

Titel:

Creating a Chilean Pharmaceutical Terminology using HL7 FHIR

Abstract:

Fast Healthcare Interoperability Resources (FHIR) is the current communication standard for healthcare data exchange, maintained by Health Level 7 (HL7). Recently FHIR became a normative standard and is therefore relevant for the upcoming generation of clinical informatics solutions. The Chilean Healthcare Ministry initiated the creation of a digital infrastructure for basic information such as a healthcare provider index and a pharmaceutical terminology which enables the development of a more efficient healthcare system through digitalization. Interoperability is hereby a key requirement.

Based on profiled FHIR resources and using the persistence layer and API of the Open Source HAPI FHIR server, we propose the first interoperable Chilean Pharmaceutical Terminology (CPT) for medications, incorporating international terminologies like WHO Anatomical Therapeutic Chemical Classification (ATC) & International Nonproprietary Names (INN), SNOMED and Global Standards 1 (GS1) as well as identifiers from local authorities like the Public Health Institute (ISP).

Local particularities like the quality indicator for bioequivalence amongst others have been considered as extensions and custom search parameters have been implemented in order to enable easy querying. Finally a FHIR Implementation Guide ensures easy access and guidance for future developers.

The interoperable data model of the CPT provides the infrastructure necessary for electronic prescriptions and management in other related systems and could help healthcare professionals improving patient care.