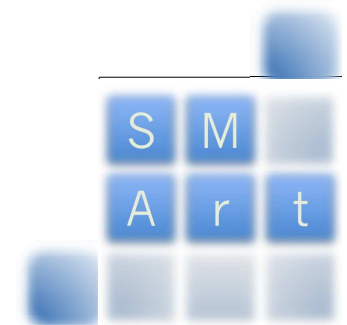# SMArt:
Substitutable Medical Apps, reusable technologies

SHARP Area 3 Overview

Josh Mandel, M.D.
SHARP Area 4 Face-to-face meeting
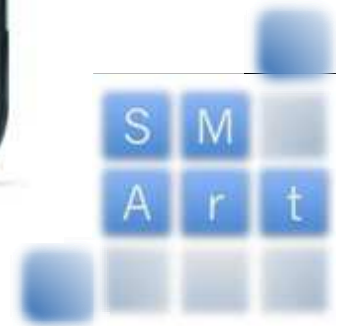**Monday, June 21 2010**

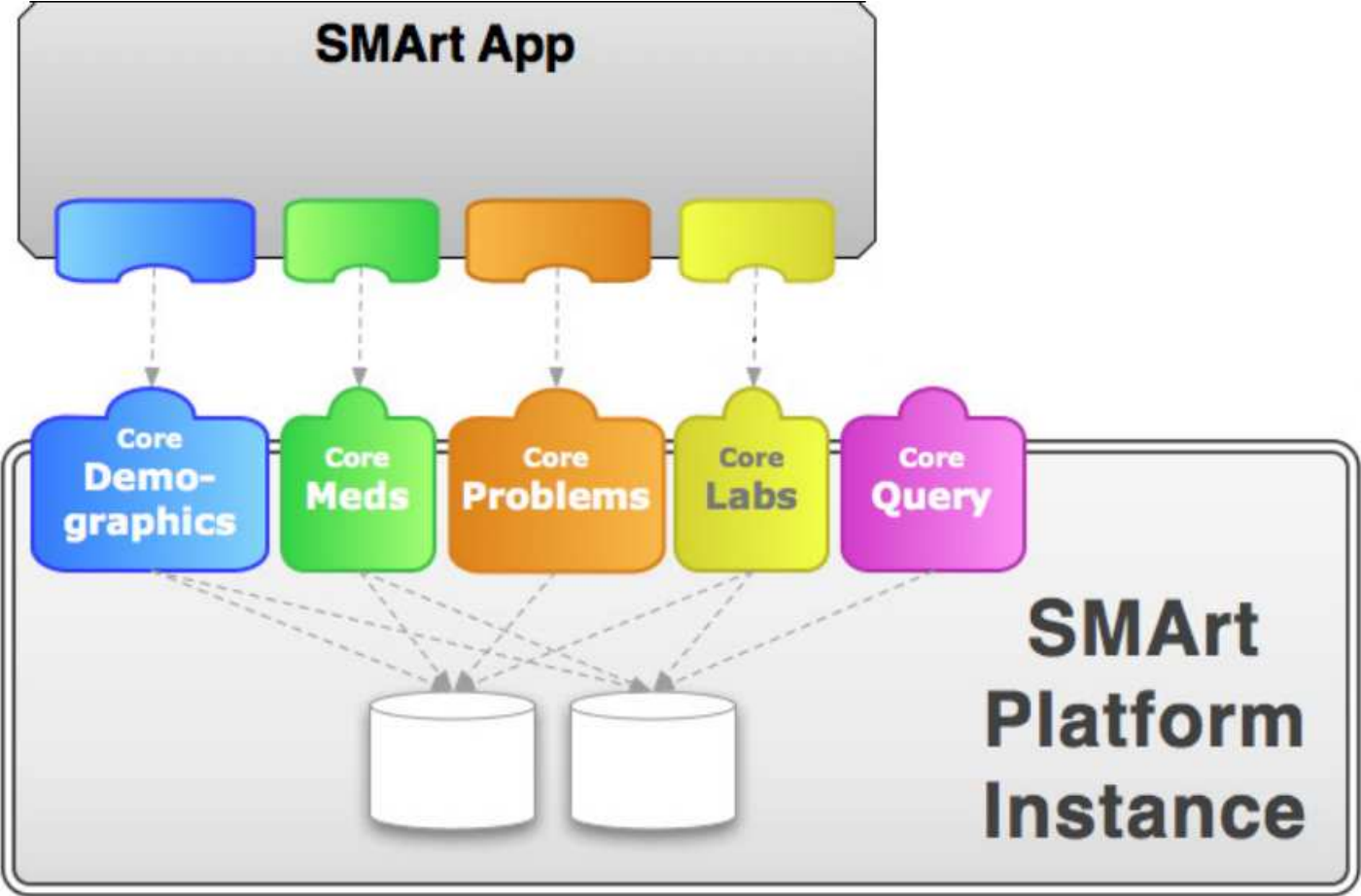# EHR as an "iPhone-like" Platform

A common **a**pplication **p**rogramming **i**nterface

SUSTITUTABLE applications

- Nimbly evolve functionality
- Avoid vendor lock
- Shrink switching costs
- Push innovation to the edges

SMArt App Programming Interface

SMArt's RESTful* API
Representational State Transfer (REST)

Each resource has a **unique ID** . E.g.

