Business Process Workflow Modeling Training

Tutorial 3, Basic Models in DMN, CMMN, UML

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Version: 001

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About the Authors & Acknowledgements

- This training was developed under VA Human Factors Services (HFS) Contract (36C77619D0018), Task Order 3, by **Visionary Consulting Partners, LLC**, contractors to Human Factors Engineering.
  - The HFS Contracting Project Team includes authors and instructors:
    - Anthony Masalonis, PhD
    - Claire Hayes Watson, PhD, MPH
    - Aneesa Motiwala, MS
    - Marsha McClure, MHA

- We would also like to acknowledge Visionary team members who served as reviewers and contributors to this content:
  - Eleanor Thornton, MS, MCHES, AE-C
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  - Nakina Eugene, MPH, CHES

- Video production and editing provided by:
  - Jamiel Chapple
  - Michael D. Thornton Jr.

Introduction to All Modules

- This training is adaptive, self-paced, and includes both didactic and hands-on tutorials. More specifically this includes:

  – Short video tutorials

  – Handouts

  – Slide decks

  – Vignettes/examples for practice

  – Quizzes

  – Office Hours

Objective

- Learn the CMMN, DMN, and UML notation standards and better understand their application.

Notation Overview

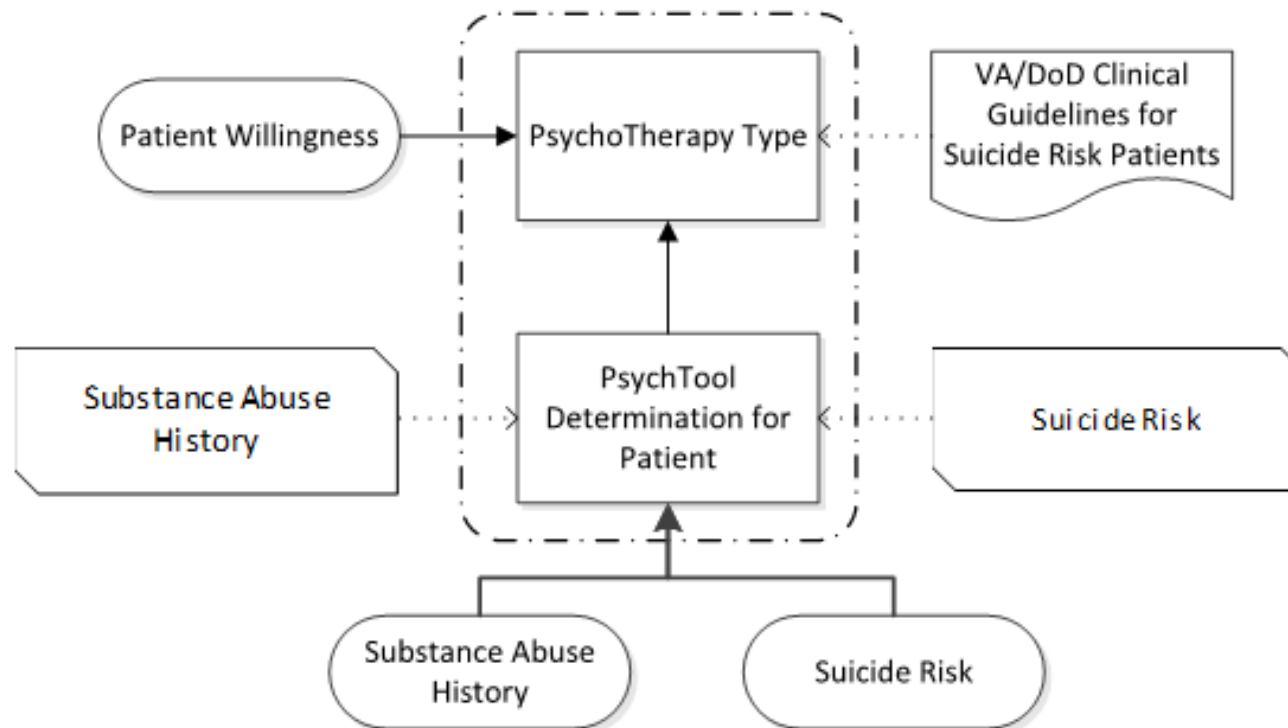| Modeling Type	When to Use	Scenario
BPMN	Repeatable Processes	Basic Encounter with Triage
CMMN	Ad-Hoc or If/Then Processes	Chronic Care Required (e.g.—Hypertension, Arthritis, Atrial Fibrillation)
DMN	Decision Trees and Truth Tables	Conditions Influence Treatment (e.g.—Age, Weight, Sex, BMI)
UML	Entity Relationship Data and Information Flow	Information flows need to be included

