ISO, IHE e HL7

Apresentação ABNT

José Costa Teixeira

Junho 2015

Standards

- ISO – Normas *de jure* e *de facto*
- HL7 – Normas *de facto (de jure quando adotada)*
- IHE – Normas e recomendações de implementação

- Projetos Europeus
- Framework para projetos eSaude

- Discussão – projetos compatíveis?

ISO - Key work items

- IDMP – Identification of Medicinal Products
- ISO/DIS 17523 - ePrescription
- DT 19256 – Medicinal Product Dictionary
- TS 19293 – Dispense Record

IDMP – conjunto de normas

IDMP – Normas e Implementation Guides
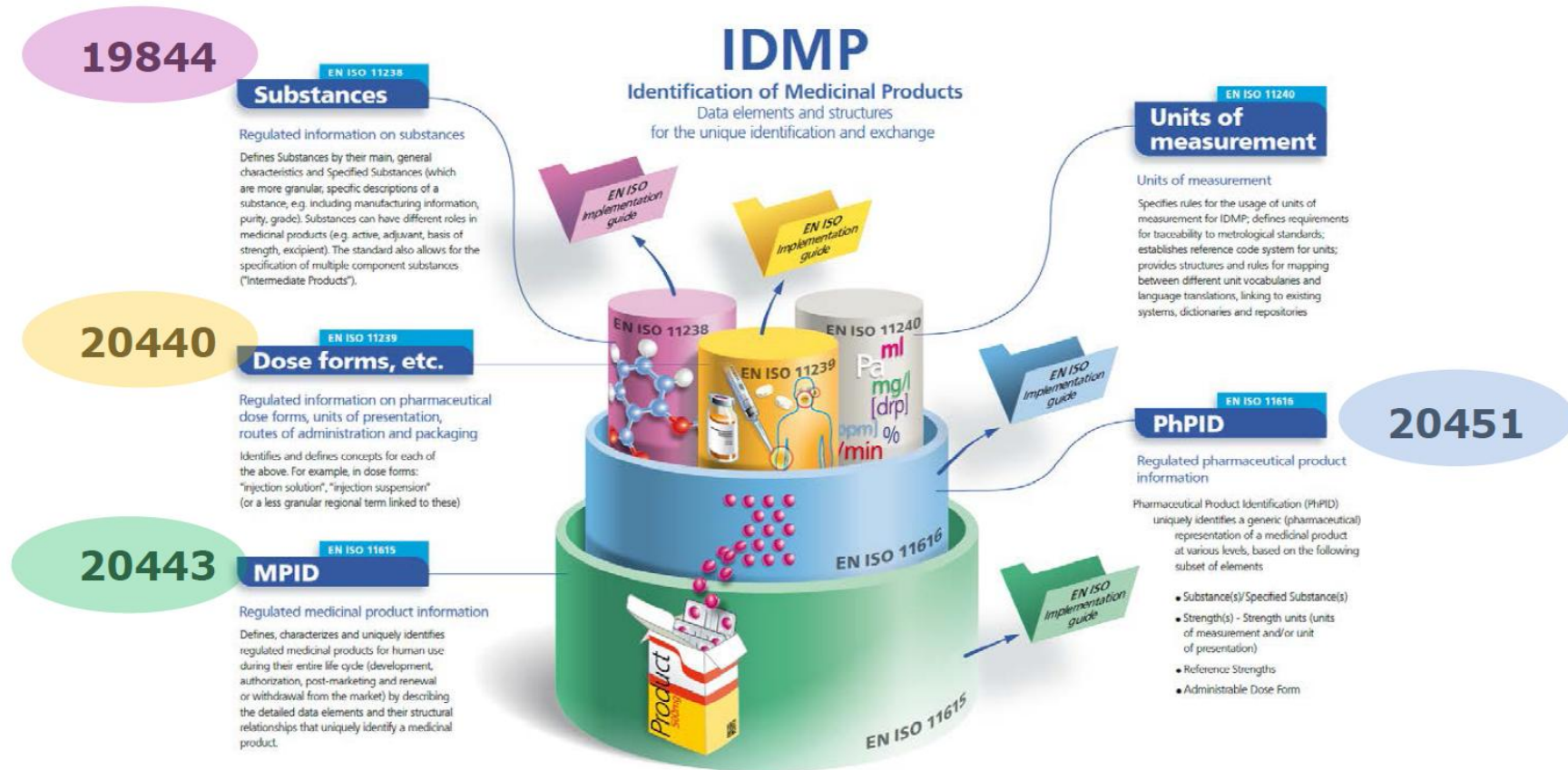
# ISO/DIS 17523 - Requirements for electronic prescriptions

