The Role of Open APIs & FHIR for Integrating Patient Care & Clinical Research Data

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Integrating Patient Care & Clinical Research Data

Background

Landscape

Contributors

Obstacles

Opportunities

Integrating Patient Care & Clinical Research Data

Background

- Centuries of paper
- Four decades of propriety systems
- Conflicting business & regulatory needs
- ARRA & HITECH
- The HL7 Legacy
- The Internet of Things

Integrating Patient Care & Clinical Research Data

Landscape

- The legacy of V2, V3, and the RIM
- Internationalization
- The double-blind placebo-controlled trial
- HL7 Free IP
- Emergence of the API across industries
- Interoperability: Pressure on healthcare

Integrating Patient Care & Clinical Research Data

Contributors

- ONC & Meaningful Use
- CDER & the Critical Path Initiative
- European Commission & epSOS
- HHS & the Triple Aim
- HL7 & Fresh Look
- Private sector & APIs
- FHIR

Integrating Patient Care & Clinical Research Data

Obstacles

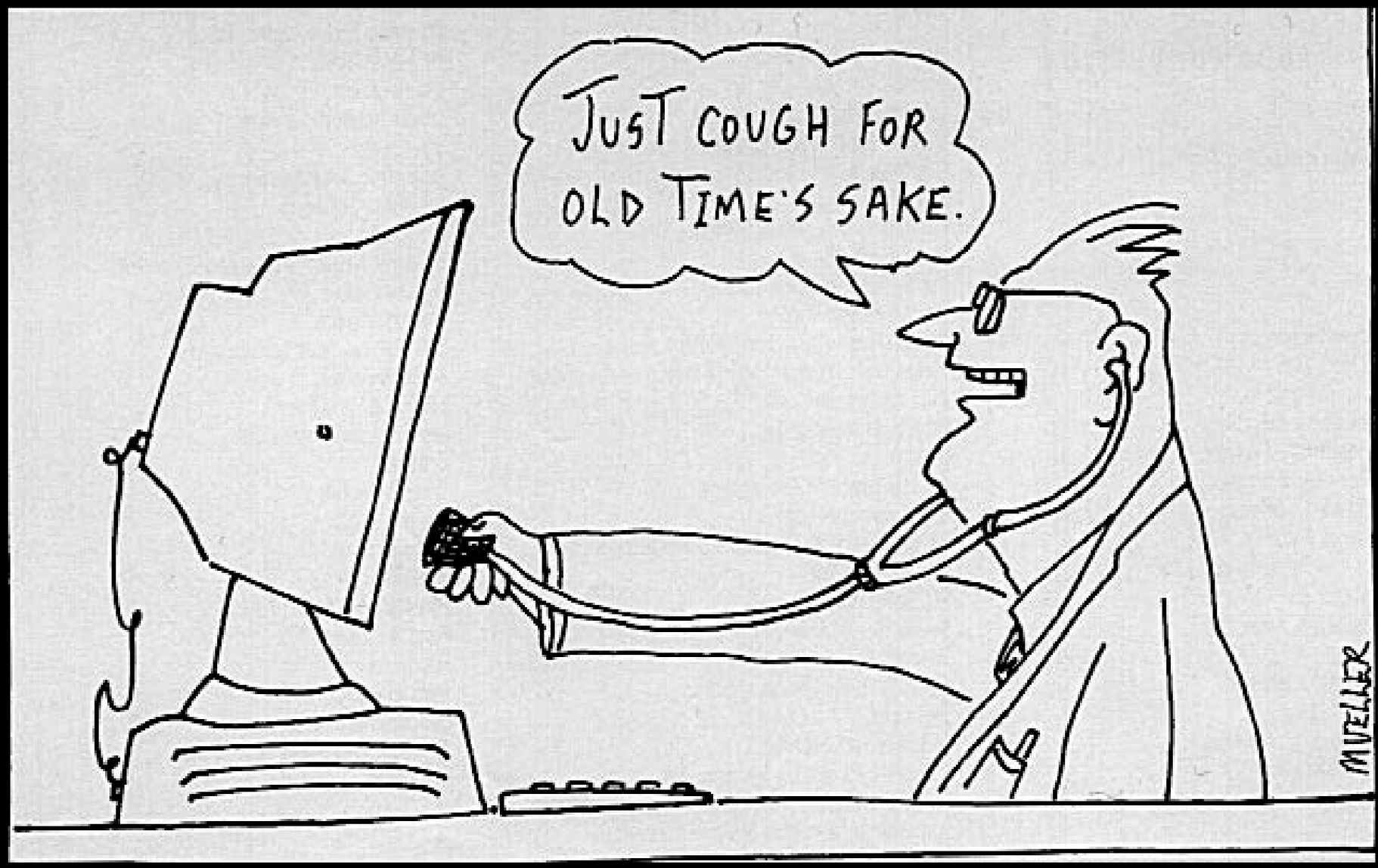
- “Not Invented Here”
- Vocabularies, Terminologies, & resistance to change
- Data mapping paradigm
- $30B in EHR investments
- Regulatory inequities
- Privacy, Security, & the International perspective
- Regestries & the investment paradox

Integrating Patient Care & Clinical Research Data

Opportunities

- Internationalization
- Argonaut Project & the private sector
- Industry consolidation
- Open FDA
- Genetics, genomics & other “omics”
- 21st Century Cures & other legislation
- Data analytics
- HHS & Meaningful Use 3

