

HL7 Today & Tomorrow

Charles Jaffe, MD, PhD
CEO, HL7

AMDIS 2016

Ojai, CA

22 June 2016



Overview

- What's cookin'
- What's hot
- Quo vadis?
- What some of my friends tell me

“Perfection is achieved,
not when there is nothing
more to add,
but when there is nothing left
to take away.”

Antoine de Saint-Exupery



HL7® FHIR®

Fast Healthcare Interoperability Resources

The principles underlying
FHIR development
are meant to address the challenges
learned in
30 years of
standards development.



FHIR enables an
evolutionary
development path
with
other HL7 standards*

* Many are embedded in Federal regulation



FHIR focuses on
implementation*

* and implementers



FHIR development is global*

FHIR development workshops in UK, Canada,
Australia, Netherlands, Argentina, and
Japan...as of Monday.



FHIR is Free

* The FHIR name and logo are trademarked, but the specification is licensed without restriction or royalty.



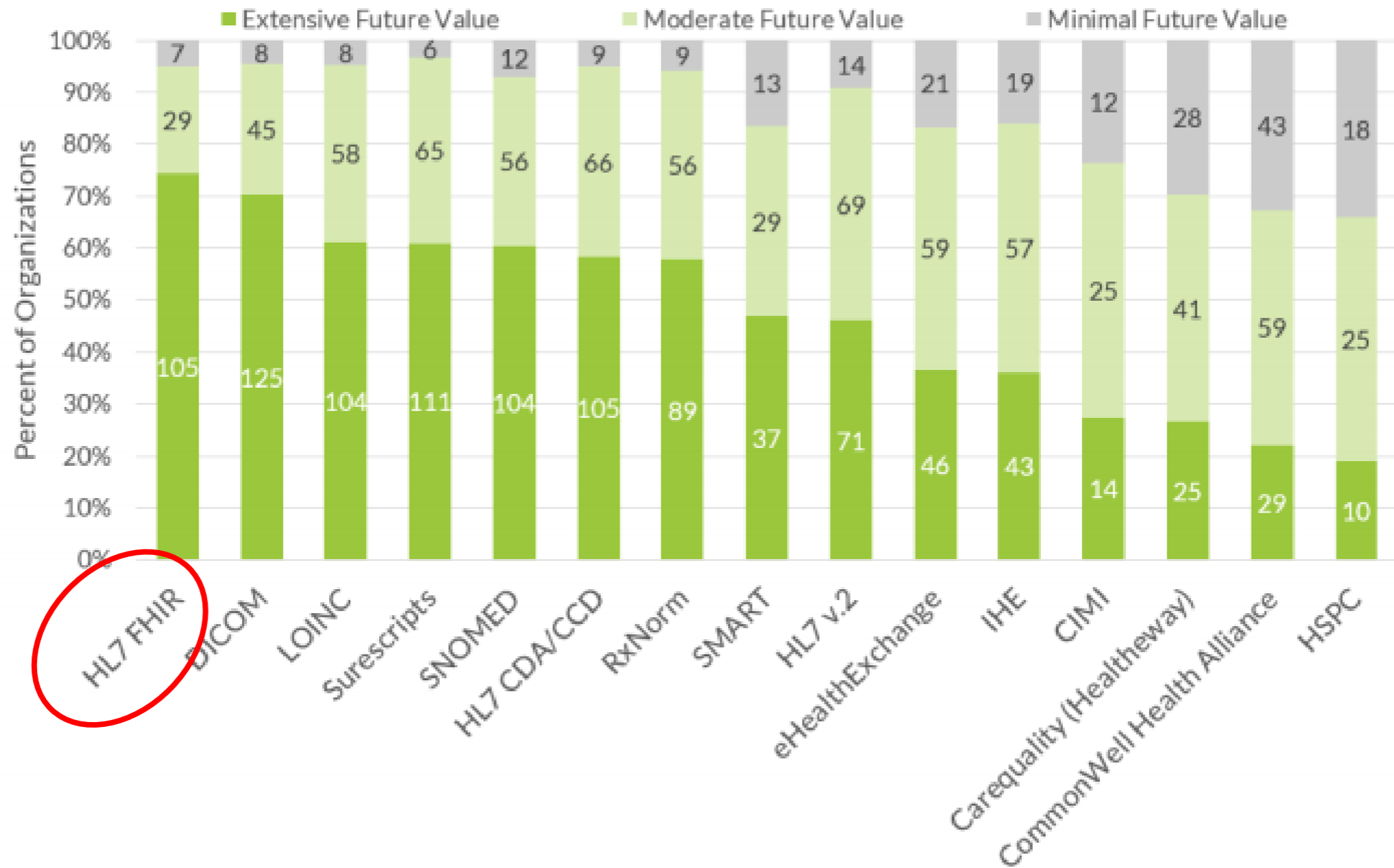
“You can accomplish anything in life,
if you don’t mind who gets
the credit.”

