

**PRACTICE WORKFLOW & INFORMATION MANAGEMENT REDESIGN SPECIALIST
EXAM BLUEPRINT**

General Description

Workers in this role assist in reorganizing the work of a provider to take full advantage of the features of health IT to improve health and care. Individuals in this role may have backgrounds in health care (for example, as a practice administrator) or in information technology, but are not licensed clinical professionals.

Number of Questions on the Exam:

125 Multiple-Choice Questions

Exam Time:

3 Hours

Domain I: Fundamentals of Health Workflow Process Analysis and Redesign

15%

Competency Statements:

1. Given a scenario, outline the elements involved in providing care within a complex health care system that reflect an understanding of workflow processes.
2. Document clinic processes to facilitate workflow analysis and redesign.
3. Develop a process map for given clinical process workflows within a complex health care system.
4. Facilitate decision-making necessary for optimizing health care processes.
5. Critically analyze the workflow processes in a selected clinical setting, taking into account potential gaps, areas of redundancy, delays, manual work, work volume, task time, and elapsed time.
6. Design processes and information flows for the practice that accommodate quality improvement and reporting.
7. Develop a plan for a revised and optimized clinical workflow within a health care system that integrates meaningful use of information technology.
8. Propose ways in which quality improvement methods and tools can be applied in order to improve workflow processes in a health care setting.
9. Develop and present an implementation plan for a process change.
10. Working with practice staff, develop a set of plans to keep the practice running if the EHR system fails.
11. Working with practice staff, evaluate the new processes as implemented, identify problems and changes that are needed, and develop and present plans for these process changes.
12. Apply to these activities an understanding of health IT, meaningful use, and the challenges practice settings will encounter in achieving meaningful use.

Domain II: Usability and Human Factors

15%

Competency Statements:

1. Articulate a systems approach to usability and human factors as it applies to health information technology.
2. Explain the cognitive consequences of health information technology on clinical performance.
3. Identify the consequences of suboptimal design in the delivery of healthcare.
4. Apply methods of cognitive research, sources of usability evidence, and principles of user-centered design to decisions regarding systems evaluation, technology evaluation, and iterative design, given a population of users.
5. Apply requirements engineering methods to inform design and technology selection.
6. Demonstrate concept knowledge of cognition and human performance models in their relevance to systems evaluation methods.

7. Apply concept knowledge of cognitive, physical and organization ergonomics to human factors engineering.
8. Select the most appropriate usability evaluation method, given particular system, setting, and development phase.
9. Apply principles of usability and design to critiquing EHR systems and to making recommendations for iterative improvement.
10. Diagnose problems associated with a clinical decision support system.
11. Apply cognitive methods of analysis to medical device.
12. Evaluate user interface designs using cognitive methods of analysis, usability testing, and Nielsen's heuristic evaluation method.
13. Diagnose various types of error and create or select potential solutions.
14. Select appropriate technology input methods given different technology uses, user populations and contexts.
15. Describe how information visualization can support and enhance the representation of trends and aggregate data.
16. Describe the role of mobile and ubiquitous computing in healthcare.

Domain III: Health Management Information Systems

14%

Competency Statements:

1. Describe general functions, purposes and benefits of health information systems, why they are needed, and the benefits they provide in different healthcare and public health settings.
2. Describe the significant developments and federal initiatives that have influenced the evolution and adoption of health information systems.
3. Compare/Contrast different types of health information systems in terms of their ability to support the requirements of a health care enterprise.
4. Understand how electronic health records affect patient safety, quality, efficiency and patient care, productivity, and reporting outcomes.
5. Propose strategies to minimize major barriers to the adoption of electronic health records.
6. Understand the principles of healthcare data exchange and standards, workflow design and assessment, and their relationship to patient care.

Domain IV: Quality Improvement

14%

Competency Statements:

1. Analyze clinical decision-making requirements, including who, what, when, how, and where information is needed.
2. Design and implement information technology that supports effective teamwork, fosters open communication and enables shared decision-making to achieve quality patient care.
3. Analyze clinical workflows to design information technology that supports clinical decision-making and care coordination.
4. Design and apply information technology and standardized practices that support safety and quality.
5. Formulate activation planning that supports and maintains safety and quality.
6. Select and apply quality measures for incorporation into information systems to enable review of outcomes of care and identification of improvement opportunities.
7. Assess findings from quality reviews of reported events to design and implement clinical information system improvements.
8. Select improvement tools to assist clinical teams in improving the quality and safety of the electronic health record.
9. Monitor use of information technology for inappropriate use leading to hazards and errors.

10. Design an information technology culture conducive to highly reliable processes built on human factors research.
11. Design and implement effective strategies to use information technology to decrease reliance on memory.

Domain V: Introduction to Information and Computer Science

14%

Competency Statements:

1. Use proper hardware, network, Internet and software computer terminology in written and verbal communications.
2. Write simple computer programs including constructs such as conditional statements, loops, functions, objects, simple data structures, etc.
3. Design a simple database and develop querying statements for it.
4. Describe network computing, its benefits and risks, and identify commonly-used communications hardware and software components.
5. Identify security risks for computing systems and discuss potential solutions.
6. Explain the design and development process of a large system such as an EHR.

Domain VI: Terminology in Health Care and Public Health Settings

14%

Competency Statements:

1. Define, understand and correctly pronounce medical terms related to each of the major body systems.
2. Define commonly used terms in public health, nursing, health information technology, and clinical vocabularies & terminologies related to the implementation of electronic health records.
3. Identify the purpose and uses of pertinent health care terminologies in the electronic health record.
4. Demonstrate the ability to integrate and use health care terminology in the various health information technology roles.

Domain VII: The Culture of Health Care

14%

Competency Statements:

1. Describe the major types of clinical personnel involved in health care, including their education and training, certification and licensure, and typical roles in health care.
2. Describe the major types of settings in which health care occurs including ambulatory care, acute and emergency care, hospital based and critical care, and community health and public health settings.
3. Describe the major processes of information gathering, analysis, and documentation used by clinicians to detect, understand, and prevent or treat diseases.
4. Give examples and explain the differences between common forms of care delivery including episodic one-on-one care, multidisciplinary care, interdisciplinary care, care of chronic conditions, population based care, disease management, long-term care, end of life care.
5. Describe the role of community health and public health in managing illness outbreaks, epidemics, and pandemics.
6. Discuss the role of medical ethics and professional values in care delivery including such issues as privacy (including HIPAA), ethical conflicts, and health disparities.
7. Describe common forms of quality measurement, performance improvement, and incentive payment schemes meant to influence care delivery.

100%

Note: All competency statements are tested on the exam, and are equally important.