Thanks



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Supplemental Material

FHIR Maturity Model

0: Resource or Profile published

1: WG determination that the artifact is ready for implementation

2: Artifact has been test and exchanged by at least 3 independent systems

3: Artifact meets *DSTU Quality Guidelines* and undergoes formal balloting

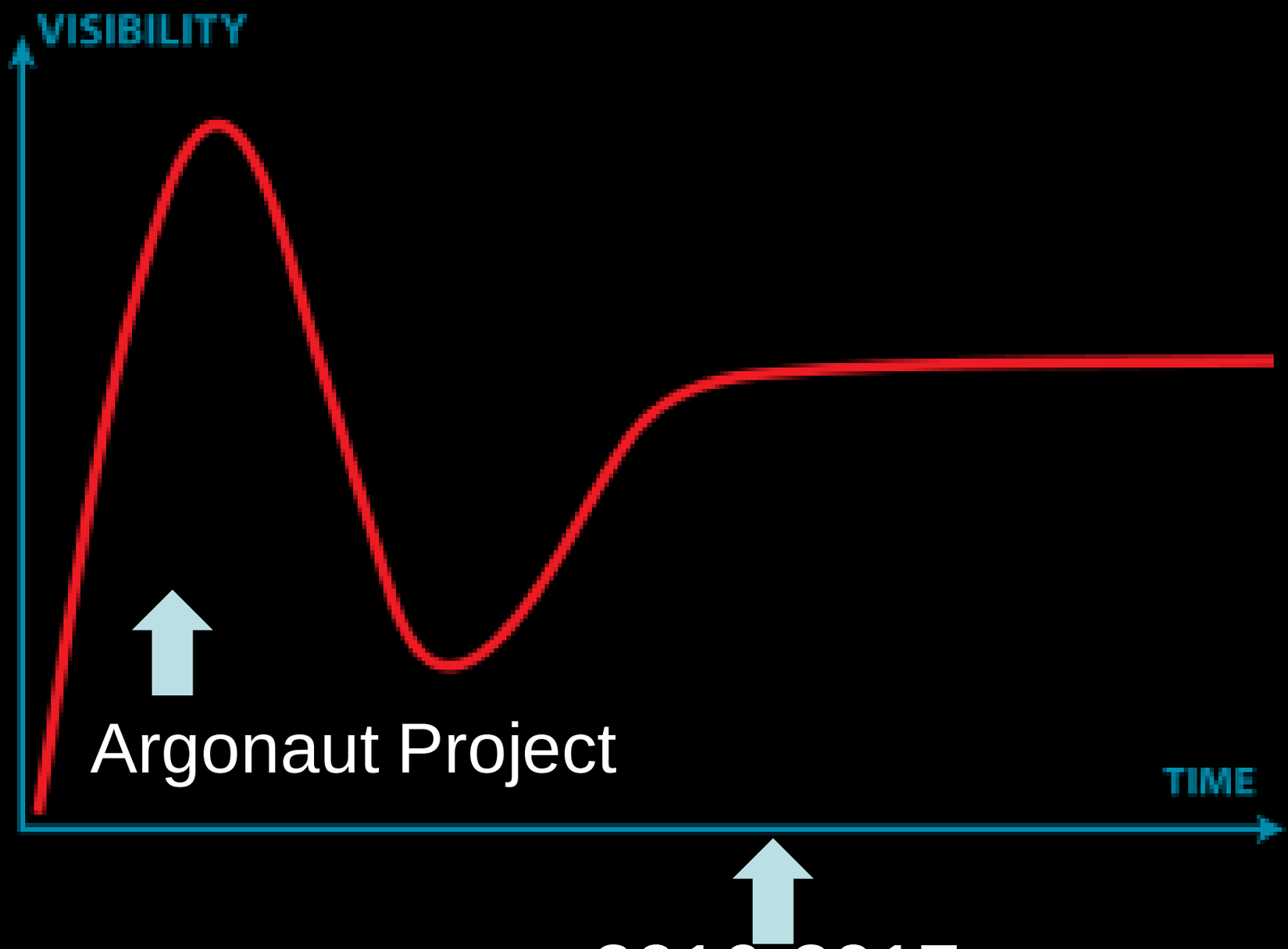
4: Artifact has been tested, published, & implemented in multiple prototype projects

5: Artifact has been implemented in at least 5 in production systems in more than one country

The future of FHIR

Current Status

The Gartner Hype Cycle



2016-2017

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

SMART®

HL7 INTERNATIONAL

CIMI
Clinical Information Modeling Initiative

Like FHIR, CIMI was the product of the HL7 Fresh Look Task Force

CIMI provides a unique opportunity to populate clinical model into FHIR

Effective October 2015, CIMI will become an HL7 Work Group

HSPC
Health Services Platform Consortium

HSPC facilitates clinical application interoperability and data sharing by defining open, standards-based (HL7 FHIR, SNOMED, LOINC) specifications for enterprise clinical services and clinical applications.

HSPC vision is the creation of an “app store” for the distribution of interoperable and shareable clinical applications.

HSPC
the healthcare services platform consortium™

HL7 INTERNATIONAL

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

Henry Ford

“We can’t solve problems with the same kind of thinking when we created them.”

Albert Einstein