

## CPDHTS Competency Gap Assessment

HIMSS' Competency Gap Assessment will help you determine your readiness for the CPDHTS® 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.

The certification exam and this Competency Gap Assessment is prepared using the Outline of Exam Topics for the CPDHTS program, which details the knowledge, skills and abilities needed to lead digital healthcare transformation efforts globally.

### **1. DIGITAL HEALTH ECOSYSTEM — 31%**

- A. Digital Health Information Systems and Technologies
- B. Privacy and Security
- C. Emerging Technologies
- D. Applied Artificial Intelligence and Machine Learning
- E. Digital Infrastructure and Interoperability
- F. Digital Maturity Assessment

### **2. PERSON-ENABLED HEALTH — 23%**

- A. Population Health
- B. Citizen-Driven Informatics
- C. Virtual Healthcare Delivery Models
- D. Patient-Generated Data and Consumer Perception

### **3. MEASUREMENT AND IMPROVEMENT — 23%**

- A. Data Science, Clinical and Business Intelligence, and Analytics
- B. Clinical Outcomes
- C. Stakeholder Satisfaction
- D. Compliance and Adherence
- E. Economic Assessment
- F. Program Planning and Evaluation
- G. Sustainability

### **4. STRATEGY, GOVERNANCE, AND ORGANIZATIONAL MANAGEMENT — 23%**

- A. Operational Management (including Workforce)
- B. Policy, Regulations, Legislation, and Ethics
- C. Leadership
- D. Strategy
- E. Health Equity and Inclusion

Within 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 CPDHTS 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 CPDHTS 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.

I. Digital Health Ecosystem (Digital) - 31%		
	Competence	Gap
<b>A. Digital Health Information Systems and Technologies</b>		
1. Digital health information systems - administrative (e.g., Enterprise Resource Planning [ERP]), clinical information (e.g., Electronic Medical Record [EMR]), and business intelligence (e.g., dashboards)	1 2 3 4	1 2 3
2. Digital health information technologies (e.g., Internet of Medical Things [IOMT], app ecosystems, Fast Health Interoperability Resource [FHIR], Natural Language Processing [NLP])	1 2 3 4	1 2 3
<b>B. Privacy and Security</b>		
1. Cybersecurity	1 2 3 4	1 2 3
2. Cyber-hygiene	1 2 3 4	1 2 3
3. Techniques for protecting personal information (e.g., communication, applications, databases)	1 2 3 4	1 2 3
4. Methods and behaviours used by attackers	1 2 3 4	1 2 3
<b>C. Emerging Technologies</b>		
1. Emerging technologies and trends	1 2 3 4	1 2 3
2. Risk and benefits of emerging technologies	1 2 3 4	1 2 3
3. Innovative and emerging projects	1 2 3 4	1 2 3
<b>D. Applied Artificial Intelligence and Machine Learning</b>		
1. Application of Artificial Intelligence (AI)	1 2 3 4	1 2 3
2. Application of Machine Learning (ML)	1 2 3 4	1 2 3
<b>E. Digital Infrastructure and Interoperability</b>		
1. Standards and terminology	1 2 3 4	1 2 3
2. Cloud-based infrastructure	1 2 3 4	1 2 3
3. Interoperable systems (e.g., Health Information Exchange [HIE])	1 2 3 4	1 2 3
<b>F. Digital Maturity Assessment</b>		
1. Digital assets	1 2 3 4	1 2 3
2. Gap analysis between current and future digital state	1 2 3 4	1 2 3
3. Standards and compliance implementation	1 2 3 4	1 2 3
II. Person-Enabled Health (Health) - 23%		
<b>A. Population Health</b>		
1. Population health standards and stakeholders	1 2 3 4	1 2 3
2. Impact of Social Determinants of Health (SDOH) on digital health transformation	1 2 3 4	1 2 3
3. Maturity models	1 2 3 4	1 2 3
<b>B. Citizen-Driven Informatics</b>		

