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What is Open Health Tools?

Open Health Tools

OPEN HEALTH TOOLS

Skip McGaughey - Executive Director

Academic & researchers

Open Source Developers

National, Regional & Local Health Services Providers

Collaborative Community

Open Standards Organizations

Health professionals

Vendors

Individuals

VISION OF OPEN HEALTH TOOLS

Vision:

To enable a ubiquitous ecosystem where members of the Health and IT professions can collaborate to build open, standards-based interoperable systems that enable patients and their care providers to have access to vital and reliable medical information at the time and place it is needed.

Purpose

Ensuring users have increasingly better and affordable access to and use of comprehensive health information whenever and wherever needed to improve the health and well-being of individuals and communities worldwide

What will the OHT Community do for You?

Enable a community of individuals, vendors and organizations to integrate appropriate standards, early adopter implementations, reference applications and the necessary integration tooling to support this community.

Enable healthcare information interoperability by providing a common software tool platform based upon open standards for creating software.

Provide a range of exemplary tools and several reference / exemplary applications to facilitate the use of and illustrate the Open Health Tool Technology.

Provide software tooling to **enable easy integration** with existing systems and processes.

Create, nurture and enable suppliers to participate in an ecosystem that allows them to **profit from open standards and open source software.**

The approach to standards

Strategy:

Adopt recognized industry standards and best practices.

Maintain close working relationships with identified Standards Development Oranizations (SDO).

Provide feedback to SDOs via early adopter program and communities to foster creation of useful, usable healthcare standards that address real healthcare requirements.
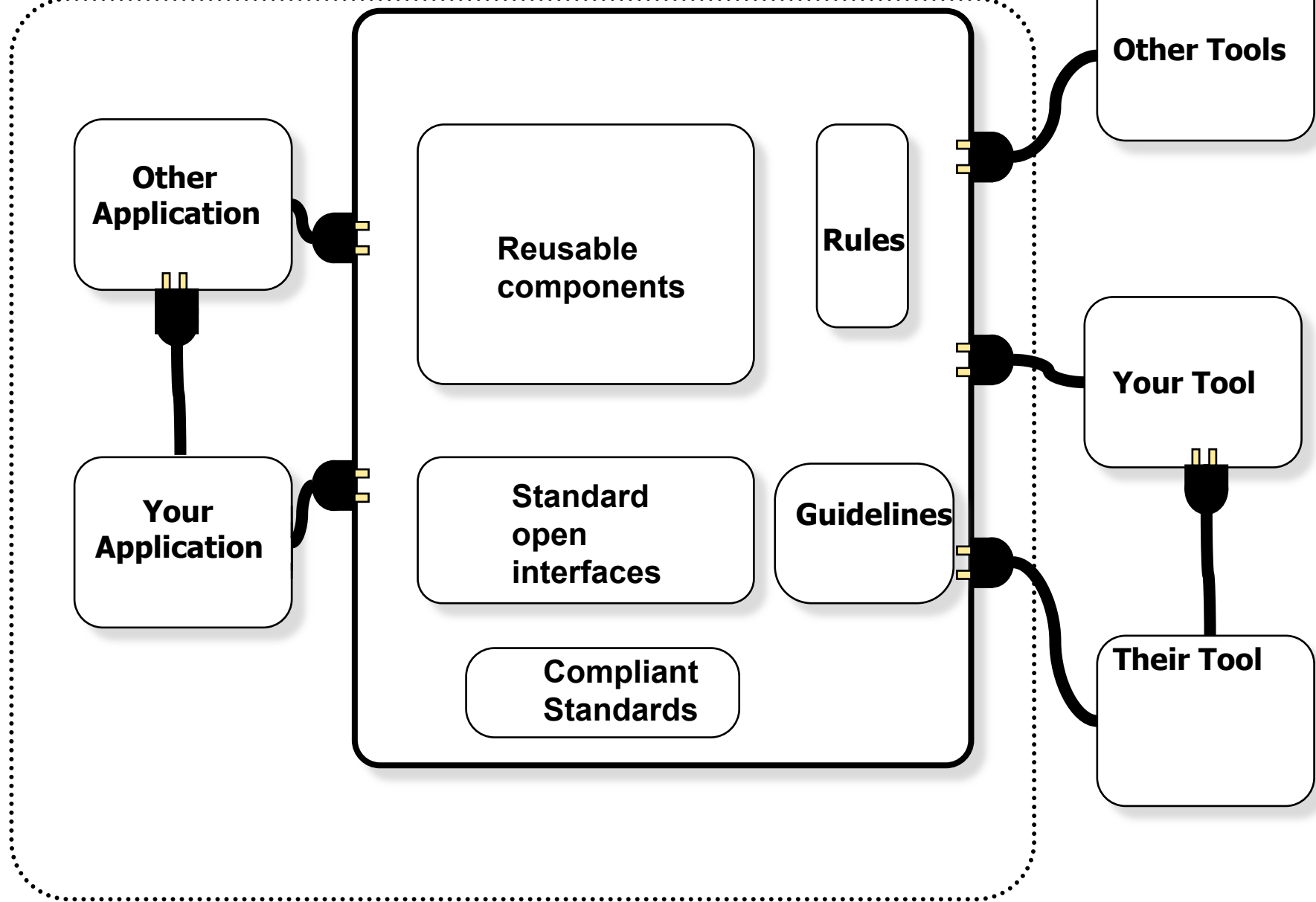
SDOs:

