

The Healthcare Services Platform Consortium

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HSPC Mission Statement

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Improve health by creating a vibrant, open marketplace for healthcare applications

What Is Needed to Enable a New Ecosystem?

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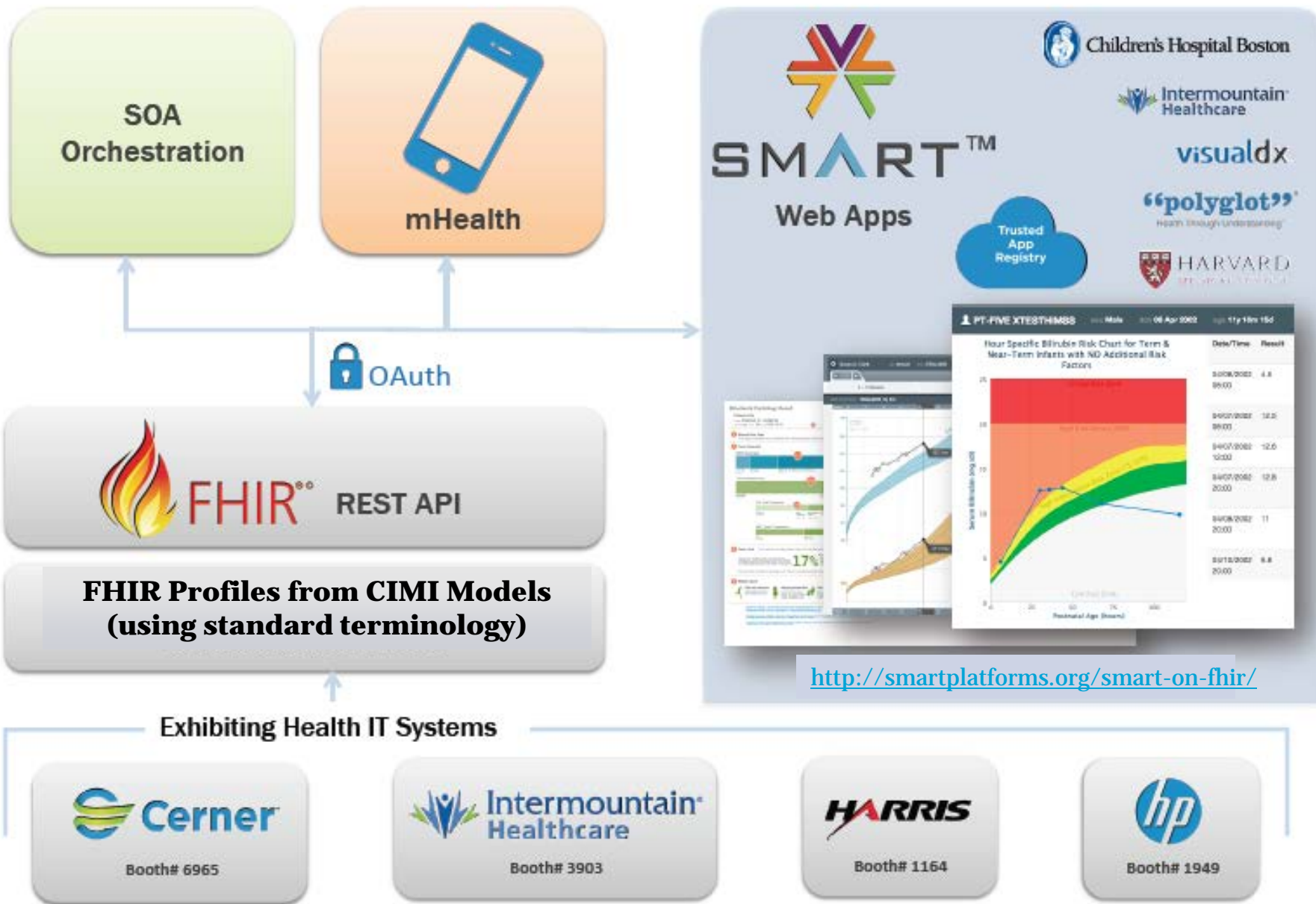
- Standard set of detailed clinical data models coupled with...
- Standard coded terminology (SNOMED CT, LOINC, RxNorm, others)
- Standard query language
- Standard API's (Application Programmer Interfaces) for healthcare related services
- Open sharing of models, coded terms, and API's
- Sharing of decision logic and applications