- Requirements for e-prescription and content that facilitates exchange and processing of e-prescription

  - Requirements on
    - Identification of the patient
    - Authentication of the prescription (metadata)
    - Identification of the prescriber
    - Identification of the prescribed product
    - Prescription information
  - Data elements in normative annex A
  - Examples in informative annex B

ISO/DIS 17523

- Kuopia, Finland (May 2011)
  - decision to revise ENV 13607 (CEN, 2000) Health informatics - Messages for the exchange of information on medicine prescriptions
- NP Ballot passed October 2011
- Vienna (September 2012) - first draft, scope
- Mexico (March 2013) – proceed to CD ballot
- Sydney (Sept. 2013) – CD ballot passed
- Karuizawa (May 2014) – proceed to DIS
- Feb 2015 DIS ballot passed
- **San Francisco (Apr 2015) – proceed for FDIS**

19256 - Medicinal Product Dictionaries

The MPD-system does not exist on its own.
It is a component of a larger clinical and/or pharmacy information system.
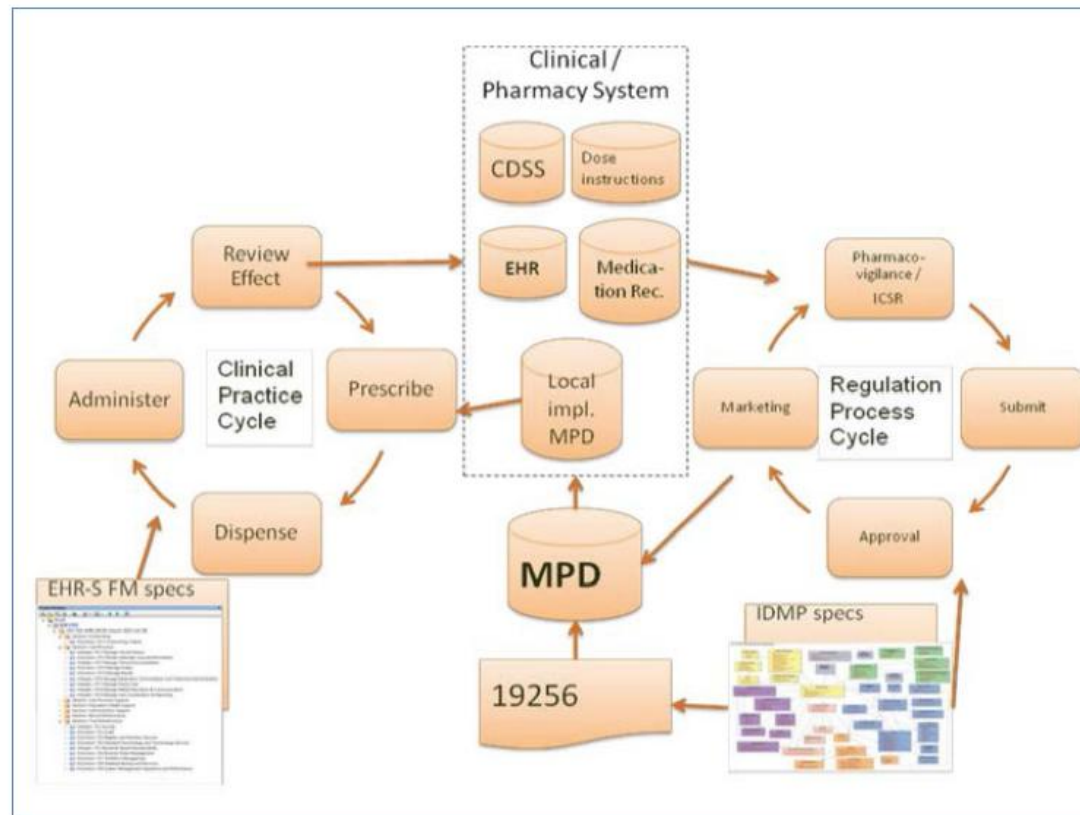
ISO TS 19293 – Dispense Record

- Requisitos sobre dispensa de produtos de saúde.