Harry Truman

HL7 FHIR: Future of Interoperability

Which Standards, Organizations, Associations, and Collaborations Will Provide Future Interoperability Value?

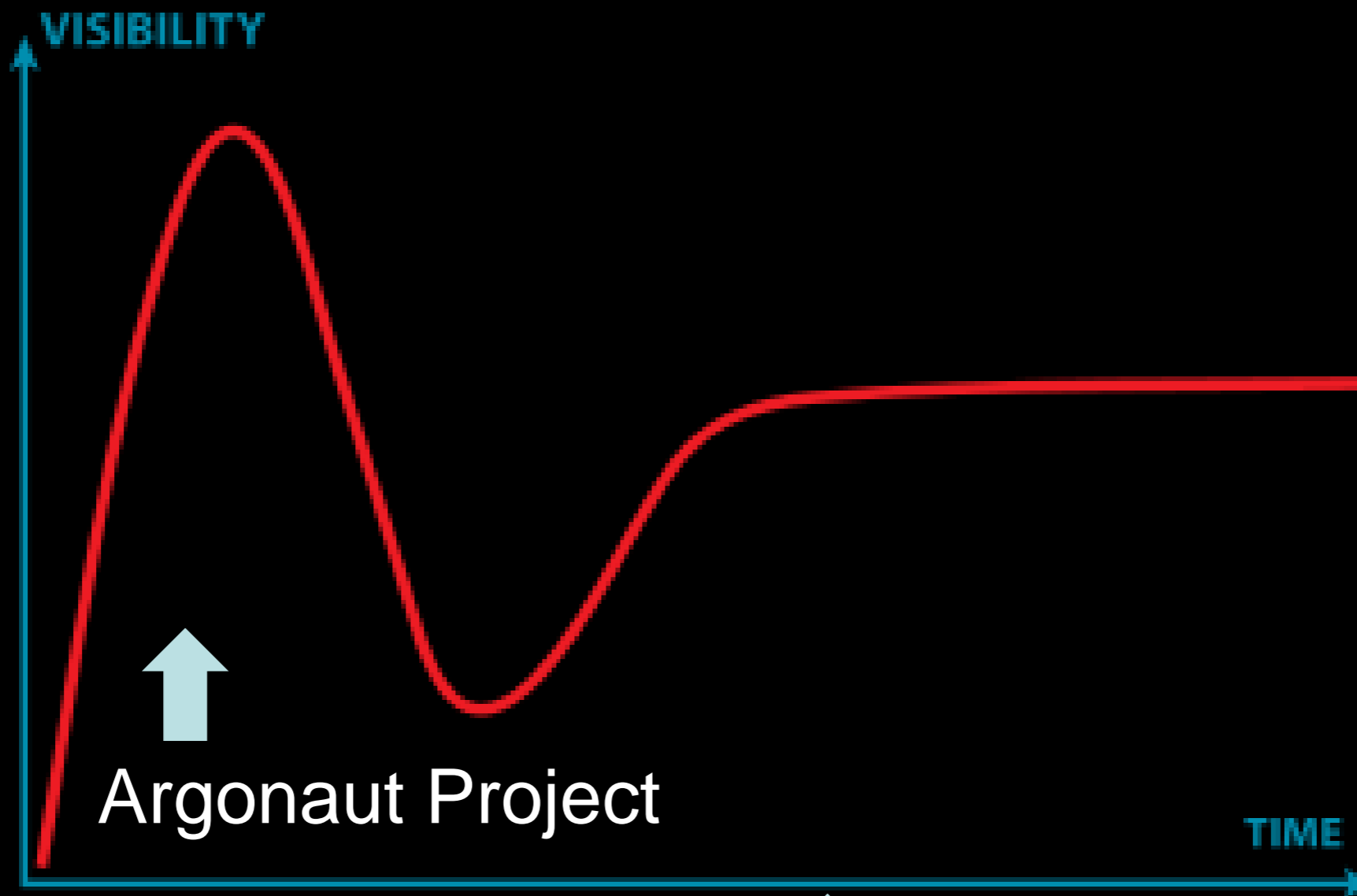
Provider leaders were asked which standards, organizations, associations, or collaborations will provide the highest future value to national interoperability success