Basic Models: DMN
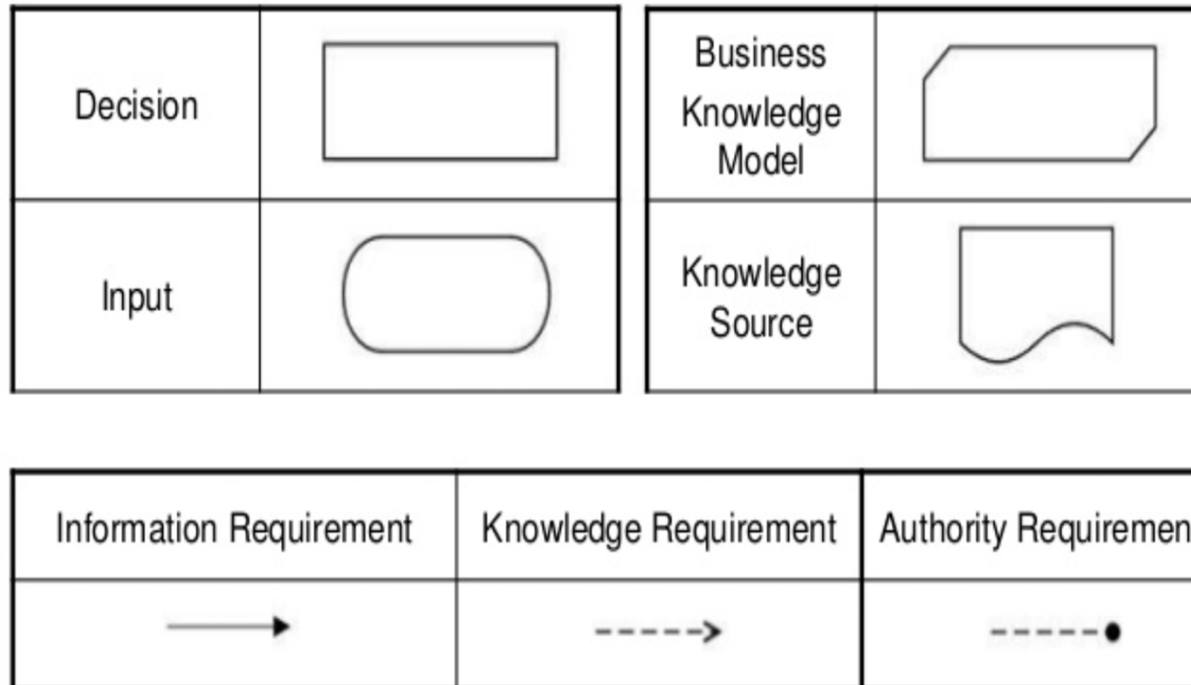
Decision	▭	Business Knowledge Model	⬡
Input	▢	Knowledge Source	⬠

