HL7 FHIR is rewriting the Interoperability Paradigm

Partners in Interoperability

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Advancing Interoperability

* Why is Interoperability taking so long?

* HL7 Fresh Look. Happy Birthday FHIR.

* HL7 Roadmap

* Making it all work together
Is the Holy Grail of Interoperability really Plug & Play?

Credit: Monty Python
The Interoperability Blame Game.
“How much easier it is to be critical than to be correct.”

Benjamin Disraeli
The Players

- Government Agencies & Regulators
- Healthcare Systems & Hospitals
- Technology Developers & Vendors
- SDOs
- Clinicians
- Academicians
The Circle

- Government
- SDOs
- Hospitals
- Academia
- Vendors
- Clinicians
The Circle: Let the Games Begin

“You develop standards too slowly and too unpredictably.”
“You don’t provide the support we need.”
“You are lagging far behind, considering the incentives we provide.”
"The regulations are obtuse, vague and overwhelming."

- Government
- Health Systems
- Vendors
The Circle

“We need everything customized, and we need it yesterday.”
"Best of breed? That’s not a coherent strategy."
“Work flow? You call *that* work flow?”
“You put 3 surgeons in a room, you get 4 (strong) opinions.”
The Circle

“If is doesn’t have head circumference, it’s not an EHR.”

Vendor

Pediatricians
"Charging for standards is an impediment to adoption."
The Circle

“Can we get a grant for that?”

Government

SDOS

Academicians

$
“Corollary: You pay for SNOMED.”
“Do we really need a license? What happened to Open Source?”
The Circle

“Standards are an impediment to innovation.”

SDOs

Academicians
"What are standards?"
The Circle

“Can that be postponed until 2020?”

Government

Hospitals

Vendors
The Circle

“Can that be accelerated to next month?”
The Circle

Fraud & Abuse: “If you’re not cheating, you’re not trying.”

Government

Hospitals

Money

Clinicians
If you’re not guilty of any of these elements of the *Blame Game*, you shouldn’t be in the room.
The principles underlying FHIR development are meant to address the challenges learned in 30 years of open standards development.
Here are several principles we learned the hard way. I think they are the best kind of lessons.
Principle #1

It’s not architecture; it’s city planning.
Remaining relevant.

...not just interesting.
Principle #2

A standard is not used because we created it. It is a standard because people use it.
“I can’t understand why people are frightened of new ideas. I’m frightened of the old ones.”

John Cage
Principle #3

Government regulation only codifies standards. Standards bring value when they are adopted in the marketplace.
Principle #4

For information models, one size never fits all.
Principle #5

The only standard that never changes is the standard you never use.
“Knowledge is knowing that a tomato is a fruit. Wisdom is not putting tomatoes in a fruit salad.”

Peter Kay
Principle #6

There is an inherent Standards Life Cycle, either stated or implied.

The entire community of stakeholders rely upon that knowledge.
Principle #7

Emerging standards require a Maturity Model.

Mature standards need a timeline for enhancement or sunsetting.
“Perfection is achieved, not when there is nothing more to add, but when there is nothing left to take away.”

Antoine de Saint-Exupery
The HL7 Roadmap must be visionary and keep promises.
FHIR enables an evolutionary development path with other HL7 standards*.

* Many are embedded in Federal regulation
CDA on FHIR

* Consolidated-CDA is embedded in Meaningful Use

* Inconsistent implementation of C-CDA has been an impediment to interoperability

* CDA on FHIR project has been developed to overcome that challenge
Collaboration
JASON
Task Force
&
the Argonauts
SMART on FHIR

* SMART is a 6-year project at Boston Children’s Hospital, funded by ONC, based upon an API model to enhance health data interoperability

* SMART has adopted FHIR as its standards-based API model

* The goal of SMART is the creation of an “App Store” for healthcare
Sync for Science

* Joint project of ONC, Harvard Medical School, EHR vendors and NIH

* Leverages patient-donated genomic data for clinical research and Precision Medicine

* Relies upon open APIs and FHIR
CMS is coordinating a diverse ecosystem of developers for creation of the Blue Button on FHIR.
Public Health Reporting
Mobile Health is...

...more than clinical data on a smart phone.
More than three hundred clinical organizations, IT developers, government agencies and healthcare systems worldwide are now committed to developing FHIR applications.
Clinical Professional Societies
Payer Summit
Implementing FHIR
HL7 International Genomics Summits

Next Summit: October 26-28, Washington
FHIR Applications Roundtable

* Showcase for FHIR Apps & Development tools
* Platform for best practices & collaboration
* Apps & tools in demonstration environment
* Harvard Medical School, July 27–28
  Duke University, March 8–9, 2017
FHIR.ORG

- Non-profit community for Implementers
- Implementation Registry
- Reference implementations & task tracking
- Community Forum & Help Desk
- Resources for conformance testing and public reference implementations
“We can’t solve problems with the same kind of thinking when we created them.”

Albert Einstein
“It’s not enough to show up. You’ve got to have a Business Plan.”
Analytics may be the answer, but you can’t get there with bad data.
Thanks

JUST COUGH FOR OLD TIME'S SAKE.

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