A gentle word of caution about FHIR

↓ Current Status

The Gartner Hype Cycle



↑
2017





JASON Task Force & the Argonauts

Argonaut Project Origins

- * JASON Task Force recommendations on market-based interoperability governance and coordination, and call to action on “public APIs”
- * Market experience with MU 2 and associated US certification

The Argonaut Project

- Leverages the work of other initiatives such as the S&I Framework, SMART, and HSPC
- Accelerates the maturation of FHIR for the industry
- Open to all participants

The Argonaut Project is NOT

- An organization or entity
- Competitive with other existing initiatives
- Proprietary

Argonaut Phase I

- * Accelerated the development of the FHIR specification for the balloting of the Draft Standard for Trial Use (DSTU) Release 2
- * Supported the creation of a community of FHIR implementers

“If I had asked my customers what they wanted, they would have asked for a faster horse.”

Henry Ford

Argonaut Phase II

- * Supported the development of resources for a FHIR **implementation registry**, FHIR **conformance testing**, and a robust source of stable resources and artifacts.
- * Completed the development of reliable specifications for **security and authorization**

Argonaut Phase II Implementation Program

- * Formalized implementation programs
- * Developed focused **sprint initiatives**
- * Implemented testing tooling & artifacts
- * Published test results for internal and external audiences

Argonaut Phase III Implementation Program

Welcome to the Argonaut Project Implementation & Testing Wiki

Sprint	Dates	Check-in Meetings
Sprint 1: Patient , Allergies , Problems	5/25 - 6/14	Tuesday 5/25 3-4PM ET
Sprint 2: Vital signs , Labs , Smoking , Care Team	6/14 - 7/5	Tuesday 6/14 4-5PM ET
Sprint 3: Medications , Immunizations , Goals , UDI	7/5 - 8/2	Tuesday 7/5 4-5PM ET
Sprint 4: Procedures , Plan of treatment	8/2 - 8/30	Tuesday 8/2 4-5PM ET
Sprint 5: Assessment , Health Concerns	8/20 - 9/27	Tuesday 8/30 4-5PM ET
Sprint 5: Review	9/27	Tuesday 9/27 4-5PM ET

For discussion and collaboration on either Argonaut-focused implementation activities or Argonaut-focused FHIR development please use the [Argonaut Project Google Group](#)

Argonaut Implementation Program

To date, there are over 150 healthcare systems, vendor corporations, academic institutions, government agencies, pharmaceutical companies, payer organizations, and independent developers committed to supporting and implementing solutions based upon FHIR specifications.

