Select, simplify, fix: How Continua, IHE and other profiles contribute to making standards fit for purpose

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2. Relationship Continua-IHE
3. How we work
4. Example: HL7’s FHIR
About us...

A nonprofit membership association transforming healthcare through personalized, interoperable connected health solutions.

- Founded 2006 (as “Continua Health Alliance”)
About personal connected health
(Continua market segmentation, circa 2010)

Independent living
  AAL
  Active ageing
  Healthy longevity

Wellness
  Fitness
  Quantified self

Chronic conditions management
  Remote monitoring
  Personalized health
Personal Connected Health Alliance

A nonprofit membership association transforming healthcare through personalized, interoperable connected health solutions.

- Founded 2006 ("Continua Health Alliance")
- Brings together industry and users
- Works from use cases, creates profiles ("guidelines")
- Takes existing standards, makes them fit for purpose
- Maintains & annually publishes the **Continua Design Guidelines (CDGs)**
- Since 2013 recognised as ITU Standard (ITU Recommendation ITU-T H.810)
- Merger 2014, known as “Personal Connected Health Alliance” (PCHAlliance)
PCHAlliance’s flagship event, the Connected Health Conference, is the premier international conference and expo for the exchange of research, evidence, ideas, innovations and opportunities in connected health. Formerly the mHealth Summit, and now in its ninth year, the event features industry-leading keynote presentations, dynamic programming, poster presentations, an interactive exhibit floor, and high-value networking sessions. www.ConnectedHealthConf.org

Published annually, PCHAlliance’s Continua Design Guidelines define a flexible framework for user friendly end-to-end interoperability of personal connected health devices and systems. Continua certified products bear the globally recognized Continua logo, which signals market-readiness for 21st century health data exchange. The Guidelines are recognized as an international standard by the United Nations’ International Telecommunication Union (ITU-T) and available for free in six languages.
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Leaders in eHealth Interoperability

Working together towards interoperability for healthcare

Feb 2017
About IHE and PCHAlliance

Integrating the Healthcare Enterprise (IHE) and Personal Connected Health Alliance (PCHAlliance) are each focused on improving the ways health IT systems share information.

IHE’s primary domain is in clinical healthcare settings and their regional/national/cross-border exchanges while PCHAlliance’s primary domain is in home and remote health settings.

IHE Profiles and PCHAlliance’s Continua Design Guidelines are both standard-based, open specifications for health information exchange:
- Where they overlap they are consistent, resulting in a mature and interoperable information ecosystem
- Together they ensure that device data whether captured by the patient or in a care delivery setting flows into electronic health records in the same format and coded content

Together, both IHE and PCHAlliance continually improve interoperability within their domains and oversee conformity testing and certification of products worldwide.
Where to deploy IHE Profiles and PCHAlliance’s Continua Guidelines
How We Are Leading Together  

- **Collaborating on future Profiles and Guidelines development.**
  - Coordinating work programs between the two organizations
  - Enabling seamless integration between products using IHE Profiles and the Continua Design Guidelines to ensure the combined deployment of fully interoperable systems.

- **Collaborating with each other’s conformity testing and certification programs.**
  - Aligning tools and processes.

- **Collaborating on Communication, Education, and Product Interoperability Demonstrations.**
  - Eliminating confusion among providers, vendors, and standards bodies about both organizations’ standards and tools.
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Where we are now

- Fragmentation
  - Data models
  - Connectivity
  - Platforms

- Micro Interoperability
  - Closed platforms
  - Walled gardens
  - Proprietary

- Explosive Growth
  - Bluetooth LE
  - Smartphones
  - Applications

- Remote Care
  - Growing demand
  - Reimbursement
  - Large scale deployments
More than a standard...

The Continua Design Guidelines (CDG) define a framework of underlying standards and criteria required to ensure the interoperability of components used for applications monitoring personal health and wellness.

- **Select:** Choose standards for data format, transports, etc.
- **Simplify:** Clarify the underlying standards or specifications, by reducing options, adding a missing feature
- **Fix:** Repair the underlying standards (e.g., Bluetooth handling of time, pairing, connection, security)
Standards landscape covered by CDG
Flexible E2E Architecture
What We Have Built!
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Annual CDG development

- Field is in flux...
- PCHAlliance members (industry, governments, researchers, experts) identify...
  - New trends
  - New standards
  - New use cases
- PCHAlliance members decide new work items (ballots)
- Publish new CDGs every year
Example: HL7 FHIR

Fast Healthcare Interoperability Resources (FHIR)

- Draft standard with modular components (“resources”)
  - Various versions of HL7 and latest web standards
  - Application programming interfaces (APIs)
  - Focus on implementability

- Applications:
  - mobile phone apps
  - cloud communications
  - EHR-based data sharing
  - server communication in large institutional healthcare providers
Integrating FHIR in CDGs

• Request from members (health authorities) in 2015/2016
• PCHAlliance Global Technical Committee adopted FHIR as work item
• Engagement:
  • Liaison with Furore (https://fhir.furore.com/)
  • Support for FHIR Developer Days (November 2016)
• Difficult decisions and choices:
  • Fixed versus optional resources
  • FHIR “DSTU” versus CDG commitment to stability
• New release of the CDGs: November 2018
Flexible E2E Architecture
Continua Design Guidelines 2018 (November 2018)
Thank You!

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