Detailed Clinical Models with Enterprise Architect

Michael van der Zel

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Contents

- Model Driven
- Standards based; not exclusively EA
- Flowchart
- HOW-TO with EA
- Patterns and Rules
- DCM to:
  - DOC, HTML, XFORM, HL7 v3 Template, ADL, etc.
Assumptions

- Know what DCM's are
- DCM's are instances
- Basic UML
- Read the EA getting started
- (Design Patterns)
Instead of XSLT we could also use the Transformation and Code Generation features of EA. Then the XMI step is also not necessary. The other alternative is read the XMI in Eclipse and work from there, or read the MIF in OHT (Eclipse) and work from there. Use Eclipselink (ORM) as persistence layer, eCore as model en SWT as UI? Eclipselink with native ISO datatypes database?

Information Analysis

EA UML Class Diagram based on DCM CIM

DCM CIM Building Blocks

DCM Design Patterns

ISO Datatypes & SNOMED expression syntax

XMI

run xslt

run Form xslt

run Model xslt

xslt for each transform

MIF

HL7 v3 Template

ADL

Implicit Rules

HTML FORM

Infopath Form

PDF Forms

TODO: Also reverse path. From MIF, ... > XMI > Import into EA or other UML modeler, e.g. Rational UML Modeler.
DCM Project
DCM Project Structure

- Contents diagram
- **Metadata**
  - *Most metadata is in the UML Model!*
- Purpose
- Evidence base
- **Model**
  - **UML and description of the variables**
- Working instructions
- Interpretation guidelines
- Care proces / dependance / Story board(s)
  - Story boards describe the Model?
- An example of the instrument
- **Screenshots**
  - *Generated forms? Or example application*
- **Mapping Table (generated from model!!)**
- Remarks
How do we model this in UML? Will this be all ST, CD or classes.

DCM CIM Walkthrough

We should also address SOP (Standard Operating Procedure)
Create Element

ctrl drag DCM CIM element on diagram and select "as instance..."
Set Instance Properties

double click element and set instance properties
Set Run State

[ctrl-alt-r] set run state
Next

- ValueSets > enumerations
- export XMI – right click on DCM
- export RTF
- create HTML (XMI + XSLT)
Some thoughts

- Naming the zip
- Versioning
- Sending via patientcare list
- Publishing on detailedclinicalmodels.org?
- Repository