



2011

**HL7 Spain
Report**

**25th Annual Plenary & Working Group Meeting
San Diego, September 11-16 2011**

Mission



HL7 SPAIN provides a comprehensive support to:

- **Health Care Professionals**
- **Industry**
- **Administration**
- **Faculty**

Involved in the use of standards for the exchange, integration, sharing, and retrieval of electronic health information that supports clinical practice and the management, delivery and evaluation of Spanish health services.

Membership



2011 HL7 SPAIN Membership Structure

- 46 Health Care Industry
- 16 Health Administration
- 5 Faculty

67 Corporative Members

Activities



- **Spanish Working Group Meetings**
 - **22nd February, 2011 – HL7 Spain Board and Technical Committee Meeting at INTEL, Madrid.**
 - **21st June, 2011 – HL7 Spain Board and Technical Committee at Hospital General Universitario Gregorio Marañón, Madrid.**

Training

214 Attendees



HL7 SPAIN 2011	Last update		10.09.2011						
Training & Certification Program									
	1	2	3	4	5	6	7	8	9
	PALMA 14.03.2011	PALMA 16.03.2011	BCN 21.03.2011	BCN 23.03.2011	PALMA 28.03.2011	PALMA 28.03.2011	PALMA 30.03.2011	DONOSTIA 04.04.2011	BCN 07.04.2011
Spanish e-Learning C.									
V2.6 Workshop	6			6					
CDA R2 Workshop		4	4						
RIM R1 Workshop					8				
HL7 Executive Workshop									20
SNOMED Workshop						14			
CDA & SNOMED Adv Wksp							13	10	

10	11	12	13	14	15	16	17	Total	
VALENCIA 11.04.2011	VALENCIA 13.04.2011	10ed CV 14.04.2011	VALLAD 04.05.2011	SEVILLA 09.05.2011	SEVILLA 16.05.2011	MADRID 18.05.2011	MADRID 20.06.2011		
		24						24	Spanish e-Learning C.
	14		7	19			13	65	V2.6 Workshop
12					19			39	CDA R2 Workshop
								8	RIM R1 Workshop
								20	HL7 Executive Workshop
						21		35	HL7 & SNOMED Workshop
								23	CDA & SNOMED Adv Workshop
								214	5

Certification (1)



69 Certified Professionals - 2011

HL7 SPAIN 2011	Last update										10.09.2011	
Certification	1	2	3	4	5	6	7	8	9	10	Exam	Certif
	MADRID 22.02.2011	BCN 29.04.2011	PALMA 11.05.2011	VALENCIA 12.05.2011	MADRID 18.05.2011	VALLAD 01.06.2011	SEVILLA 02.06.2011	MADRID 14.07.2011				
V2.6 Certification Exam	3	3	2	12		6	10	7			43	
V2.6 Professional Cert.	3	3	2	10		5	10	4				37
CDAR2 Certification Exam	2	6	4	3	3	2	17				37	
CDAR2 Professional Cert.	2	4	2	3	2	2	14					29
RIM R1 Certification Exam	2					1					3	
RIM R1 Professional Cert.	2					1						3
											83	69

Certification (2)



282 Certified Professionals since 2005

HL7 SPAIN 2011		Last update	10.09.2011							
Certified Professionals										
			2005	2006	2007	2008	2009	2010	2011	Total
V2.x Certified Professionals			10	8	13	25	17	70	37	180
CDA R2 Certified Professionals					2	3	28	34	29	96
RIM R1 Certified Professionals								3	3	6
Certified Professionals			10	8	15	28	45	107	69	282

Collaboration (1)



- HL7 EDUCATION e-Learning Project
- HL7 SPANISH e-Learning Course
- HL7 SPAIN & BARCELONA POLYTECHNIC UNIVERSITY
 - Improving HL7v3 usability by Automatic Filtering Models
 - e-Learning “HL7 Practitioner's Guide to UML”
 - Security Domain Analysis Model
 - Mirroring HL7v3 to UML compliant models
- IHE SPAIN Alliance

Collaboration (2)



- HL7 SPAIN & VALENCIA POLYTECHNIC UNIVERSITY
 - **CDA & Archetypes Editor**
- HL7 SPAIN & BASQUE COUNTRY UNIVERSITY
 - **CDA & TERMINFO**
- HL7 SPAIN & SALAMANCA UNIVERSITY
 - **HL7 Training & Certification Program**