HSPC Technology Assumptions (already decided)

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- **Services – HL7 FHIR^{©TM}**
 - Generate FHIR profiles from existing model content
- **Data modeling**
 - Clinical Element Models (now)
 - CIMI models as soon as they are available
- **Terminology**
 - LOINC, SNOMED CT, RxNorm, HL7 tables
- **EHR Integration – SMART**

A Conceptualization of CIMI Use



HSPC History

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- **HSPC was incorporated as a not-for-profit corporation on August 22, 2014**
- **Meetings**
 - May 2013 Salt Lake City
 - August 2013 in Phoenix
 - January 2014 Salt Lake City
 - May 2014 in Phoenix
 - July 2014 Salt Lake (Technical modeling meeting)
 - August 21-22 2014, Washington DC, hosted by IBM
 - February 4-6, New Orleans, Louisiana, hosted by LSU

Sample of Participants

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- HL7 FHIR – Grahame Grieve
- SMART – Josh Mandel
- Cerner – David McCallie, Marc Overhage
- Epic – Janet Campbell
- VA – Jonathan Nebeker, Paul Nichol
- openEHR – Thomas Beale
- Open Health Tools – David Carlson
- Harris – Vishal Agrawal
- Intermountain Healthcare
- Systems Made Simple – Viet Nguyen
- LSU – Frank Opelka, Wayne Wilbright, John Couk
- Center for Medical Interoperability – Todd Cooper
- RelayHealth – Arien Malec
- NLM – Clem McDonald
- Infocare Healthcare – Herb White
- Mayo Clinic – Cris Ross
- Clinical Architecture – Shaun Shakib
- Cognitive Medical Systems – Doug Burke
- IBM – Jeff Rogers, Dennis Leahy
- ASU – Aziz Boxwalla, Robert Greenes
- Regenstrief Institute – Douglas Martin

Essential Functions of the Consortium

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- **Select the standards for interoperable services**
 - Standards for models, terminology, security, authorization, context sharing, transport protocols, etc.
 - Modeling: SNOMED, LOINC, RxNorm – FHIR Profiles – do it together
 - Publish the models, and development instructions openly, licensed free-for-use
- **Provide testing, conformance evaluation, and certification of software**
 - Gold Standard Reference Architecture and its Implementation
 - We will work with an established company to provide this service
 - Fees that off set the cost of certification will be charged to those who certify their software
- **Implementation of the standard services by vendors against their database and infrastructure**
 - Everyone does not have to do every service
 - There must be a core set of services that enable a marketplace

Other Functions of the Consortium

- Participation in “other” functions is optional for a given member
 - Enable development “sandboxes”
 - ✦ Could be provided by companies or universities
 - ✦ Could be open source or for-profit
 - Set up an actual “App Store”
 - ✦ Many companies already have their own app stores
 - ✦ Vendor certification that a given application can be safely used in their system
 - ✦ Accommodate small companies or individuals that won’t have their own app store
 - Create a business framework to support collaborative development
 - ✦ Pre-agree on IP, ownership, co-investment, allocation of revenue
 - ✦ Try to avoid unique contracts for each development project
 - Provide a way for people to invest (Venture capital)

Principles

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- **Not-for-profit entity**
 - There could be an associated for-profit entity some day
- **Provider led**
 - Simple majority of providers on the Board of Directors
- **All organizations will have equal influence and opportunity**
 - Intermountain and Harris will not be “special”
- **Start small, be effective, and then grow**
 - We want to allow everyone that is interested to participate
- **Allow diverse strategies and participants**
 - Open source and for-profit
 - One person business up to multi-national corporations
 - Healthcare providers and healthcare software developers
 - Students and professional software engineers

Principles (continued)

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- Initially, focus on the minimum set of standards and technology
 - Increase options as we gain experience and success
- HSPC is ***not*** producing software (mostly)
 - HSPC members or groups of members produce software
 - HSPC may need to provide a reference implementation for purposes of certification
- No “central planning” by HSPC of app development
 - Participants decide what they want to build and invest their own resources
 - We ***DO*** need to agree about the minimum set of services that will enable a marketplace

HSPC wiki

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- <https://healthservices.atlassian.net/wiki/display/HSPC/Healthcare+Services+Platform+Consortium>

Contact Information

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Questions and Discussion

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