Fundamentals of Health Workflow Process Analysis & Redesign

Component Description:

Fundamentals of health workflow process analysis and redesign as a necessary component of complete practice automation; includes topics of process validation and change management.

Unit 1: Concepts of Processes and Process Analysis – 3.0 PD

Description:
This unit focuses on the six aims for health care process improvement. In this unit students are helped to understand the concepts of systems, systems thinking and health care processes. Such understanding provides a foundation for the study if clinical process analysis and redesign.

Objectives:
1. Describe the purpose for process analysis and redesign in the clinical setting.
2. Describe the role of a workflow process analyst and redesign specialist and contrast it with other roles such as technical support and implementation management.
3. Explain how health process analysis and redesign and meaningful use are related.
4. Analyze a healthcare scenario and identify the components of clinical workflow.
5. Given a scenario of a health care analysis and redesign, analyze the responsibilities of each participant in the process and how the roles complement or overlap with one another.
6. Describe how the workflow processes used by a healthcare facility might differ depending on the type of facility.

Unit 2: Process Representation – 3.0 PD

Description:
This unit prepares students to graphically represent a workflow process that reflects accepted standards for such representation.

Objectives:
1. Articulate the value of process mapping.
2. Describe standard processing mapping symbols and conventions.
3. Analyze an existing workflow process chart in terms of the information that could be generated and the sequence of steps that are being communicated.
4. Choose the correct scope and detail level for a process map.
5. Choose an appropriate process mapping methodology.
6. Create a process map for a health care system (or system component) using correct symbols and conventions.
**Unit 3:** Interpreting and Creating Process Diagrams – 4.0 PD

Description:
This unit prepares students to **read, interpret, and create**:
1. Flowcharts using ISO 5807 and common quality improvement symbols, and
2. Data flow diagrams in Yourdon notation.

This unit prepares students to **read and interpret**:
3. Data flow diagrams in Gane-Sarson notation,
4. Class, Activity and State diagrams in UML notation, and
5. Entity-relationship diagrams in crow’s foot notation.

Objectives:
1. Create context and data flow diagrams for a health care system (or system component) using appropriate Yourdon symbols and conventions.
2. Create a process flowchart for a health care system (or system component) using appropriate ISO 5807 symbols and conventions.
3. Choose the correct scope and detail level for a process flowchart and data flow diagram.
4. Read and interpret Gane-Sarson data flow diagram.
5. Read and interpret UML class, activity, and state diagrams.
6. Read and interpret an entity relationship diagram in crow’s foot notation.

**Unit 4:** Acquiring Clinical Process Knowledge – 3.0 PD

Description:
This unit prepares the student for conducting initial contact and with a health care facility, assessing the facilities readiness for change and using group methods for the purpose of process analysis and redesign.

Objectives:
1. Identify how the strategic goals and stakeholders for a given health care facility can influence workflow processes in that facility.
2. **Create an agenda for an opening meeting to discuss workflow processes in a health care facility, in light of that facility’s strategic goals and stakeholders.**
3. Compare and contrast different types of knowledge and their impact on organizations.
4. Analyze a health care scenario according to CMMI levels.
5. Identify the workflow processes that are likely to be used by a healthcare facility.
6. Identify the workflow processes that are essential to document and analyze in order to determine how best to streamline the operations in a given health care facility.
7. Identify key individuals with whom the analyst should meet or observe in order to gain an understanding of the nature and complexity of their work.
8. Given a process observation scenario, formulate the questions that would facilitate a productive discussion of the workflow of information, activities and roles within that facility.
9. Suggest ways to successfully respond to common challenges encountered in knowledge acquisition.
10. Given a practice scenario, choose an appropriate knowledge acquisition method.
11. Given a process analysis scenario including a list of observations, create an agenda for a visit closing meeting and an initial meeting report.
12. Given a set of diagrams and observations from an information gathering meeting draft a summary report.

**Unit 5: Process Analysis – 3.0 PD**

**Description:**
This unit focuses on the optimization of health care workflows and how the Practice Workflow and Information Management Redesign Specialist can help health care facilities achieve and sustain such optimization.

**Objectives:**
1. Describe the purpose of Process Analysis.
2. Describe skills and knowledge necessary for Process Analysis.
3. Perform a process analysis for a given clinic scenario.
4. Given results of a process analysis draft a summary report.
5. Given results of a process analysis identify desired electronic medical record functionality.

**Unit 6: Process Redesign – 3.5 PD**

**Description:**
This unit focuses on the redesign and automation of health care workflows and how the Practice Workflow and Information Management Redesign Specialist can help health care facilities make clinical health care processes safer, more efficient and more effective.