- HL7: CCD, Semantics, Documents, Services
- OMG: technical specifications of services
- IHE: pragmatic community for adoption
- IHTSDO (SNOMED): Semantics, terminology definitions for healthcare
- ASTM: CCR / CCD specifications
- ISO/CEN/HL7: EHR requirements and specifications

OHT is NOT a Standards organization.

OHT implements standards in the development of software.

Hybrid Business Model
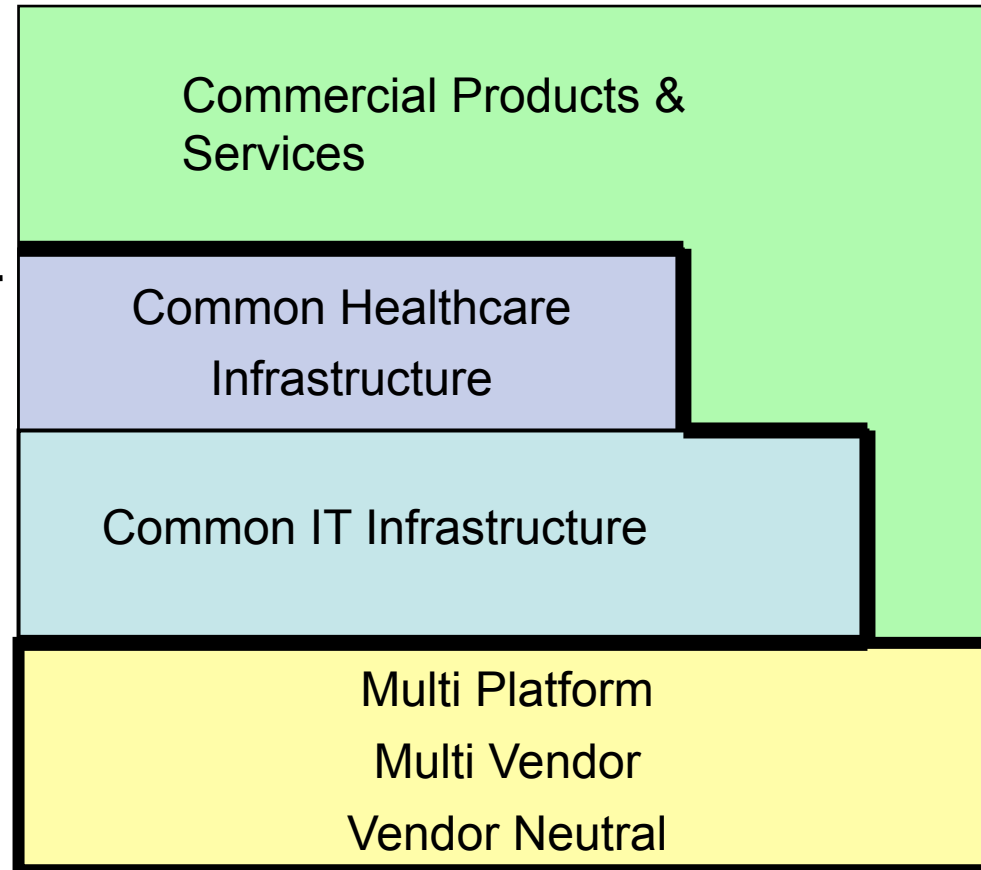
OPEN HEALTH TOOLS

Profit Based

Distribute
Deploy
Brand
Sell
Price
Package
Promote
Fee support
Fee services
High margin
   products &
   services

Open Source

Free
Community Developed
Commercial Friendly Lic
Formal Development
Process
   Design
   Develop
   Test
    Free Support
    Free Code