Information Requirement	Knowledge Requirement	Authority Requirement
⟶	⇢	⇢●

Basic Models: DMN

Basic Models: CMMN

Case Management Model and Notation 1.0

Case Plan Model

Milestone and Task — Milestone A, Task A

Case File Item

Stages

Task with Sentries

Event Listener

Case/Process Task

Basic Models: CMMN

Basic Models: UML
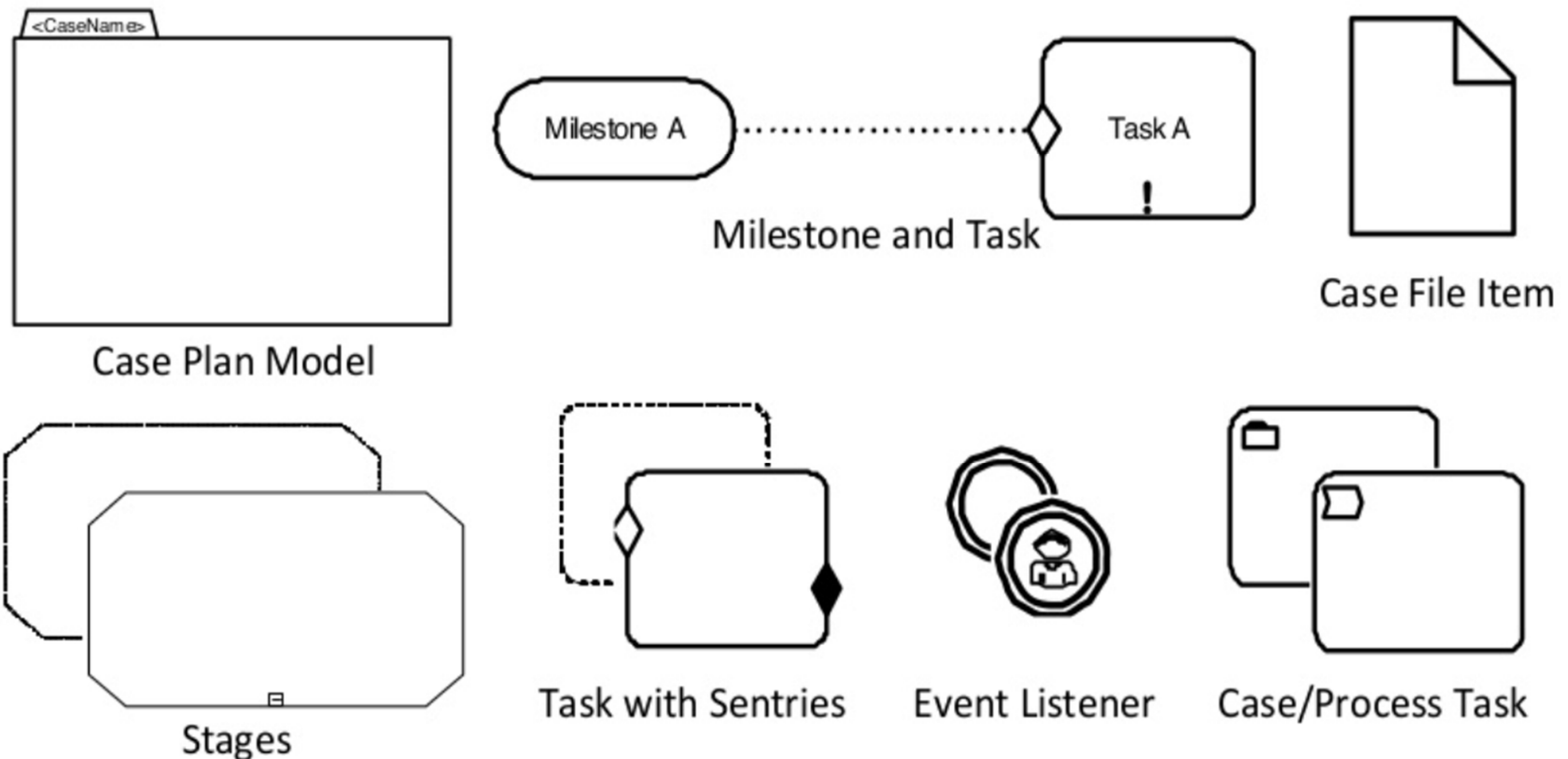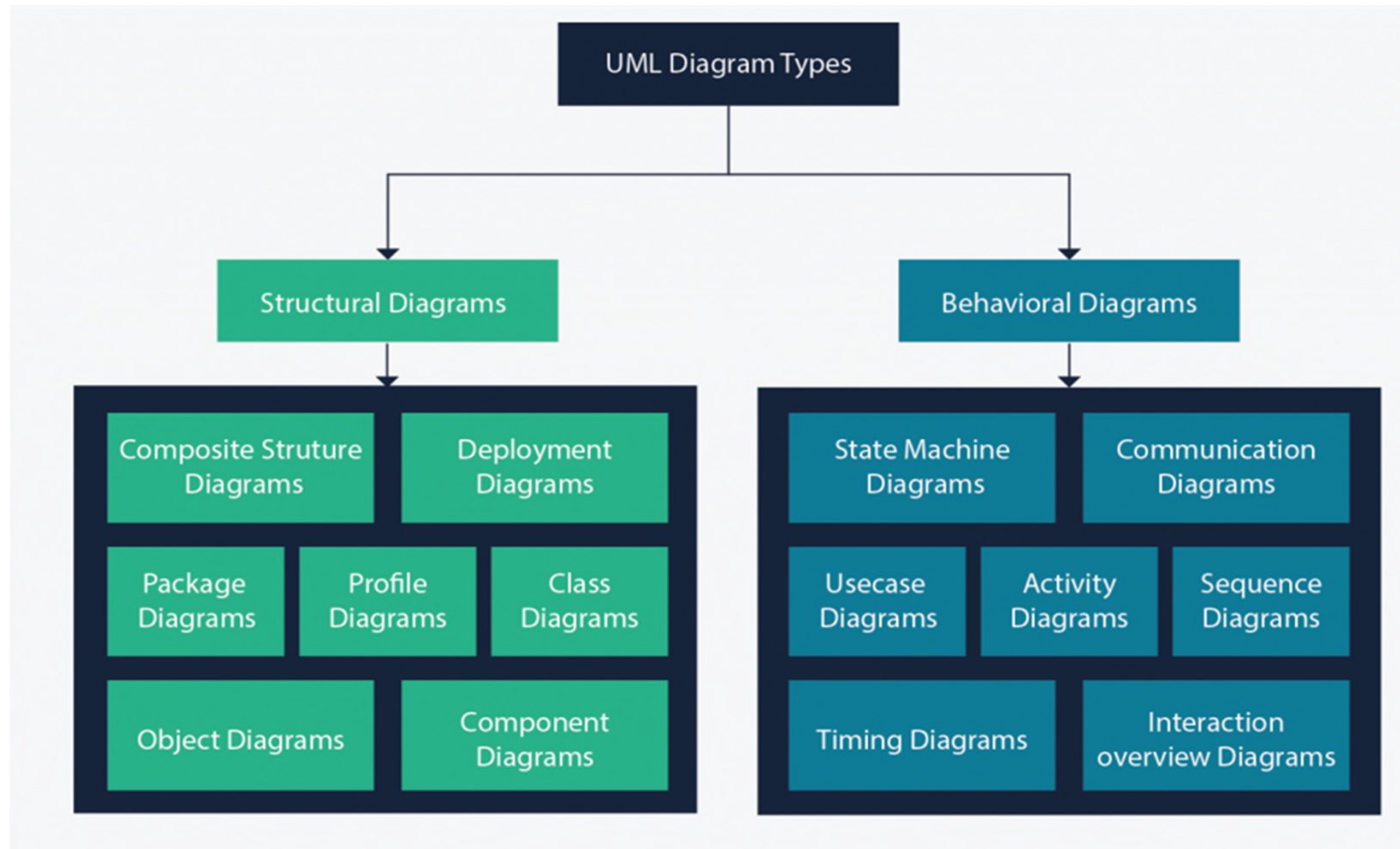

