Continua Health Alliance: The Next Generation of Personal Telehealth is Here

A non-profit, open industry alliance of the finest healthcare and technology companies in the world joining together in collaboration to improve the quality of personal healthcare.
“Our Mission is to establish an eco-system of interoperable personal health systems that empower people & organizations to better manage their health and wellness”
Continua Health Alliance enables a personal health eco-system that empowers individuals & families to better manage their own health and wellness across the continuum of life and care methods.
Promoter Members

- A&D Medical
- Aetna
- Ascension Health
- Baxter
- Cisco
- Freescale Semiconductor
- GE Healthcare
- IBM
- Intel
- Kaiser Permanente
- Medtronic
- NHS
- Nokia
- Nonin
- Novartis
- Omron
- Oracle
- Panasonic
- Philips
- Polar
- Price Waterhouse Coopers
- QualComm WirelessHealth
- Roche
- Samsung
- Sharp
- St. Jude Medical
- Texas Instruments
- Tunstall
- Viterion
Over 230 Member Companies!

Contributor Members

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Worldwide today:

- 1 billion adults overweight
- 860 million chronic disease patients
- 600 million elders age 60 or older

- 75-85% of healthcare spending is on chronic disease management

Source: World Health Organization; McKinsey
Health and Wellness
One billion adults overweight world wide

“Worried well” vital sign monitoring:
- Weight
- Blood pressure
- Glucose
- Cholesterol
- Activity level

Benefits:
- Monitor and motivate
- Achieve individuals’ goals
- Access personal fitness information anywhere
- Enhance trainers’ services

Continua member companies help people live healthier, more active lives by connecting them to their health and wellness team through a more efficient exchange of their personal fitness information.
Disease Management
860 million chronic disease patients world wide

Vital sign monitoring: (remote patient monitoring)
- Diabetes
- COPD
- CHF
- Hypertension

Benefits:
- Provide better-coordinated care
- Connect to care team
- Empower individuals
- Encourage early detection
- Reduce costs

Continua member companies help people with chronic conditions live healthier lives by connecting them to their care team through a more efficient exchange of personal health information.

- Chronic disease
- Post trauma
- Pre-op

Blood-pressure Cuff
Pedometer
Weight Scale
Fitness Equipment
Medication Tracking
Pulse Ox
Thermometer
Cell Phone
Digital Home
PC
Personal Health System
Glucose Meter

Internet

Family Care Givers
Disease Management Service
Healthcare Provider
Personal Health Record
Aging Independently
600 million elderly individuals world wide

- Independent living
- Chronic disease

Basic life monitoring:
- Bed pressure (sleep)
- Bathroom sensor
- Gas / water sensor
- Emergency sensor

Benefits:
- Involve family members
- Allow remote analysis & care
- Provide integrated view
- Encourage early detection
- Reduce costs

Continua member companies help the elderly age independently, with dignity and security, through the efficient exchange of personal health and safety information that connects them to their family and care team.
Guidelines
Continua member companies will select connectivity standards and publish Guidelines for strict interoperability.

Certification and Logo
Continua is establishing a test and certification program with a recognizable logo signifying the promise of interoperability with other certified products.
Working Groups

Marketing - Promote Continua (events, PR), provide marketing materials, and grow membership in targeted industry markets.

Policy Strategy - Advance Continua's Mission globally by addressing policy barriers, promoting policies that drive adoption, educating Continua's membership on relevant policy, furthering Continua brand recognition with governments, and collaborating with external stakeholders on advocacy activities.

Use Case - Identify and prioritize user experiences to be addressed by the Interoperability Guidelines.

Technical - Decompose Use Cases into requirements and develop Interoperability Guidelines that specify industry standards and profiles.

Wellness Solutions - Establish a clear value proposition for innovative health benefit plans that effectively manage the health, wellness, costs, and productivity of the workforce using personal telehealth technologies.

Regulatory - Clarify and describe interoperable device functions in a regulatory environment.

Test & Certification - Create and maintain the Test and Certification Program for Continua, including member test tools, plugfests, certified test labs, and certified product listings.
Focused on guidelines and certification development

More than 2,000 members Participating in the various Working Groups
Focused on external awareness and education

More than 2,000 members Participating in the various Working Groups

Board Of Directors

Executive Director

VTM Admin

Use Case WG

Technical WG

Test & Certification WG

Wellness Solutions WG

Marketing WG

Regulatory WG

Global Dev. & Outreach WG

PR & Marketing agency

EU Policy WG

Japan Policy WG

Latin America Policy WG

U.S. Policy WG

Australia Policy WG

Expert Group
NHS, AAFP, ATA, AHA...