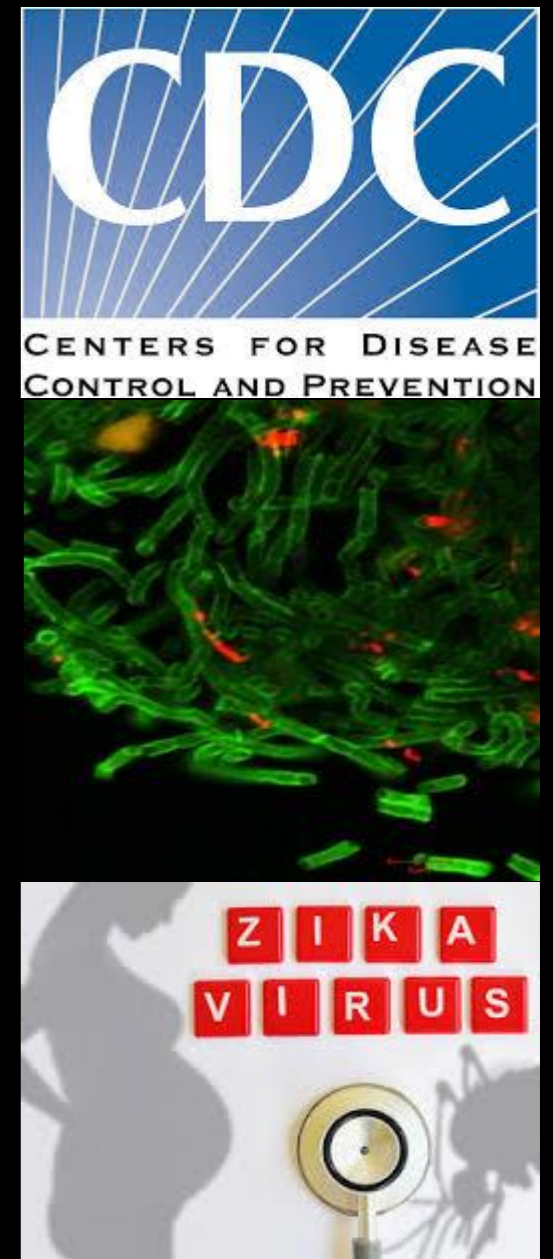


Collaboration

FDA has enabled an ecosystem with 15,000 open APIs that support FHIR



CDC is collaborating with the FHIR application developers for public health reporting