- Pendente resultados projeto OpenMedicine

HL7 Work

- FHIR Resources
- Universal Templates - CDA
- Pharmacy Glossary Project

HL7 FHIR

- Uma transição para um modelo web, RESTful

- Série de "resources" que reduz a complexidade e aumenta a flexibilidade

- Suporte multi-paradigma (interoperabilidade por mensagens, por documentos, serviços...)

Exemplo de um "resource"

Name	Flags	Card.	Type	Description & Constraints
Patient			DomainResource	Information about an individual or animal receiving health care services
identifier	Σ	0..*	Identifier	An identifier for this patient
name	Σ	0..*	HumanName	A name associated with the patient
telecom	Σ	0..*	ContactPoint	A contact detail for the individual
gender	Σ	0..1	code	male | female | other | unknown AdministrativeGender (Required)
birthDate	Σ	0..1	date	The date of birth for the individual
deceased[x]	?! Σ			Indicates if the individual is deceased or not
deceasedBoolean		0..1	boolean	
deceasedDateTime		0..1	dateTime	
address	Σ	0..*	Address	Addresses for the individual
maritalStatus		0..1	CodeableConcept	Marital (civil) status of a patient MaritalStatus (Required)
multipleBirth[x]				Whether patient is part of a multiple birth
multipleBirthBoolean		0..1	boolean	
multipleBirthInteger		0..1	integer	
photo		0..*	Attachment	Image of the patient
contact	I	0..*	Element	A contact party (e.g. guardian, partner, friend) for SHALL at least contain a contact's details or a refe organization
relationship		0..*	CodeableConcept	The kind of relationship ContactRelationship (Required)
name		0..1	HumanName	A name associated with the contact person
telecom		0..*	ContactPoint	A contact detail for the person
address		0..1	Address	Address for the contact person
gender		0..1	code	male | female | other | unknown AdministrativeGender (Required)
organization	I	0..1	Organization	Organization that is associated with the contact
period		0..1	Period	The period during which this contact person or org to be contacted relating to this patient

```
{
  "resourceType" : "Patient",
  // from Resource: id, meta, implicitRules, and language
  // from DomainResource: text, contained, extension, and modifierExtension
  "identifier" : [{ Identifier }], // An identifier for this patient
  "name" : [{ HumanName }], // A name associated with the patient
  "telecom" : [{ ContactPoint }], // A contact detail for the individual
  "gender" : "<code>", // male | female | other | unknown
  "birthDate" : "<date>", // The date of birth for the individual
  // deceased[x]: Indicates if the individual is deceased or not. One of these 2:
  "deceasedBoolean" : <boolean>,
  "deceasedDateTime" : "<dateTime>",
  "address" : [{ Address }], // Addresses for the individual
  "maritalStatus" : { CodeableConcept }, // Marital (civil) status of a patient
  // multipleBirth[x]: Whether patient is part of a multiple birth. One of these 2:
  "multipleBirthBoolean" : <boolean>,
  "multipleBirthInteger" : <integer>,
  "photo" : [{ Attachment }], // Image of the patient
  "contact" : [{ // A contact party (e.g. guardian, partner, friend) for the patient
    "relationship" : [{ CodeableConcept }], // The kind of relationship
    "name" : { HumanName }, // A name associated with the contact person
    "telecom" : [{ ContactPoint }], // A contact detail for the person
    "address" : { Address }, // Address for the contact person
    "gender" : "<code>", // male | female | other | unknown
    "organization" : { Reference(Organization) }, // C?
      Organization that is associated with the contact
    "period" : { Period } //
      The period during which this contact person or organization is valid to be conta
  is patient
```