**Objectives:**
1. Identify the factors that optimize workflow processes in health care settings.
2. Describe how information technology can be used to increase the efficiency of workflow in health care settings.
3. Identify aspects of clinical workflow that are improved by EHR.
4. Propose ways in which the workflow processes in health care settings can be re-designed to ensure patient safety and increase efficiency in such settings.
5. Use knowledge of common software functionality to inform a process redesign for a given clinic scenario.
Unit 7: Facilitating Optimization Decisions – 3.0 PD

Description:
Coordinating a process optimization meeting and using appropriate group methods to discuss and make decisions on inefficiencies and opportunities for streamlining manual and computer-aided processes. This unit will prepare students to present and review process analysis and optimization findings with health care facility decision makers, and to facilitate decisions on actions to be taken.

Objectives:
1. Complete a process analysis that includes recommendations for achieving and sustaining optimization in workflow processes.
2. Prepare a presentation for health care institution decision makers to communicate findings of a workflow process analysis and proposes a facilitation plan that would assist those decision makers in moving toward optimization of workflow processes.
3. Critique optimization meeting scenarios for their effectiveness and comprehensiveness

Unit 8: Quality Improvement Methods – 3.0 MTT

Description:
Different approaches to quality improvement have been used in health care settings. Because workflow analysts will encounter organizations and people that have experience with a multitude of proven methods and fads, an awareness of the history, methods and tools of quality improvement is critical. This Unit introduces students to these elements of QI, as well as quality reporting.

Objectives:
1. Explain how quality improvement methods can be used effectively in health care settings.
2. Compare/Contrast various quality improvement methodologies and tools and understand where they can be appropriately used in the health care setting.
3. Recommend quality improvement tools/methods that would be most effective in various health care scenarios.
4. Explain how evidence-based health care practices contribute to quality improvement goals in a health care setting.
Unit 9: Leading and Facilitating Change – 3.0 PD

Description:
This Unit introduces students to the concept of change, the diffusion of innovation, and the impact of such change on the providers within a health care facility. It enhances their understanding that workflow analysts must be sensitive to the human component as they examine and propose modifications in workflow processes. This Unit prepares the student to recognize and address common change management problems, and to work with individuals and groups to facilitate change.

Objectives:
1. Explore how concerns expressed by participants in a process analysis meeting can facilitate or serve as a barrier to changes in workflow processes that are proposed.
2. Propose strategies a workflow analyst can use to enhance acceptance of changes in workflow processes he/she may propose.
3. Critique a facilitation plan that has been developed to advance changes in workflow processes in a health care facility regarding its expected effectiveness.
4. Critique the ways in which workflow process changes have been managed in selected health care facilities.

Unit 10: Process Change Implementation and Evaluation – 3.0 PD

Description:
This Unit focuses on helping students develop skills needed to implement and evaluate the effectiveness of changes designed to improve workflow processes and the quality of care in health care facility. This Unit prepares the student to implement a process change by covering three key skill sets: 1) develop a process change plan (implementation plan), 2) communicate a process change plan, and 3) to develop an evaluation plan.

Objectives:
1. Develop a Process Change Implementation Plan for a healthcare facility that includes tasks to be accomplished, responsible parties for various tasks, a timeline, and the human and material resources needed.
2. Identify management tracking and measurement opportunities for the process change.
3. Outline elements of an evaluation plan that will help determine the success of a workflow process change implemented in a health care facility.
4. Describe how the workflow analyst can help a health care facility continually improve its workflow processes, based on results of ongoing evaluations.
Unit 11: Maintaining and Enhancing the Improvements – 3.0 PD

Description:
This Unit focuses on helping the student develop the skills to recognize and access changes that can be maintained, develop alternative processes and methods needed to keep the practice running if the EHR system fails and apply to these activities an understanding of health IT, meaningful use, and the challenges practice settings will encounter in achieving, sustaining and enhancing meaningful use.

Objectives:
1. Design processes and information flows that will help sustain and continually facilitate quality improvement and reporting processes in a health care facility, particularly if the EHR system fails.
2. Prepare a presentation for health care facility decision makers related to sustainability and continuous quality improvement within their setting.
3. Develop a set of plans to keep the practice running if the EHR system fails.
4. Propose a plan where the workflow analyst collaborates with practice staff to (a) continually evaluate new workflow processes that are implemented, (b) identify problems that arise and changes needed to address those problems, and (c) develop plans to make recommended changes.