Commercial Products & Services

Common Healthcare Infrastructure

Common IT Infrastructure

Multi Platform
Multi Vendor
Vendor Neutral

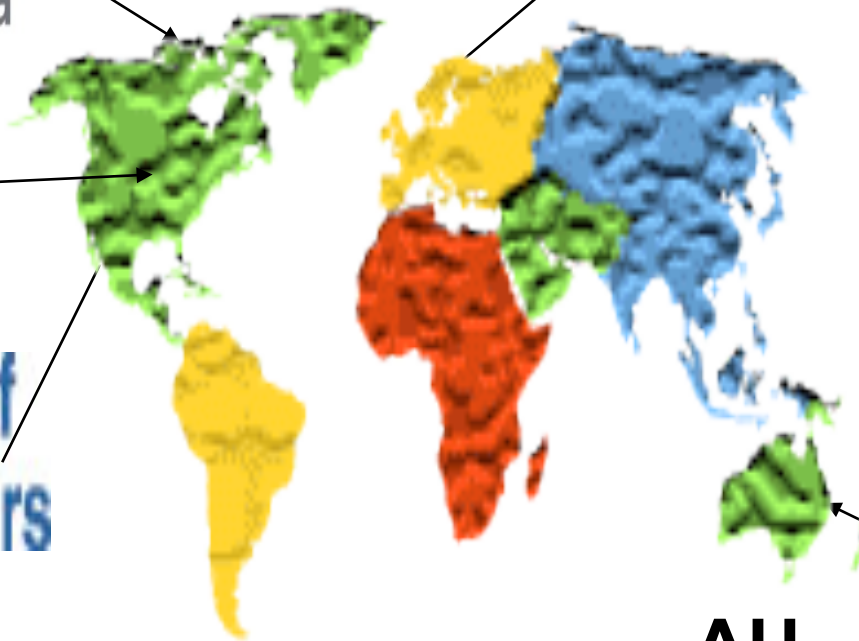# Membership of Healthcare providers

OPEN HEALTH TOOLS

Canada Inforoute
Health Santé
Infoway du Canada

National
Cancer
Institute

Department of
Veterans Affairs

UK
NHS
Connecting for Health

AU nehta

Membership Open Standards Organizations

OPEN HEALTH TOOLS

HL7

OMG
OBJECT MANAGEMENT GROUP

IHTSDO

Vendor Members

kestral
giving you the complete picture

IBM

DSS inc
VistAExperts

ORACLE

BT

International Technology Group

COLLABNET

Ocean informatics

Cambio+
Healthcare Systems

NEXJ SYSTEMS

INNOOPRACT

eclipse

redhat.