Significant Accomplishments (1)



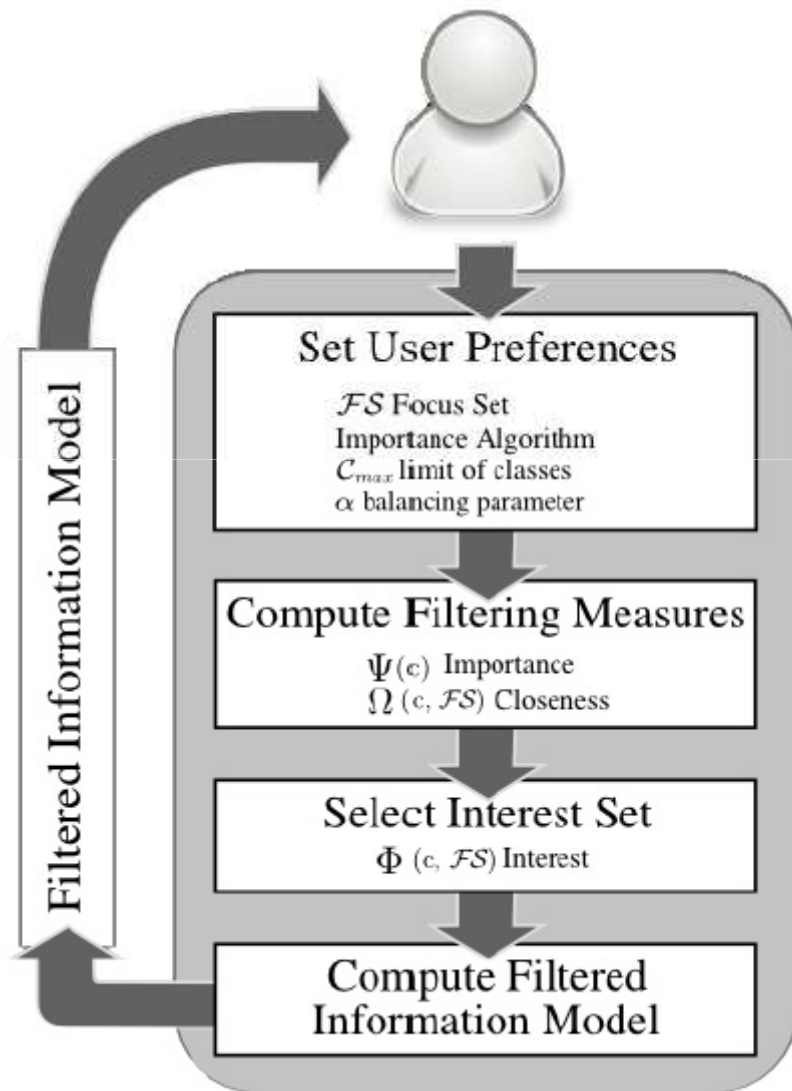
- **Personal Health Record Functional Guide**
- **Electronic Prescription Invoicing Guide**
- **Spyrometry CDA Implementation Guide**
- **Improving HL7v3 usability by Automatic Filtering Models**

Significant Accomplishments (2)



- **DMAG's Secure EHR Editor**
- **LinkEHR CDA & Archetype Editor**
- **Mirroring HL7v3 to UML compliant models**