HL7 FHIR Foundation

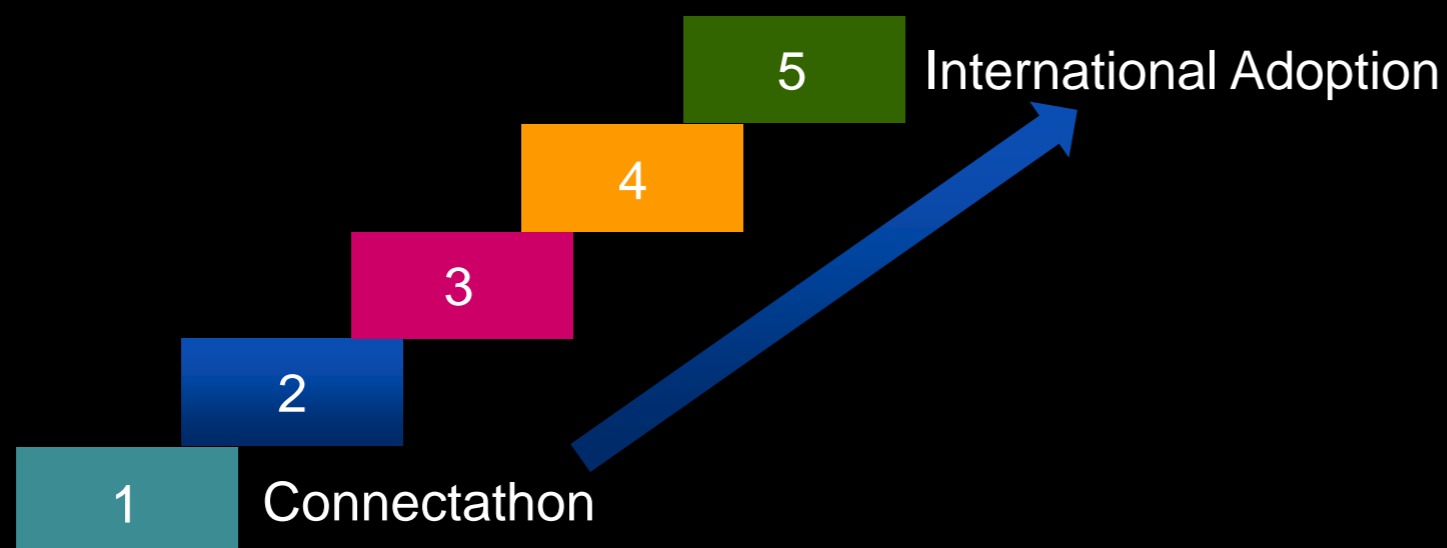


The mission of the newly announced
FHIR Foundation
is the support of implementers and
implementation*

*FHIR.org



The international *FHIR Maturity Model* was envisioned to ensure developers of the value and stability of FHIR



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

Partners in Interoperability



Partners in
Interoperability™

The HL7 *Partners in Interoperability* is a coalition of various stakeholders, including Medical Societies, BioPharma, and the Payer community, paving a path toward interoperability



Partners in
Interoperability™

More than two hundred clinical organizations, IT developers, government agencies and healthcare systems *worldwide* are now committed to developing FHIR applications



CMS is coordinating a diverse ecosystem of developers for creation of the Blue Button on FHIR



Precision Medicine Initiative Implementing FHIR

June 28, 2016
Washington



FHIR Applications Roundtable

- * Showcase for FHIR Apps & Development tools
- * Platform for best practices & collaboration
- * 28 Apps & tools in demonstration environment
- * Harvard Medical School, July 27-28



