**Page ID**: **#.# Clinical Workflow Modeling**

# Primary Content

**Title**

Enter the **Title** of the **Method** here (REQUIRED).

**Clinical Workflow Modeling**

**Description -- i.e., What it is:**

Enter the **Description** here (REQUIRED).

A way to describe an operation to make it more efficient and effective. The method uses one or more notational languages, which are tools for creating box-and-arrow visualizations of processes, decisions, events, and interactions within a system.

Clinically, workflow models are created for use cases, scenarios, and health practice patterns.

There are four commonly used model and notation types:

* **Business Processing Modeling Notation (BPMN)**, which describes procedures and shows how things should be done.
* **Case Management Modeling and Notation (CMMN)**, which explains how to react to different events that can occur.
* **Decision Model Notation (DMN)**, which describes requirements for decision-making and the logic behind a decision — i.e., how decisions will be made.
* **Unified Modeling Language (UML)**, which shows interactions within a system.

In all cases, the model is developed by first understanding the roles of the persons involved in the workflow as well as the activities and interactions that occur. This is done through interviews and observations. Once developed, the model is put through a validation process, typically with a focus group.

**Recommended Uses**

Enter the **Recommended Use** here. If there are no details, insert N/A or TBD.

* Understand the current process or specify interaction requirements, including the information, choices, and inputs that users need to achieve their intended outcomes.

**Limitations**

Enter the **Limitations** here. If there are no details, insert N/A or TBD.

* Requires expert users for interviews and observation.
* Training and practice required to execute effectively.
* Data analysis is time-consuming.

**Outcomes**

Enter the **Outcomes** here. If there are no details, insert N/A or TBD.

* A visual representation that shows interactions, decisions, and exchanges of information within an interactive system.

**Required Skills and Expertise**

Enter the **Required Skills** **and Expertise** here. If there are no details, insert N/A or TBD.

* The method can be done without formal training in human factors or related fields but requires training and practice.
* Training or experience with software tools (e.g., Microsoft Visio) is recommended.

**How to Proceed**

If there are no details, insert TBD.

* **How-To Guide.** Review step-by-step instructions on how to build a clinical workflow model.
* **Schedule a Consult.** Connect with a usability specialist for support on your project.

[BEGIN: How to Do It]

**Introduction**

Enter the **Introduction** here (REQUIRED).

The following section provides an **overview** of the steps involved in building a clinical workflow model. Get more in-depth information in our Clinical Workflow Modeling Tutorial.

**Procedure**

Enter the **Procedure** here (REQUIRED).

### 1. Gather knowledge

* Involves understanding the roles, activities, and interactions in a clinical workflow. The idea is to systematically collect information in a form that can be used to build a model.
* Activities include observations, interviews, focus groups, walkthroughs, and simulations.

### 2. Plan model storyline

* Involves building a text narrative from the compiled notes.
* Objectives include representing the difference between “as-is” and “to-be,” identifying pain points, and noting exceptions and special cases.

### 3. Develop/update model

* Involves selecting a notation standard and sketching to see the complexity of the model.
* Activities include identifying potential swim lanes (horizontal decomposition), hierarchical decomposition into sub-processes, and localization of decision points and branches.
* When sketch is mature, the model can be built more formally in software (such as Microsoft Visio or PowerPoint).

### 4. Assess model

* Involves model validation, which is typically done in focus group. The model is presented, and participants are asked to look for pain points and “likes.”
* With a critical incident technique, best-case and worst-case real-world examples can be teased out.
* Includes discussion to identify any steps in the flow that might be combined or eliminated.

### 5. Lessons learned

* Involves identifying improvements in the process and assessing benefits of proposed technology or procedural changes.

**Tools**

If there are no details, insert N/A or TBD.

* N/A

[END: How to Do It]

**Author**

Enter the **REFERENCES** here. If there are no details, insert N/A or TBD.

* Visionary Consulting Partners

**Sources**

Enter the **REFERENCES** here. If there are no details, insert N/A or TBD.

* [BPMN + CMMN + DMN: The triple crown of process improvement standards](https://www.youtube.com/watch?v=N3htv1tjmuc), Object Management Group (OMG).
* [Unified Modeling Language (UML) and Systems Modeling Language](https://www.youtube.com/watch?v=vAHHdnIV8rU), Object Management Group (OMG).

**References**

Enter the **REFERENCES** here. If there are no details, insert N/A or TBD.

* N/A