> https://inpc/patients/1234567/meds/active (med list)

Four fundamental operations:

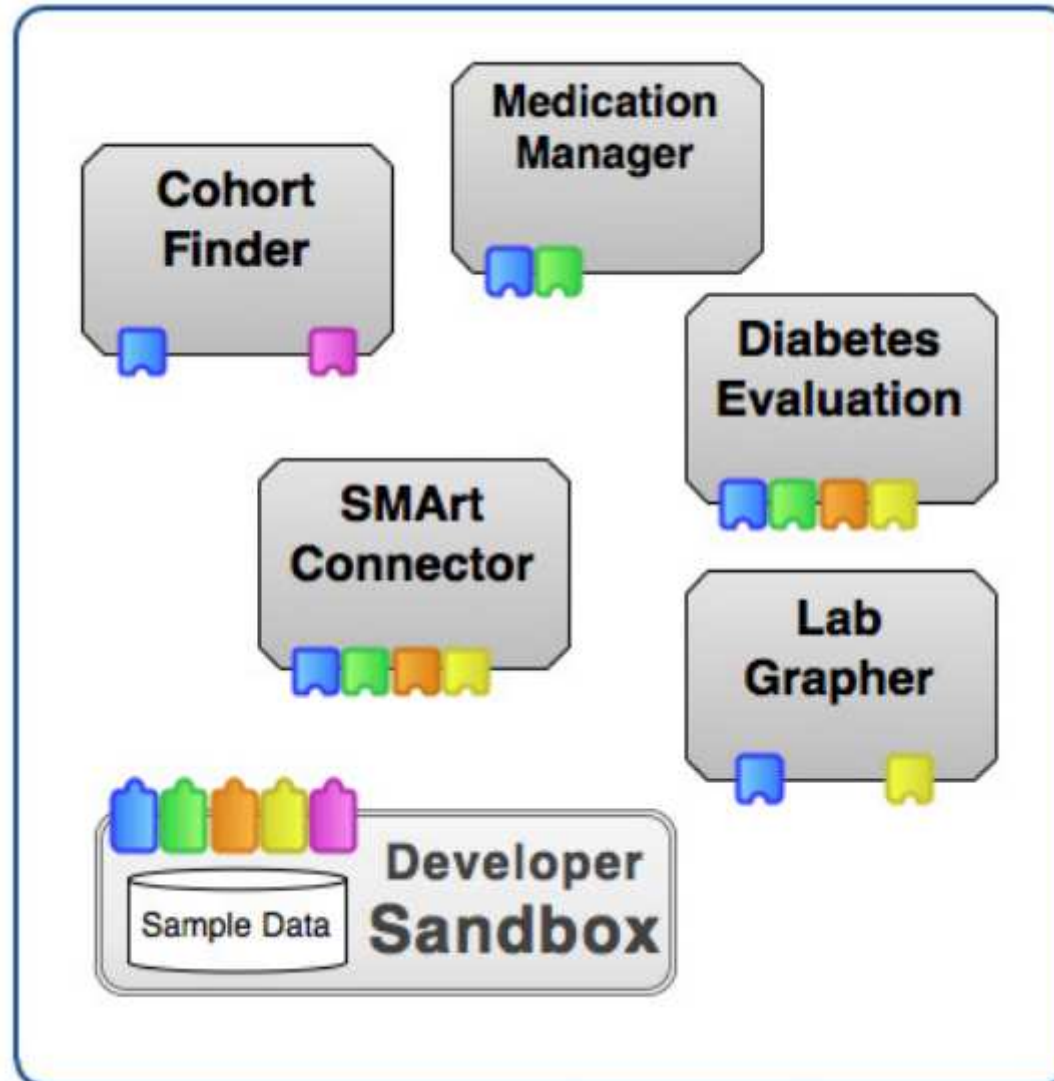|	
GET	Obtain a representation of a resource
POST	Create the resource
PUT	Update a resource
DELETE	Remove a resource