HARVARD
MEDICAL SCHOOL

Payer Summit Implementing FHIR

July 11-12, 2016
AHIP Innovation Center
Chicago



HL7 FHIR Clinical Connectathon

September 23, 2016
Baltimore

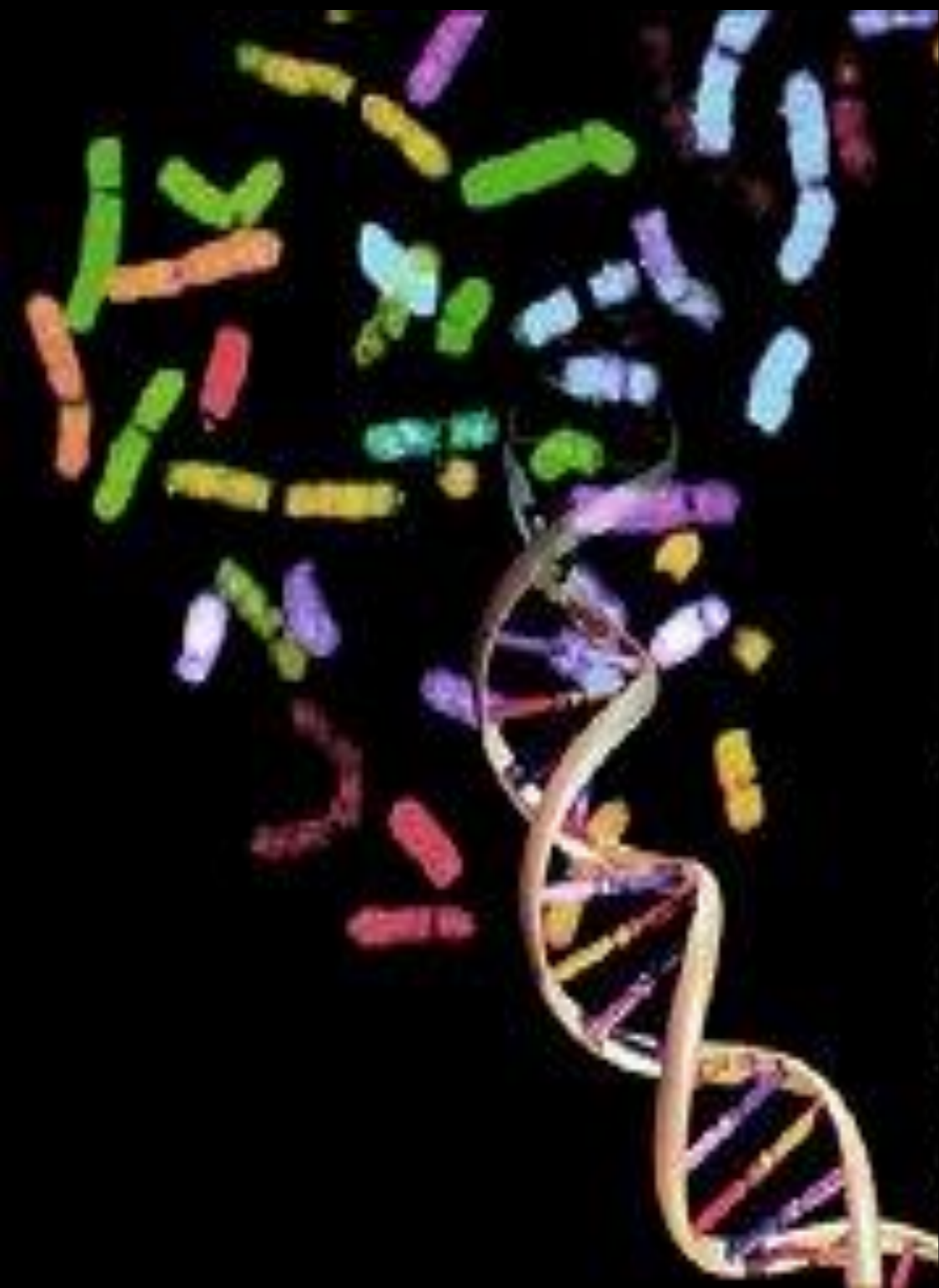


CHIME

Standard of Standards

Initiative





HL7 International Genomics Summits

October 27-28, 2016
Washington

**HL7 FHIR Half-day Tutorial for
CMIOs & Medical Informatics
Professionals
with a focus on implementation
Sunday, November 13**



International BioPharma Leveraging FHIR

Joint meeting with FDA TBD



The only standard that
never changes
is the standard you never use.



Normative version of FHIR, backward compatible with Release 2.1, is planned for the Spring of 2017