Pharmacy Glossary

	A	B	C	D	
1	**English term**	**Common HL7 & IHE Definition**	**HL7 Definition**	**IHE Definition (red: def'd in PHARM profiles, cf. http://goo.gl/A44CP)**	
9	**admission medication**	The (list of) medications that a patient is identified to be using just prior to being admitted to a healthcare institution. This excludes incidental administrations (like in an ambulance or emergency room).		The medical treatment of the patient upon admission at the healthcare institution	
10	**base (ingredient)**	The ingredient that comprises the foundation for a mixture. Among all ingredients of a material there should be only one base. A base substance can in turn be a mixture.	A base ingredient (player) is what comprises the major part of a mixture (scoper). E.g. Water in most i.v. solutions or Vaseline in salves. Among all ingredients of a material there should be only one base. A base substance can in turn be a mixture.	It is called "excipient". It is not the active pharmaceutical ingredient responsible of the action of the drug, but helps and supports it. Excipients may nevertheless have an effect - which is unwanted (excipient à effet notoire in French) - and which must be mentionned. This is the case for lactose, for instance.	
11	**community pharmacy**	Pharmacy that provides medication services where administrations (are intended to) take place external to the healthcare institution containing the pharmacy.	Pharmacy that provide medication services within a surrounding community		
12	**community setting**	Situations where administrations (are intended to) take place external to a healthcare institution.	The pharmaceutical process, limited to situations where administrations (are intended to) take place in an uncontrolled environment, like the patient's home.	The environment which is not a healthcare institution.	
13	**contraindication**	A factor that renders the administration of a drug or the carrying out of a medical procedure inadvisable	A factor that renders the administration of a drug or the carrying out of a medical procedure inadvisable		
14	**controlled drug**		medication categorized under the five	Drugs with morphinics or morphine derivatives	

HL7 Pharmacy CDA Templates

- New work on the creation of templates for CDA pharmacy content

- Initial plan is to use Art-Décor to create the first version of these templates

IHE

- Farmácia de comunidade (CDA) e hospital (HL7 v2)

- <u>Pharmacy Medication List</u> – histórico de medicamentos para um paciente (White paper + perfil técnico)

- <u>Supply of Products for Healthcare</u> (White paper + perfil técnico)

- <u>Medication Treatment Plan</u> (Perfil técnico)

Projetos europeus

- epSOS : European Patient Smart Open Services

- Antilope: Advancing eHealth Interoperability

- EXPAND: Expanding Health Data Interoperability Services

- OpenMedicine

Outros projetos

- European Prescription guidelines

- "Cadre commun des projets de e-santé" –
  - http://esante.gouv.fr/

- Se baseia no IHE e outras normas.

ART-DECOR in 4 bullets

- …is an open-source tool and a methodology for various **multidisciplinary** stakeholders of healthcare information exchange

- …supports comprehensive **collaboration of team members** within and between governance groups

- …allows separation of concerns and different views on one **single documentation for different domain experts**

- …supports **creation and maintenance of HL7 templates** (DSTU), value sets, data sets and more
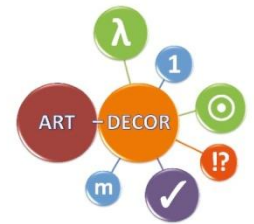
Overview ART-DECOR

Concept	Scenario	Rules	Identifiers	Codes	Issues
• Concept Group / Item • Data type • Concept list • Properties	• Actor • Transaction • Cardinality • Conformance • Test suite	• Templates • Elements • Attributes • Constraints • Validation	• OID registry • Summary of IDs	• Value Sets • Terminology Associations • Coded Concepts	• Change Management • Status • Assignment

ART-DECOR @ internet

- art-decor.org
  - Documentation about ART-DECOR
  - International site and international projects host
- decor.nictiz.nl
  - Dutch projects host
  - Documentation, specification
- HL7 EU Newsletter #4: download at hl7.eu

Eventos 2015

- S. Francisco

- Paris