Reference:
https://www.omg.org/spec/DMN/1.3/PDF
https://access.redhat.com/documentation/en-us/red_hat_process_automation_manager/7.1/html/designing_a_decision_service_using_dmn_models/dmn-con_dmn-models
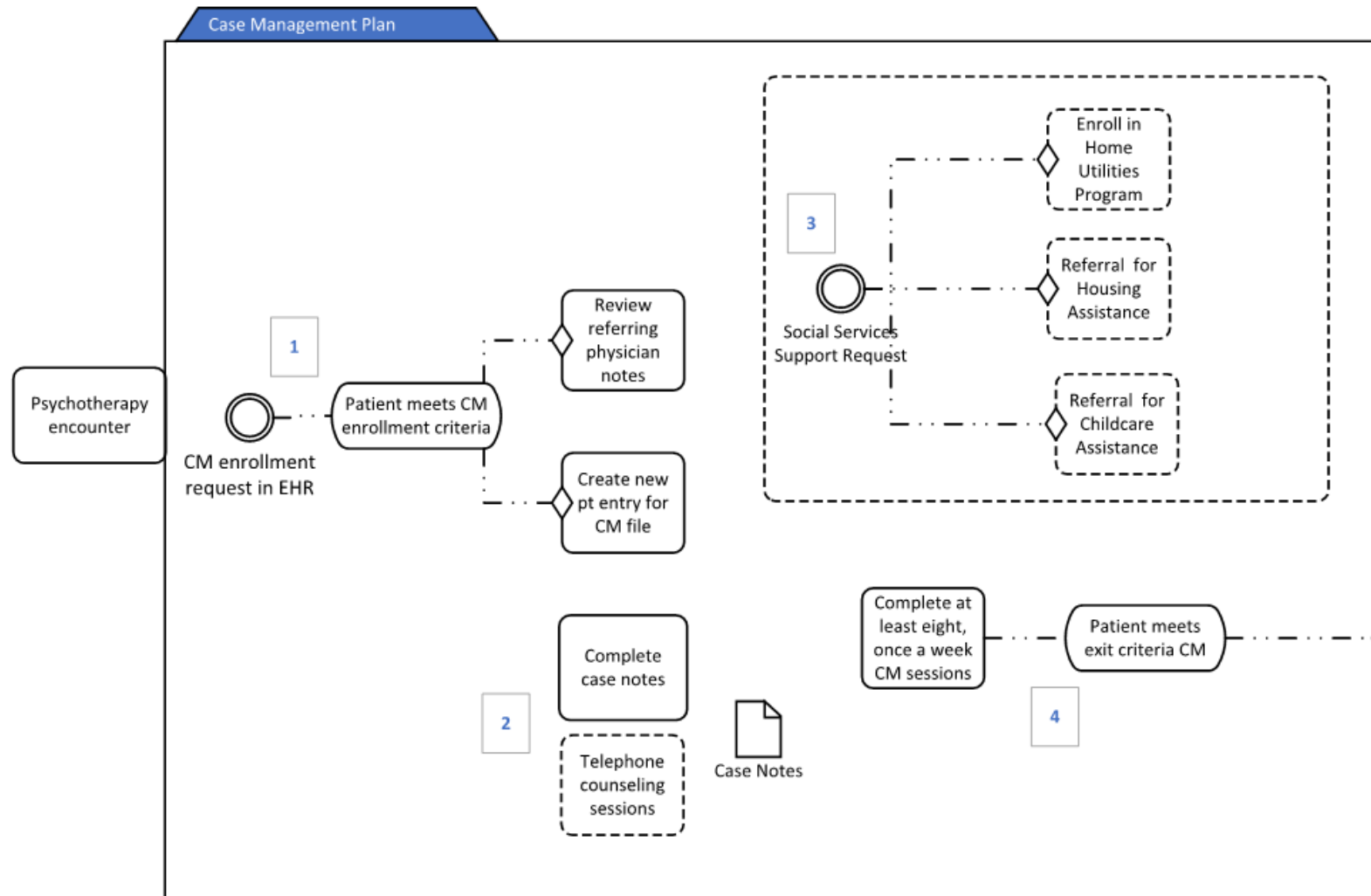
Basic Models: UML

References

Herzbeg, N. (2015). *Introduction to CMNN* [SlideShare slides]. Retrieved April 20, 2020 from https://www.slideshare.net/NicoHerzberg/introduction-to-cmmn.

Object Management Group (OMG). (2020, April 4). Object Management Group. Retrieved April 20, 2020 from https://www.omg.org/.

The Object Management Group Video Tutorials:

– OMG BPMN, CMMN and DMN overview Video: https://www.youtube.com/watch?v=N3htv1tjmuc

– OMG UML Overview Video: https://www.youtube.com/watch?v=vAHHdnIV8rU

– OMG UML for Information Models: https://www.youtube.com/watch?v=HqKZOgvCeUo

Red Hat, Inc. (n.d.). *Designing a Decision Service Using DMN Models, Chapter 1. Decision Model and Notation (DMN).* Retrieved April 20, 2020 from https://access.redhat.com/documentation/en-us/red_hat_process_automation_manager/7.1/html/designing_a_decision_servic e_using_dmn_models/dmn-con_dmn-models.