# HL7

#### Introduction

HL7 is providing a comprehensive framework and related standards for the exchange, integration, sharing, and retrieval of electronic health information that supports clinical practice and the management, delivery and evaluation of health services. "Level seven" refers to the seventh level of the International Organization for Standardization (ISO) seven-layer communications model for Open Systems Interconnection (OSI) - the application level.

### Structure Overview

Its different resources are document Center, Help Desk, HL7 Strategic Initiatives,

Job postings, HL7 Project Database. We can participate by attending an event,

GForge, HL7 Wiki, Join a conference call, Listserv, OID Registry, User groups, Work groups

There is also a section about news which control Read HL7-related news, Press release

Press kit and media contact.

The basic standards are being followed in hI7 are given below

## 1. Primary Standards

In which most popular standards integral for system integrations, inter-operability and compliance are highlighted.

#### 2. Foundational Standards

It describe fundamental tools and building blocks used to build the standards, and the technology infrastructure that implementers of HL7 standards.

#### Clinical and Administrative Domains

It contains Messaging and document standards for clinical specialties and groups.

#### 4. EHR Profiles

These provide functional models and profiles that enable the constructs for management of electronic health records.

## 5. Implementation Guides

These guides serve as supplemental material for a parent standard.

#### 6. Rules and References

Technical specifications, programming structures and guidelines for software and standards development is provided in rules and reference

#### 7. Education & Awareness

In this section there are available a member of Draft Standers for Trial Use (DSTU). The next module is about membership. There are some ways how we can get membership of hl7. We can use this hierarchy, become a member, my hl7 dashboard, my account, my email address, my profile, my listservs, my meetings, balloting and global membership directory.

Next is event structure of HL7, which we can describe in the following way, all events, conferences calls, harmonization meetings, himss, implementation workshop, sponsors, and working group meetings.

There is also a training section which is divided into following parts, Certification, Educational Portal, HL7 Fundamentals Course, Training, Webinars, and Webinar Recordings. I have described the main and salient features of HL7 considering its main working structure without going in depth and detail.

# **IHE**

## Introduction:

IHE is an initiative by healthcare professionals and industry to improve the way computer systems in healthcare share information. IHE promotes the coordinated use of established standards such as DICOM and HL7 to address specific clinical needs in support of optimal patient care. Systems developed in accordance with IHE communicate with one another better, are easier to implement, and enable care providers to use information more effectively. IHE created and operates a process through which interoperability of health care IT systems can be improved. The group gathers case requirements, identifies available standards, and develops technical guidelines which manufacturers can implement. IHE also stages "connectathons" and "interoperability showcases" in which vendors assemble to demonstrate the interoperability of their products.

## Structure Overview

IHE integration profiles describe a clinical information need or workflow scenario and document how to use established standards to accomplish it. A group of systems that implement the same integration profile address the need/scenario in a mutually compatible way.

By participating in IHE, we can do the following things, become a member, Connection, IHE committees, Public Comments, webinars, member Organizations and Volunteer Spotlight. IHE has created a set of information resources and tools for vendors and users of healthcare information systems to help them integrate systems and share information more effectively.

The resources structure could be distributed in the following way, Integration Profiles,IHE Product Registry, User Handbook, Case Studies, Technical Framework, Testing Tools,Connectathin Result and Conformity. Each domain includes a technical committee, whose primary task is developing and documenting the solutions and a planning committee, whose primary tasks are long-term scope planning and organizing deployment activities .The active IHE domains are listed below

Anatomic Pathology, Cardiology, Dental, Eye Care, IT Infrastructure, Laboratory, Patient Care, Coordination, Patient Care Devices, Pharmacy, Quality, Research and Public Health, Radiation Oncology, Radiology, Mammography and Nuclear Medicine.

In perspective of IHE Worldwide, we can divide it in IHE Europe, IHE N. America and IHE Asia-Pacific.

IHE integration statements are prepared and published by a vendor to list the IHE profiles supported by a specific release of a specific product.IHE technical frameworks are detailed documents which specify the integration profiles and associated actors (systems) and transactions. For example, one specification is for a common way of binding identification numbers to patients. There is also a News Module which describes monthly newsletters and IHE in the News. The last module is events to whom we can divide in the following way, Calendar, conferences and workshops, Connectathon manager training workshop and presentations.