Improving HL7v3 usability by Automatic Filtering Models



- **HL7 Knowledge Extraction**

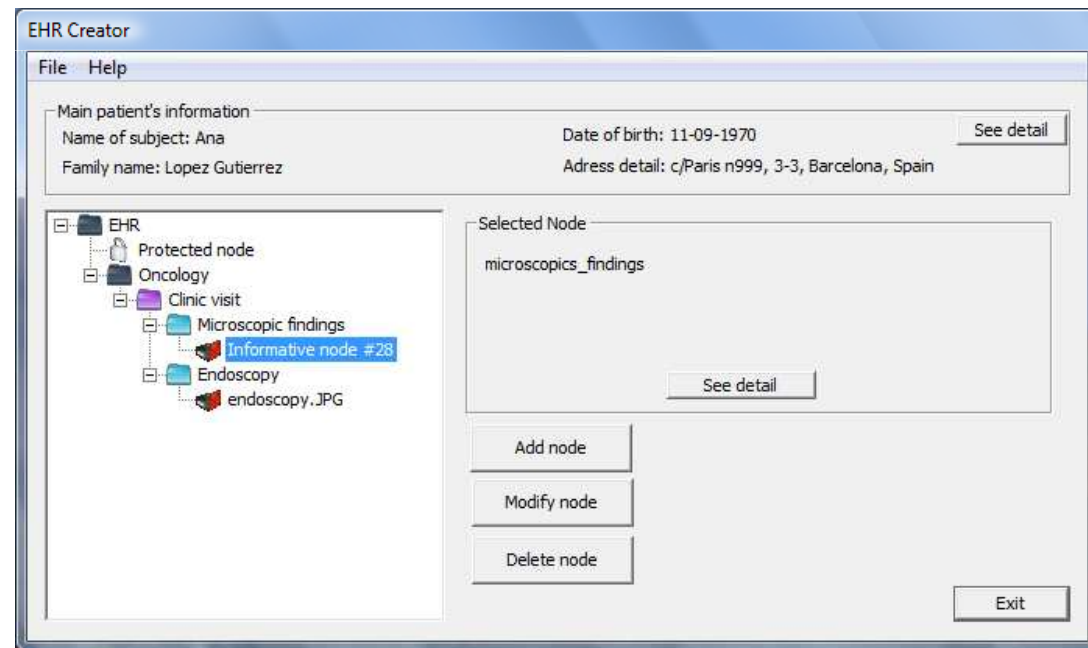
- Prototype recovers more than 80% of the knowledge of a D-MIM in three iterations, with an average time per iteration that doesn't exceed one second

DMAG's Secure EHR Editor



Use of the ISO/IEC **MPEG-21 standard** for defining and protecting EHRs (ISO 13606) and HL7 CDAs

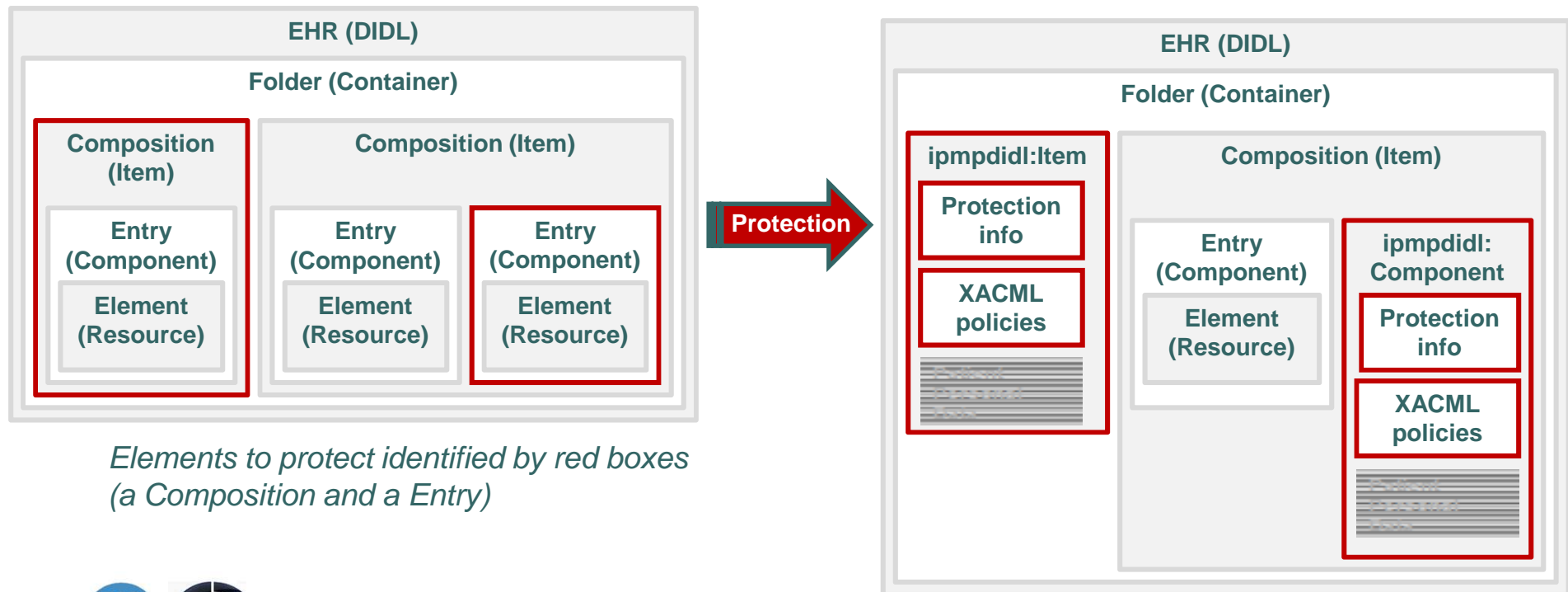
- MPEG-21 Part 2: DIDL (Digital Item Declaration Language)
- MPEG-21 Part 4: IPMP (Intellectual Property Management and Protection) Components