Looking Ahead





CDA Enhancement

CDA Enhancement

US ONC Funded

- * Implementation-a-thon

 - Second event to be held September 14-15

- * Companion Guide

 - For ballot with September cycle

- * Rendering Tool Challenge

 - Results announced at September Plenary

- * Platform for C-CDA Examples

 - RFP released in August

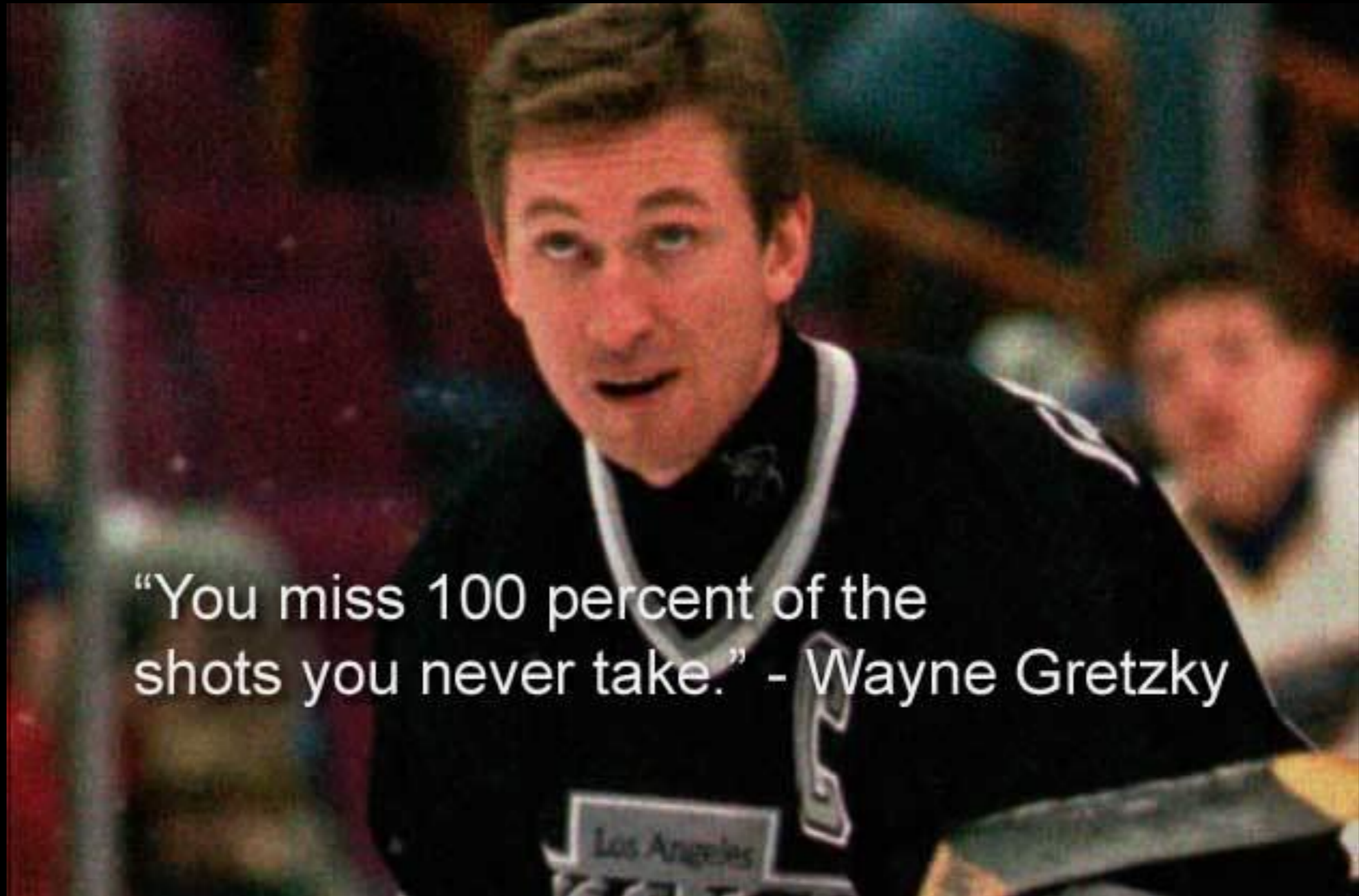
- * Scorecard Development



A standard is not used because
we created it.
It is a standard because
people use it.



Change Management



Some undocumented & unattributable
thoughts

According to a
Fruit Company in Cupertino

I can say that Apple announced the use of
CDA in the Healthkit
during the World Wide Developers Conference
two weeks ago.