1. Industry applications available on the market (e.g., patient portals, Internet of Things [IOT])	1 2 3 4	1 2 3
2. Consumer data exchange (e.g., open notes)	1 2 3 4	1 2 3
3. Shared decision making	1 2 3 4	1 2 3
<b>C. Virtual Healthcare Delivery Models</b>		
1. Telehealth guidelines, policies, and procedures	1 2 3 4	1 2 3
2. Remote patient monitoring and connected care services (e.g., e-home monitoring, remote e-ICU monitoring, healthcare robotics)	1 2 3 4	1 2 3
<b>D. Patient-Generated Data and Consumer Perception</b>		
1. Patient-generated data (e.g., symptom tracker)	1 2 3 4	1 2 3
2. Patient Reported Experience Measures (PREMs)	1 2 3 4	1 2 3
3. Other care delivery professionals (e.g., paramedics, social work, care management, PT/OT/ SLP)	1 2 3 4	1 2 3
<b>III. Measurement and Improvement (Transformation) - 23%</b>		
<b>A. Data Science, Clinical and Business Intelligence, and Analytics</b>		
1. Data mining, informatics, and business intelligence (e.g., tools, technologies, market suppliers)	1 2 3 4	1 2 3
2. Machine learning	1 2 3 4	1 2 3
<b>B. Clinical Outcomes</b>		
1. Patient Reported Outcome Measures (PROMs) (e.g., standard and validated reporting tools, quality performance measures)	1 2 3 4	1 2 3
2. Clinical quality measures (e.g., process and outcome)	1 2 3 4	1 2 3
<b>C. Stakeholder Satisfaction</b>		
1. Patient satisfaction	1 2 3 4	1 2 3
2. User Experience (UX) / Usability / User-Centered Design	1 2 3 4	1 2 3
3. Clinician satisfaction	1 2 3 4	1 2 3
<b>D. Compliance and Adherence</b>		
1. Standards, regulations, policies, and procedures	1 2 3 4	1 2 3
2. Continuous readiness assessment	1 2 3 4	1 2 3
<b>E. Economic Assessment</b>		
1. Value analysis (e.g., Total Cost of Ownership [TCO])	1 2 3 4	1 2 3
2. Cost and benefit / efficiency analysis	1 2 3 4	1 2 3
<b>F. Program Planning and Evaluation</b>		
1. Project management processes	1 2 3 4	1 2 3
2. Monitoring and evaluation techniques	1 2 3 4	1 2 3
<b>G. Sustainability</b>		
1. Continuous improvement techniques (e.g., Six Sigma, Lean)	1 2 3 4	1 2 3
2. Capacity and capability planning (e.g., human and technical resources)	1 2 3 4	1 2 3
<b>IV. Strategy, Governance, and Organizational Management (Strategy) - 23%</b>		

<b>A. Operational Management (including Workforce)</b>		
1. Service management	1 2 3 4	1 2 3
2. Change management	1 2 3 4	1 2 3
3. Supply chain management and logistics	1 2 3 4	1 2 3
<b>B. Policy, Regulations, Legislation, and Ethics</b>		
1. Policy, regulatory, and legislative requirements of the applicable jurisdiction	1 2 3 4	1 2 3
2. Ethical principles (e.g., patient, medication, and staff safety; confidentiality)	1 2 3 4	1 2 3
3. Consent management	1 2 3 4	1 2 3
<b>C. Leadership</b>		
1. Transformation initiatives to support strategies	1 2 3 4	1 2 3
2. Relationship building with stakeholders	1 2 3 4	1 2 3
3. Conflict management	1 2 3 4	1 2 3
4. Environmental assessment	1 2 3 4	1 2 3
<b>D. Strategy</b>		
1. Scalable initiatives (e.g., pilot to scalable solution)	1 2 3 4	1 2 3
2. Strategic planning principles (e.g., goal-setting, analysis, strategy formation, strategy implementation, and strategy monitoring)	1 2 3 4	1 2 3
<b>E. Health Equity and Inclusion</b>		
1. Bias in software development (e.g., recognizing and reducing / removing bias in programming or coding)	1 2 3 4	1 2 3
2. Health equity	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