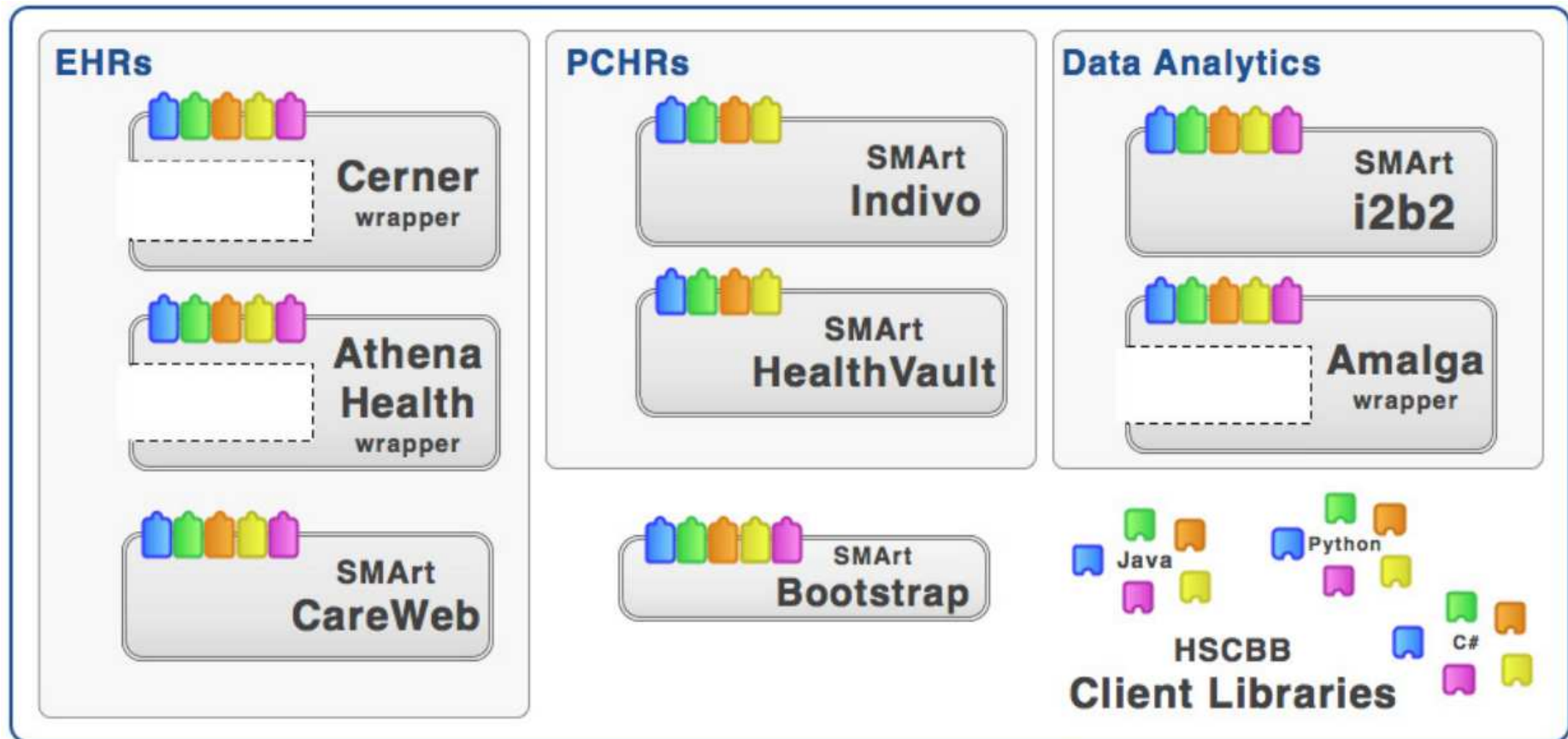**Scalable**, high-performance approach across the web.

HTTP enables **content negotiation**, e.g. HTML, JSON

SMArt App Exchange

SMArt Platform Exchange

3 Open Source Systems to build on

- I2b2 Analytic Platform (NLM Funded)

- Indivo PCHR Platform (NLM and CDC Funded)

- CareWeb EMR

TimeLine

August 2010: Present Prototypes at 1st Users Meeting

December 2010: Release SMArt API specs

April 2011: Third party apps developed by our partners

April 2012: Public App Store Opens

Executive Committee

Zak Kohane

PI, CoDirector

Ken Mandl

CoDirector, Chair Exec Committee

Rachel Ramoni

Executive Director

Ben Adida

Lead architect. CHIP, SMArt, Indivo

Elmer Bernstam UT, I2B2

Shannon Manzi Pharmacist

Mike McCoy

Regenstreif, Careweb, Networked data

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