Digital Quality Summit

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Quality care has always seemed so difficult to achieve?
Two decades ago the Institute of Medicine published *To Err is Human* …and we really haven’t gotten better since.
This is Jack’s story
This is Jack

Honor student
Football hero
College-bound
Jack complained to his Family Doctor about knee pain.
This is what Jack’s knee looked like, but his doctor never saw the report.
This is Jack’s chest x-ray after I first saw him.
The Pathology Report said metastatic osteosarcoma
Medical Errors are third leading cause of death in the United States
There should be no more stories like Jack’s
Quality care has always seemed so difficult to achieve?

Now there’s something we can do about it.
“We can’t solve problems with the same kind of thinking when we created them.”

Albert Einstein
Fast Healthcare Interoperability Resources
My coach said that I kick like a girl.

I told him that if he tried harder, he could too.

Mia Hamm
HL7 FHIR took more than a good idea
Argonaut Project

A private-sector initiative established in 2014 to accelerate FHIR implementation.

Now utilized around the world for international data exchange.
Apple iOS 11.3 & beyond supports EHR data based upon the Argonaut Project Implementation Guide
HL7 FHIR is more than technology.

HL7 FHIR is about Community.
“The plural of anecdote is not data.”

Chris Chute, MD
Johns Hopkins
Bulk Data on FHIR

The technology & policy for exchanging records from an unlimited number of patients or study subjects

supporting data analytics for population health, value-based care, clinical trial design and pharmaco-vigilance.
It’s all about asking the right question

I asked the Librarian if she had a book about Pavlov’s dog & Schrödinger’s cat.

She said that it rang a bell, but she wasn’t sure if it were there or not.
CDS Hooks

A vendor-agnostic remote Clinical Decision Support platform that helps to solve the problem of workflow integration
Da Vinci Project

Advancing “Value-Based Care” by leveraging FHIR for the capture of granular clinical data from patient records to improve quality, to reduce costs, and to enhance care management.

http://www.hl7.org/about/davinci/index.cfm?ref=common
ONC P2 FHIR Task Force Project

A group of payers, standards developers, and healthcare organizations collaborating on the development of a FHIR API to reduce variability in industry implementation.
Value-based Care
will be our legacy

Courtesy: The Prado
Health Agency Collaboration

US Federal agencies including FDA, CDC, NIH, DoD, VAH, and others actively collaborate on FHIR implementation programs.
VA Lighthouse Gateway Project

FHIR API gateway platform supporting mobile and web Apps for both providers and patients
CDC is leveraging FHIR for Morbidity & Mortality reporting*

* Death on FHIR
The FDA is collecting data from the EHRs to capture *Real-World Data* for drug safety and effectiveness.

Corrigan-Curry, C., et al, JAMA, 320, p.867-8, 4Sep18
Sync4Science
Sync4Genes
& DIGITizE
use FHIR to enable Genomic Data for
Precision Medicine,
Translational Science,
& Clinical Decision Support
The CTSA community is leveraging FHIR to create a learning health system between pre-clinical science and patient care.
The growing FHIR Community in the Non-Government Sector
Consortium for Agile Genomics

partnership with
Global Alliance for Genomics & Health
International BioPharma is leveraging HL7 FHIR for real-world evidence for clinical trials, post-marketing bio-surveillance, and genomics integration.
A collaboration of device manufacturers & technology vendors ensuring a seamless exchange of data between clinical devices and health information systems.
Tech Giants Announce Collaboration on FHIR API for Healthcare Cloud Interoperability

August 13, Washington
ONC FHIR Heat Map

Percent of hospitals with a 2015 Edition certified-API enabled with FHIR

By Hospital Referral Region

% w/ FHIR: <50% 51-75% 76-99% 100%

Source: CHPL, Medicare EHR Incentive Program
Notes: (1) gray areas = HRR with no hospital. (2) The most recent attestations to the Medicare EHR Incentive Program were used to determine FHIR installations for all hospitals. These attestations may not reflect the most currently installed technology for all hospitals. In some cases, %'s may be underestimated for HRRs.

ONC "heat map" of hospitals using FHIR-enabled EHRs in 2018
Perhaps the only solution to the spiraling cost of health care is to take better care of our patients.

Ed Hammond, PhD
Thanks

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