Online Modeling Training Storyboard Summary (Task 05)

SUBMITTED: MARCH 13TH 2020

Format: The online modeling training package will include short video tutorials, step-by-step/how to guides and quick start handouts, slide decks, and vignettes/examples that will allow trainees to practice modeling skills.

Course Objectives:

- Learn about Business Process Modeling (BPM) to be able to build, read, and interpret clinical workflow and information flow models
- Obtain background on BPM
- Learn to conduct and document interviews and focus groups to elicit clinical knowledge
- Learn to produce models:
  - Using <u>tools</u>: MS Office and Visio
  - Using <u>notations</u> including Business Process Modeling Notation (BPMN) and others
  - Basic and advanced models
- Learn to analyze models to determine benefits of procedural and technology changes, and to uncover constraints to system efficiency and workarounds

Content:

1) **Short video tutorials w/slide decks include:**

   - **Tutorial 1: Introduction and Foundations of Clinical Workflow Modeling**
     - ➢ Objective
       - Obtain background on Business Process Modeling (BPM)

   - **Tutorial 2: Notation Styles and Standards**
     - ➢ Objective
       - To understand the various modeling styles, notations including Business Process Modeling Notation (BPMN), Decision Model and Notation (DMN), Case Management Modeling and Notation (CMMN), and Unified Modeling Language (UML)
       - Learn to differentiate between these modeling styles, including when and how to use each

   - **Tutorial 3: Basic Models in DMN, CMMN, UML**
     - ➢ Objective
       - Learn the CMMN, DMN, and UML notation standards and better understand their application

   - **Tutorial 4: MS Office Buttonology**
     - ➢ Objective
       - Learn to produce simple models using Microsoft PowerPoint
         - This will include how to use PPT and its stencils
     - ➢ Trainees will practice building a basic encounter in PPT with the instructor and then participate in a hands-on activity based on the Telestroke Program video and possibly other sample models

- ➢ A PowerPoint stencil file will be provided for trainees

- ▪ **Tutorial 5: MS Visio Buttonology**
  - ➢ Objective
    - • Learn to produce simple models in Microsoft Visio
      - o This will include how to use Visio and its stencils
  - ➢ Trainees will practice building a basic encounter in Visio with the instructor and then participate in a hands-on activity based on the Telestroke Program video and possibly other sample models

- ▪ **Tutorial 6: Eliciting Data for the Creation of Models (Knowledge Elicitation)**
  - ➢ Objective
    - • Learn the definitions and foundational concepts of methods for eliciting knowledge on clinical workflows, such as observations, interviews, focus groups, walkthroughs/tabletops, and simulations
      - o Guidelines for selecting methodologies
      - o Best practices for each
      - o Using collected data to draft initial model

- ▪ **Tutorial 7: Drafting a Model**
  - ➢ Objective
    - • Learn how to use information obtained during knowledge elicitation or from other sources to create initial models
      - o Includes selecting the appropriate notation standard, sketching high level models

- ▪ **Tutorial 8: Validating a Model**
  - ➢ Objective
    - • Understand the importance of validating your model
    - • Learn the methods used for validating models based on resources available

- ▪ **Tutorial 9: Analyzing Models**
  - ➢ Objective
    - • Learn to read and interpret workflow models to:
      - o Understand the workflow of a process you participate in or manage
      - o Identify areas for improvement in current practice
      - o Assess benefits of proposed or pending technology or procedural changes
  - ➢ We will use two Telestroke models (Pharmacist at bedside & Pharmacist in pharmacy) to depict how models can be compared. These will be referred to throughout the module
  - ➢ We will also address analyzing timing, errors, and resource usage

- ▪ **Tutorial 10: Advancing Your Modeling Skills**
  - ➢ Objective
    - • Starting with one or more text narrative(s) of clinical vignette(s), learn to build one or more workflow models from "scratch"

2) Supplemental Materials

- Handouts (downloadable)
  - Practice Vignettes
    - Persistent Cough
    - Diabetes #1
    - Diabetes #2
    - Severe Headache
    - Back Pain
    - Potential new vignettes which may include:
      - Transitioning between specialties, ex) Primary care to/from Mental health
      - Open access/Walk-ins
  - Educational Supplements
    - Basic Models
    - BPMN Quick Start Guide
    - BPMN Shapes
    - CMMN/DMN/UML Overview
    - Quick Start Guides (areas to be identified)
- Tests and Quizzes
- Additional Materials
  - PowerPoint stencil file