Discovery Machine Inc.
Knowledge Embedded Business Systems

MISYS
open source solutions

Collaborative Software Initiative

PALAMIDA
Application Security for Open Source Software

THE AUSTRALIAN
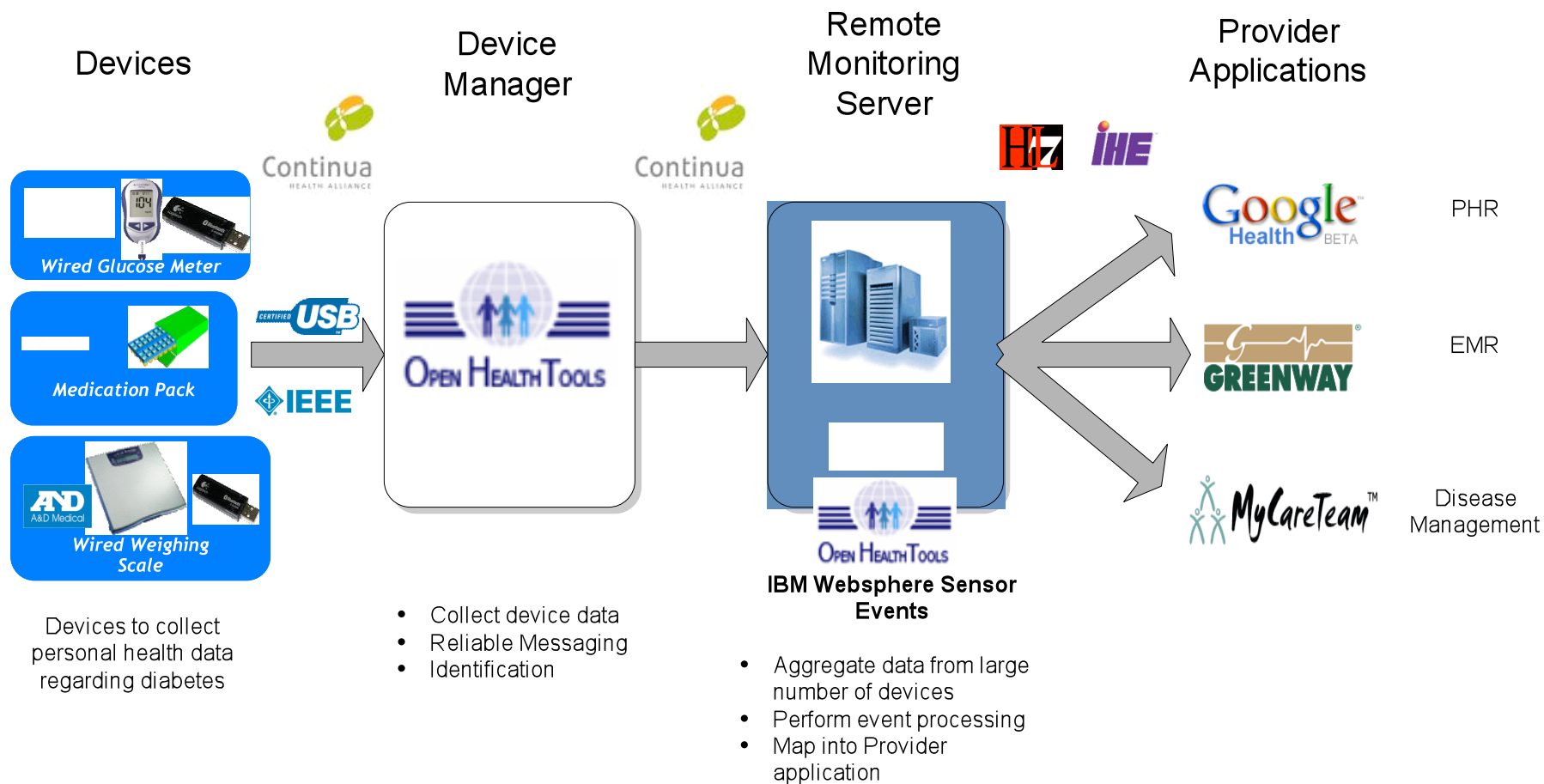E-HEALTH
RESEARCH CENTRE

Example projects

IHE Profiles	Implementation of IHE profiles used in health information exchanges
Model Driven Health Tools (MDHT)	UML platform with healthcare standards. Produce tools for developers, e.g. HL7 CDA tooling
Stepstone – remote patient monitoring	Home care solution for improved chronic disease mgmt. Reference implementation using healthcare standards and SOA

Home Care Solution
Architecture Overview

Devices

Device Manager

Remote Monitoring Server

Provider Applications

Wired Glucose Meter

Medication Pack

Wired Weighing Scale

IBM Websphere Sensor Events

PHR

EMR

Disease Management

Devices to collect personal health data regarding diabetes

- Collect device data
- Reliable Messaging
- Identification

- Aggregate data from large number of devices
- Perform event processing
- Map into Provider application

Challenges

- **Licensing** - there are different open source licenses, with significantly different implications re: intellectual property and rights. (OHT has chosen an approach to licensing that is friendly to software vendors which enables them to participate, e.g. Eclipse Public License)

- **Awareness** - OHT not that well known in Europe beyond UK (NHS is a founding member.)

- **Contributions to projects -** investment models needed, why invest in open source?
  can be challenging - can be achieved, e.g. foundational initiatives such as AAL that desire innovations, and reference implementations that can scale to production, standards orgs and alliances (e.g. HL7, Continua)

Is the OHT Community for you?

- Learn more about OHT, there is a lot going on
- Take advantage of opportunities to participate
- Leverage your expertise and skills
- Share your experience with others

Summary

- **Health & well-being is the outcome**

- **Information is the enabler**
  - Health and reference information is available to individuals, their providers, and population health entities in the most useable form whenever and wherever they need it [accessible, available]

- **"IT solutions" are the means by which the information is used**
  - OHT contribution is to create and maintain a collaborative, inclusive, continuously evolving ecosystem to support and improve these solutions – with a specific orientation on meeting the needs of the solution users

References

Open Health Tools
http://www.openhealthtools.org/

Open Health Tools – IHE Profiles
https://iheprofiles.projects.openhealthtools.org/

Open Health Tools – Stepstone
https://stepstone.projects.openhealthtools.org/

Open Health Tools – HoME
https://mdht.projects.openhealthtools.org/

Integrating the Healthcare Enterprise
http://www.ihe.net/

Continua Health Alliance
http://continuaalliance.org