Health Records

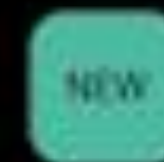
Overview

Represent different types of patient visits

Support international HL-7 CDA standard

Available through patient health care portals

Imported via Safari, Mail, and your apps



Industry Consolidation is a *fait accompli*

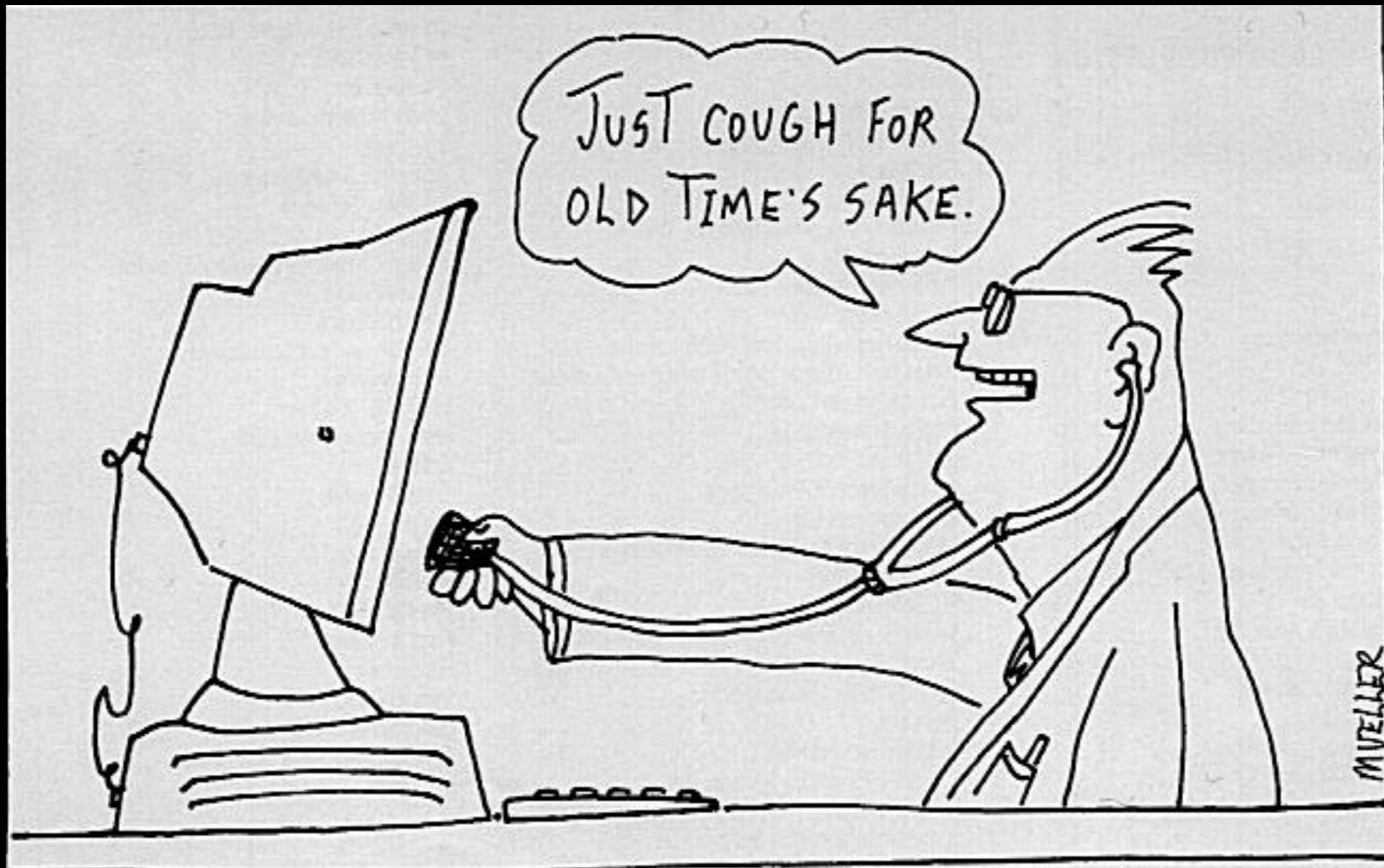
It's a lot like baseball...you win some, you lose some, and some are rained out.

HL7 FHIR Panel

June 23
9:30 -10:30



Thank you



cjaffe@hl7.org