and academic)	1 2 3 4	1 2 3
Identify and differentiate among major clinical and business departments and functions found in healthcare organizations.	1 2 3 4	1 2 3
Differentiate basic roles of healthcare information and management systems professionals	1 2 3 4	1 2 3
Identify and differentiate roles of governmental, regulatory, professional and accreditation agencies related to healthcare	1 2 3 4	1 2 3
Recognize trends in healthcare technology (e.g., telemedicine, patient portals, wearable devices, population health)	1 2 3 4	1 2 3
<b>B. Technology Environment</b>	<b>Competence</b>	<b>Gap</b>
Differentiate characteristics of applications (e.g., clinical, administrative, financial) and clinical technologies commonly used in healthcare	1 2 3 4	1 2 3
Recognize basic characteristics of the information and communication technologies that support the healthcare environment (e.g., diagnostic imaging, data warehouses, data models, infrastructure, servers, web services)	1 2 3 4	1 2 3
2 – Clinical Informatics - 26%		
<b>Task Statements</b>	<b>Competence</b>	<b>Gap</b>
Identify basic clinical vocabulary/terms frequently represented in healthcare informatics (e.g. dosage frequency, dosage routes, body systems)	1 2 3 4	1 2 3
Identify basic healthcare IT vocabulary/terms frequently represented in healthcare informatics (e.g., LAN, SMS, VPN)	1 2 3 4	1 2 3
Identify basic clinical metrics frequently represented in informatics (e.g., average daily census, turnaround time, adherence, barcode medication administration)	1 2 3 4	1 2 3

2 – Clinical Informatics (continued) - 26%		
Identify and support opportunities to optimize clinical effectiveness and efficiencies	1 2 3 4	1 2 3
Understand various data visualization techniques (e.g., tables, graphs, charts)	1 2 3 4	1 2 3
Maintain clinical content and decision-support tools	1 2 3 4	1 2 3
3 - Healthcare Information and Systems Management - 33%		
Task Statements	Competence	Gap
A. Analysis		
Identify and differentiate fundamental concepts of systems development ( e.g., systems development lifecycle or SDLC, rapid application development, extreme programming)	1 2 3 4	1 2 3
Identify and differentiate fundamental IT project management methodologies (e.g., Agile, waterfall) and components (e.g., needs analysis, gap analysis, defining and prioritizing requirements)	1 2 3 4	1 2 3
Identify and differentiate fundamental concepts of process improvement (e.g., DMAIC, PDCA)	1 2 3 4	1 2 3
Describe business and clinical processes utilizing standard visualization tools such as Gaant charts, fishbone, swimlane	1 2 3 4	1 2 3
Conduct basic data analysis and interpretation	1 2 3 4	1 2 3
Understand the basic elements of common business documents such as RFPs, RFIs, proposals, SLAs, change requests, NDAs, etc.	1 2 3 4	1 2 3
B. Design	Competence	Gap
Identify functional requirements of software, hardware and network solutions	1 2 3 4	1 2 3
Develop the documentation of compliance with applicable industry, regulatory and organizational standards	1 2 3 4	1 2 3
Identify basic business continuity planning concepts (e.g., RPO, RTO, BCA, scheduled and unscheduled downtime procedures)	1 2 3 4	1 2 3
Collect and compile information to assist in evaluation of existing and emerging technologies	1 2 3 4	1 2 3
Understand basic data management concepts (e.g., data types, metadata, data dictionary, field formats)	1 2 3 4	1 2 3
C. Selection, Implementation, Support, and Maintenance	Competence	Gap
Facilitate solution selection activities (e.g., evaluating functional requirements vs proposals, demonstrations, site visits, reference checks)	1 2 3 4	1 2 3
Understand characteristics of various training and support methods (e.g., computer-based learning, classroom training, train the trainer, at-the-elbow support from superusers)	1 2 3 4	1 2 3
Understand the interrelationships between scope, schedule, budget, and quality for solution implementations	1 2 3 4	1 2 3
Maintain healthcare information systems (e.g., operate, upgrade)	1 2 3 4	1 2 3
Gather, input and help analyze data for problems and trends (e.g., error reports, help desk logs, performance metrics, network monitoring)	1 2 3 4	1 2 3
D. Testing and Evaluation	Competence	Gap
Identify and differentiate accepted testing methodologies (e.g., unit test, integrated test, stress test, acceptance test)	1 2 3 4	1 2 3
Identify and differentiate internal controls to protect resources and ensure availability and integrity during testing (e.g., security audits, versioning control, change control)	1 2 3 4	1 2 3

3 - Healthcare Information and Systems Management (continued) - 33%		
Verify deliverables against contractual terms or design specifications	1 2 3 4	1 2 3
Gather and compile data to support that expected outcomes have been realized (e.g., return on investment, benchmarks, user satisfaction)	1 2 3 4	1 2 3
<b>E. Privacy and Security</b>	<b>Competence</b>	<b>Gap</b>
Describe the organizational policies and procedures to ensure confidentiality, privacy, security, availability, and integrity of data	1 2 3 4	1 2 3
Use specific procedures to identify, escalate, and mitigate potential privacy/security risks and breaches	1 2 3 4	1 2 3
Administer user access controls according to established policies and procedures	1 2 3 4	1 2 3
Audit physical, technical, and administrative controls to ensure safeguards are in place to protect assets (e.g., servers secured, unattended computers, two-factor authentication)	1 2 3 4	1 2 3
Identify and differentiate organizational roles (e.g., information security, physical security, compliance) responsible for managing vulnerabilities	1 2 3 4	1 2 3
Maintain data management controls (e.g., data ownership, criticality, security levels, protection controls, retention and destruction requirements, access controls)	1 2 3 4	1 2 3
4 – Management and Leadership - 14%		
<b>Task Statements</b>	<b>Competence</b>	<b>Gap</b>
Assess the organizational environment (e.g., corporate culture, values and drivers)	1 2 3 4	1 2 3
Understand components of an IT strategic plan (e.g., process maturity and growth, gap analysis, quality improvement, organizational alignment, roles and responsibilities, performance measurement)	1 2 3 4	1 2 3
Gather and compile metrics to monitor and assess specific organizational performance indicators	1 2 3 4	1 2 3
Monitor, assess and report on key performance indicators of systems effectiveness	1 2 3 4	1 2 3
Comply with legal and regulatory standards	1 2 3 4	1 2 3
Understand and comply with the organization's ethical business principles	1 2 3 4	1 2 3
Prepare and deliver business communications (e.g., presentations, reports, project plans)	1 2 3 4	1 2 3
Maintain awareness of emerging industry trends	1 2 3 4	1 2 3
Identify and recommend strategies to mitigate organizational risk	1 2 3 4	1 2 3
Maintain effective and ethical working relationships with internal and external stakeholders (e.g., clinicians, vendors, partners)	1 2 3 4	1 2 3
Identify and provide data to support recommendations for decision makers		
Understand and support organizational change management processes	1 2 3 4	1 2 3
Understand individual and team roles, responsibilities and job descriptions	1 2 3 4	1 2 3

KEY:

#### Level of Competence

- 4 – Expert level of understanding/experience
- 3 – Moderate level of understanding/experience
- 2 – Basic level of understanding/little or no experience
- 1 – Little or no exposure

#### Development Gap

- 3-Little or no development needed
- 2-Some development needed
- 1-Considerable development needed