DMAG's Secure EHR Editor



- **Protection:** MPEG-21 Intellectual Property Management and Protection (IPMP) Components
- **Privacy Policies** definition: OASIS eXtensible Access Control Markup Language (XACML)



*Elements to protect identified by red boxes
(a Composition and a Entry)*



LinkEHR CDA & Archetype Editor

- The objective is to study if CEN/ISO 13606 **archetypes** can be an alternative for defining **CDA templates**.
- LinkEHR Editor is a tool developed by the Valencia Polytechnic University as a **Reference Model-Independent** archetype editor.
- HL7 CDA XML Schema can be imported into the tool and we can build **CDA archetypes** guided by that Schema.

<http://www.linkehr.com>

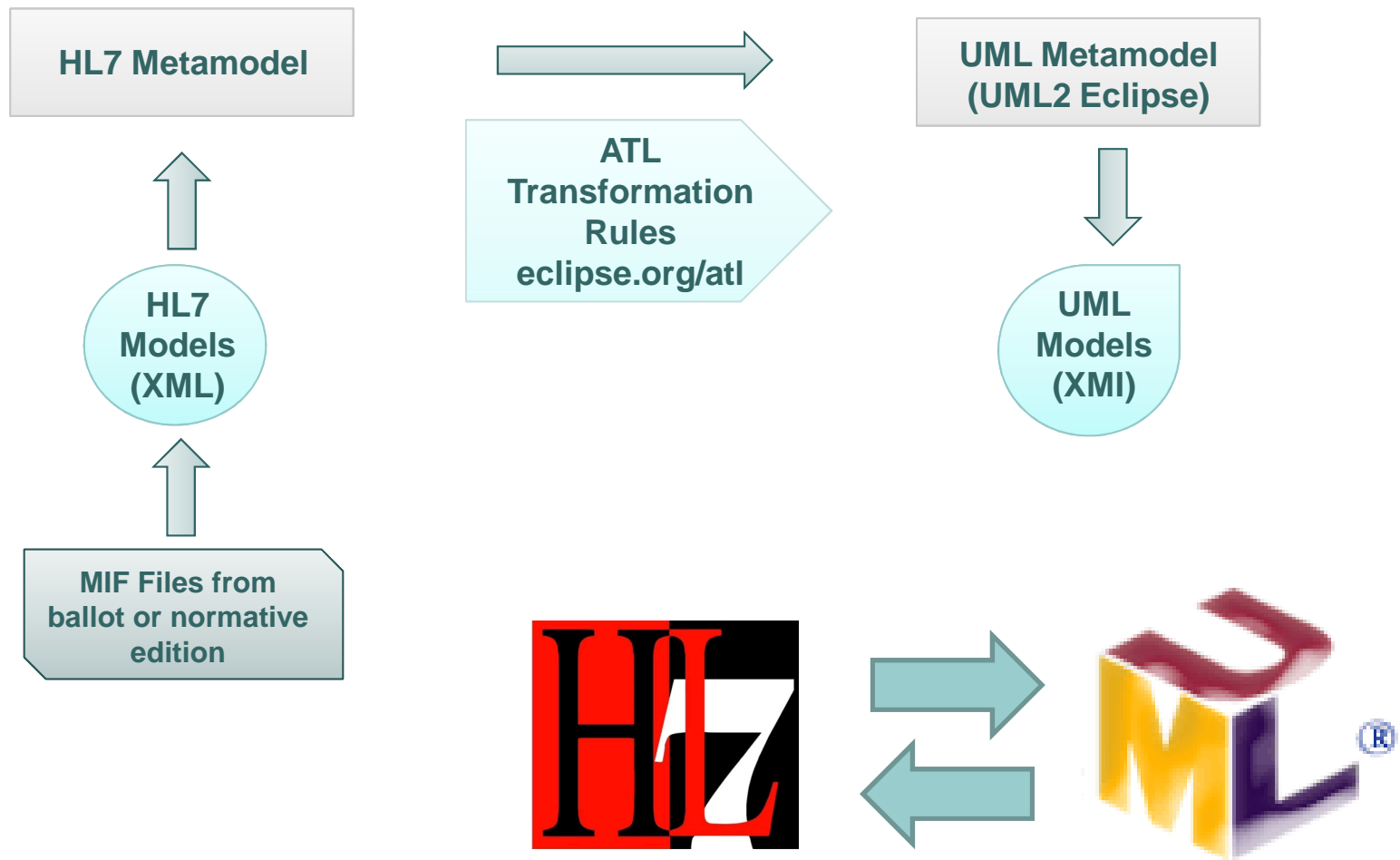
LinkEHR CDA & Archetype Editor



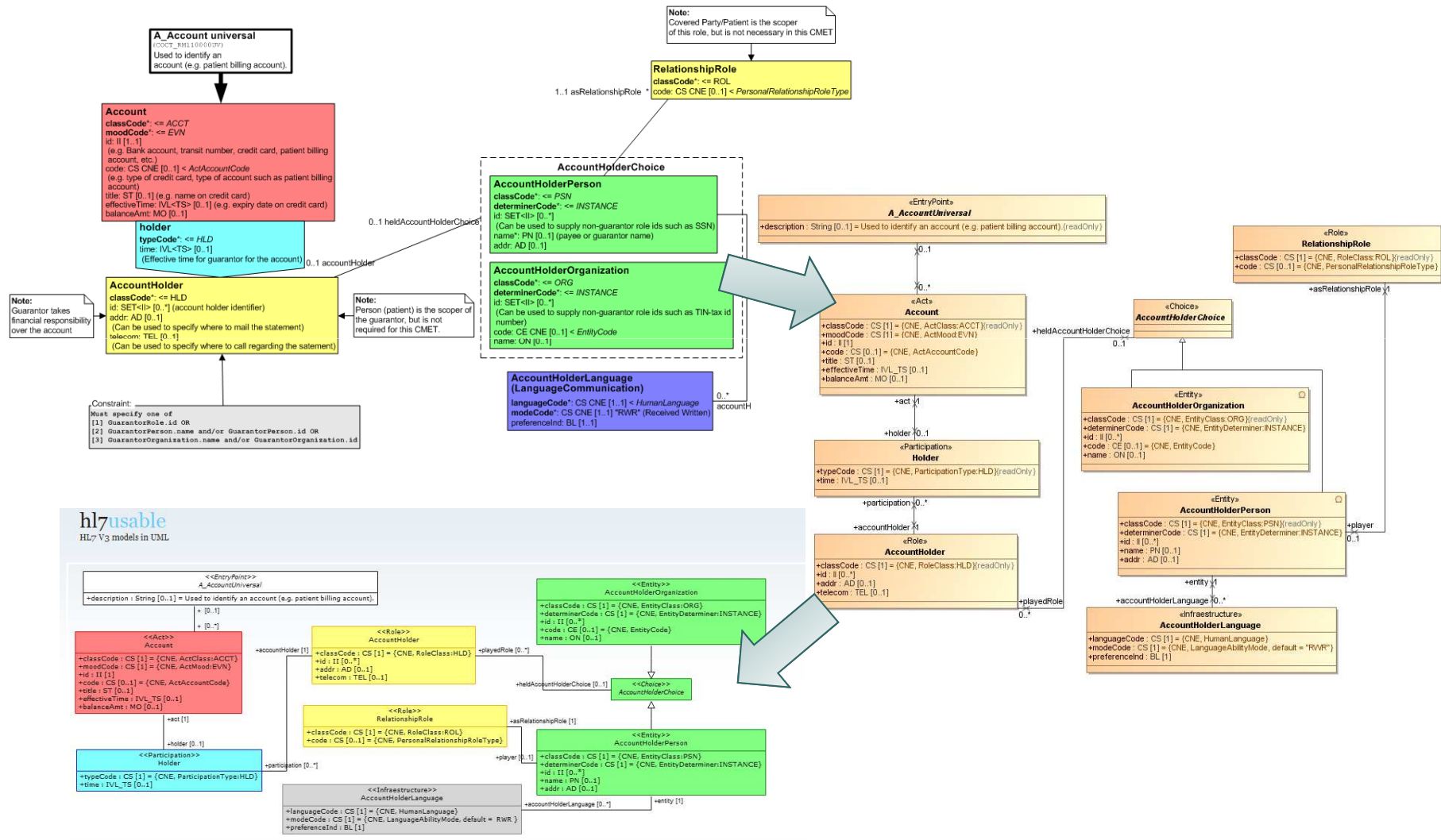
The screenshot displays the LinkEHR-Ed Integration Archetype Editor interface. The main window is titled "HL7-CDA-ClinicalDocument.Prueba.v1 - LinkEHR-Ed Integration Archetype Editor". The interface is divided into several panes:

- Archetype Tree (Left):** A hierarchical tree view showing the structure of the ClinicalDocument archetype. The root is "ClinicalDocument [at0000] {1}", which contains several mandatory and optional components like "author", "code", "component", "structuredBody", "section", "entry", "act", "text", "title", "confidentialityCode", "custodian", "effectiveTime", "id", "recordTarget", "typeId", "Language", and "Ontology".
- POCD_MT000040_Entry (Right):** A detailed view of the selected archetype element. It includes:
 - Documentation:** A section for adding documentation, currently showing "ANY ALLOWED" and "Occurrences" with Min.: 0 and Max.: 0 (Unbounded).
 - Ontology:** A section for defining the ontology, with "Text:" set to "POCD_MT000040_Entry" and "Description:" set to "This is a POCD_MT000040_Entry object".
- Context Menu (Bottom Center):** A context menu is open over the "act" element in the tree, listing various actions:
 - Delete
 - Add child "contextConductionInd"
 - Add child "encounter"
 - Add child "nullFlavor"
 - Add child "observation"
 - Add child "observationMedia"
 - Add child "organizer"
 - Add child "procedure"
 - Add child "realmCode"
 - Add child "regionOfInterest"
 - Add child "substanceAdministration"
 - Add child "supply"
 - Add child "templateId"
 - Add child "typeCode"
 - Add child "typeId"

Mirroring HL7v3 to UML compliant models



Mirroring HL7v3 to UML compliant models - Example



Mirroring HL7v3 to UML compliant models



- Allows the easy adoption of the **HL7v3** standard for those familiar with the UML world and **Model Driven Architecture**.
- Facilitates the usage of a big amount existing **CASE** tools to work with UML models, such as **open source tools**.

Next...

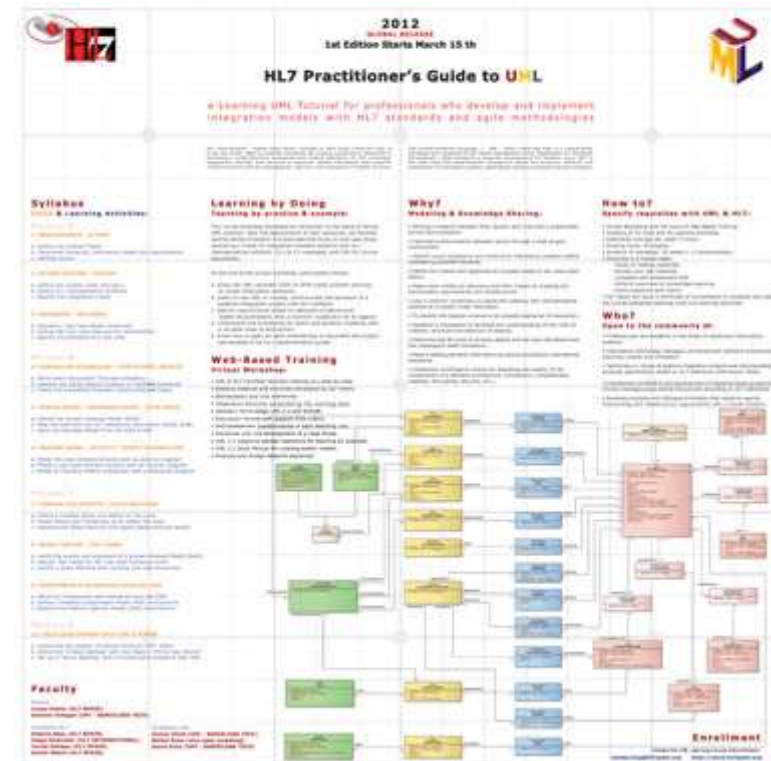


New e-Learning course

HL7 Practitioner's Guide to UML

Spanish 1st Ed. September 2011

English 1st Ed. January 2012





Thank you...

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