Sub-Committees

Testing and Certification Lab
Version One Device Connectivity Standards

- 11073-10404 = Pulse Oximeter
- 11073-10406 = Pulse / Heart Rate
- 11073-10407 = Blood Pressure
- 11073-10408 = Thermometer
- 11073-10415 = Weighing Scale
- 11073-10417 = Glucose
- 11073-10441 = Cardiovascular Fitness Monitor
- 11073-10442 = Strength Fitness Equipment
- 11073-10471 = Independent Living Activity
- 11073-10472 = Medication Monitor
- 11073-20601 = Base Framework Protocol

Personal Health Device Class Specification
Medical Device Profile Specification
Version One Healthcare Record Standards

- **Personal Health Monitoring (PHM) [based on CDA / CCD]**

  - **Cross-Enterprise Document Reliable Interchange (XDR)**

  - Disease Management Service Provider
    - Disease management nurse or home care nurse
  - Remote Patient Monitoring (RPM) Server
  - Home-based Remote Patient Monitoring (RPM) System
  - Patient
  - Vital Sign Devices

  - **Healthcare Provider**
  - **Labs**
  - **Electronic Health Record**
  - **Personal Health Record**

- Continua Health Alliance
Developer Resources
- Web-based environment (repository, collaboration tools)
- Reference source code

Certification
- Test and certification tools
- Right to use certified logo upon completion of successful certification

Market Intelligence
- Access to market research data
- Access to pre-publication drafts of the design guidelines
- Internal and external education and training

Collaboration
- Plugfests participation
- Participation in RFP MatchMaker program
- Unlimited participation in Continua quarterly summits, town hall meetings, and education seminars
Free Reference Source Code

Source Code Library

- 500 modules of member-written source code already available in our library...downloaded by dozens of companies
- We are paying contractors to write the rest. Currently investing over $800k...will add more code to the library each year
- Structured as library of modules w/ API
- Reference code only—use at your own risk (disclaimer)

Generic Reference Platform

- Operating system: Windows XP
- Hardware: X86-based
- Language: Object Oriented C++ | C for embedded components

Implement Mandatory Features of Guidelines

- Common Source for Certification Test Tool, Plugfest System Simulator, Member Implementations
The Continua Matchmaking Program: Helping members and non-members find solutions for new health and chronic disease management programs

- Help healthcare providers find world class vendors who are developing the next generation of personal telehealth devices and services
- Come to our website, fill out a simple RFP-like form and submit it. Our Continua vendor community will receive notification and contact you
- http://www.continuaalliance.org/match_program
First Public Interoperability Demonstration
Harvard Medical Amphitheater | October 2008

Device Interface

Heart Failure & COPD

XHR Interface

EHR

Cambridge Consultants

And Medical

CYPAK

University Health Network

Roche

CYPAK

CYPAK

Intel

PHILIPS

Telehealth Service

IBM

PHILIPS

Telehealth Service

Google Health BETA

IBM

EHR

PHR

 Partners Healthcare

Telehealth Service
End-to-end demo - Vancouver Q2 2009

Device Interface Manager

Device

- Roche Accu-Chek 360
- LNI Android-based G1 Cell phone 20601 manager

WAN

- Based upon proposed protocols for Continua WAN

XHR Interface Receiver

- IP network
- Wi-fi or 3G
- Web services

- xHR

Roche

Google Health

PHR

Disease management platform

Glucose Meter

Pulse Oximeter

Roche

IBM
End-to-end demo - Tokyo Q1 2010

Personal Device
- Omron
- Tanita
- A&D Medical
- Nonin

Chip / stack
- Nordic
- CSR

Aggregation Manager
- Freescale
- Alive
- Kadenza

Telehealth Service Center
- NTT
- Docomo
- HitachiSoft

Health Records

Health Service
- MOM
- Mythos
- Saint-Care
Latest Continua Certified™ Products

Intel Health Guide

Freescale i.MX Linux AHD Reference Platform running LNI HealthLink/OXP-Libraries and Continua certified as a Manager supporting the Blood Pressure Cuff device specialization

Panasonic Toughbook C1, World's first Continua Certified convertible PC with Bluetooth

Wipro Contina x73 Manager USB Reference System
Latest Continua Certified™ Products

Panasonic TOUGHBOOK H1 with Blood Pressure Monitor, Cardiovascular and Weighing Scale device specializations by Bluetooth

Texas Instruments MSP430 USB Agent Platform

A&D Blood Pressure Monitor w/ CPX186 Converter Cable

A&D Weight Scale w/ CYPAK Converter Cable

A&D Medical Blood Pressure Monitor

A&D Medical Weight Scale

Nonin Wireless Fingertip Pulse Oximeter

Nonin Pulse Oximeter

A&D Medical

Roche Accu-Chek® Smart Pix Device Reader

Continua Bluetooth Manager Stack for Windows, manufactured by Toshiba

Omron Continua Certified Weighing Scale with a Body Composition Monitor

Omron Blood Pressure Monitor

Omron Pedometer
Continua sponsored public symposiums and member summits

2009: Tokyo, Barcelona, Vancouver B.C., Boston
2010: San Diego, Belfast, South Korea
Thank you!