Introducing HL7 FHIR®

FHIR® – **F**ast **H**ealth **I**nteroperable **R**esources (hl7.org/fhir) – is a next generation standards framework created by HL7. FHIR combines the best features of HL7's Version 2, Version 3 and CDA product lines while leveraging the latest web standards and applying a tight focus on implementability.

FHIR solutions are built from a set of modular components called "Resources". These resources can easily be assembled into working systems that solve real world clinical and administrative problems at a fraction of the price of existing alternatives.

FHIR is suitable for use in a wide variety of contexts – mobile devices, cloud communications, EHR-based data sharing, server communication in large institutions, and much more.

Why FHIR is better

FHIR offers many improvements over existing standards:

- Focus on **implementation** – fast and easy to implement (have working interfaces in a single day!)
- Multiple **implementation libraries**, many **examples** available to kick-start development
- Specification is **free for use** with no restrictions
- **Interoperability out-of-the-box** – base resources – used as is, or adapted for local needs
- **Evolved from HL7 v2 and CDA** – FHIR and these standards can co-exist and leverage each other
- Leverages **Web standards** – XML, JSON, HTTP, Atom, OAuth, etc.
- Supports **REST** and **Service Oriented Architectures** as well as message and document exchanges
- Specifications are **concise** and **easily understood**, by both developers and clinicians
- **Human-readable wire format** for developers
- **Backed by solid ontologies** and rigorous formal mapping for correctness

Flexibility

A central challenge for healthcare standards is how to handle the variability caused by diverse and evolving health care processes. Over time, more fields are added to a specification, increasing cost and complexity.

FHIR addresses this challenge by defining a simple framework for extending and adapting FHIR resources. All FHIR systems, on whatever platform, can work with these extensions using the same framework that manages the primary resources.

Further, each resource carries a readable html representation as a fall back display option for clinical safety.

The FHIR development process

FHIR is still undergoing development as an HL7 standard. As of January 2014, it became a Draft Standard for Trial Use, and is in wide and diverse trial use. After the period of trial use to vet the specification, HL7 will develop FHIR as a full normative specification, most likely through 2016.

http://hl7.org/fhir. Follow us on Twitter using **#FHIR**