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.
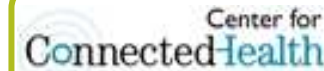
The Continua Health Alliance

"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 — Promoter Members — Open International

A&D Medical · ActiveHealth Management (Life-Saving. Cost-Saving.) · Aetna · Ascension Health · Baxter · Bayer HealthCare · ca Transforming IT Management · CAST Center for Aging Services Technologies · Center for Connected Health · Cisco · European Centre for Connected Health · GE Healthcare · Clínic Barcelona Hospital Universitari · IBM · iMetrikus · Intel · Kaiser Permanente · LifeSync Corporation · Medtronic · NHS Connecting for Health · Nokia Connecting People · Nonin · Novartis · Omron · Panasonic ideas for life · Philips · Polar Listen To Your Body · PriceWaterhouseCoopers · Qualcomm Wireless Health · Roche · Samsung · Sharp · Siemens · Sprint Together with Nextel · St. Jude Medical · Texas Instruments · Tunstall · VDE · Viterion TeleHealthcare · Welch Allyn

Continua HEALTH ALLIANCE

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- Analogic Corp.
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- Westchester Institute for Human Development
- Whole Health Management
- Wipro
- Zarlink Semiconductor
- Zensys

The Challenge & The Opportunity

- **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

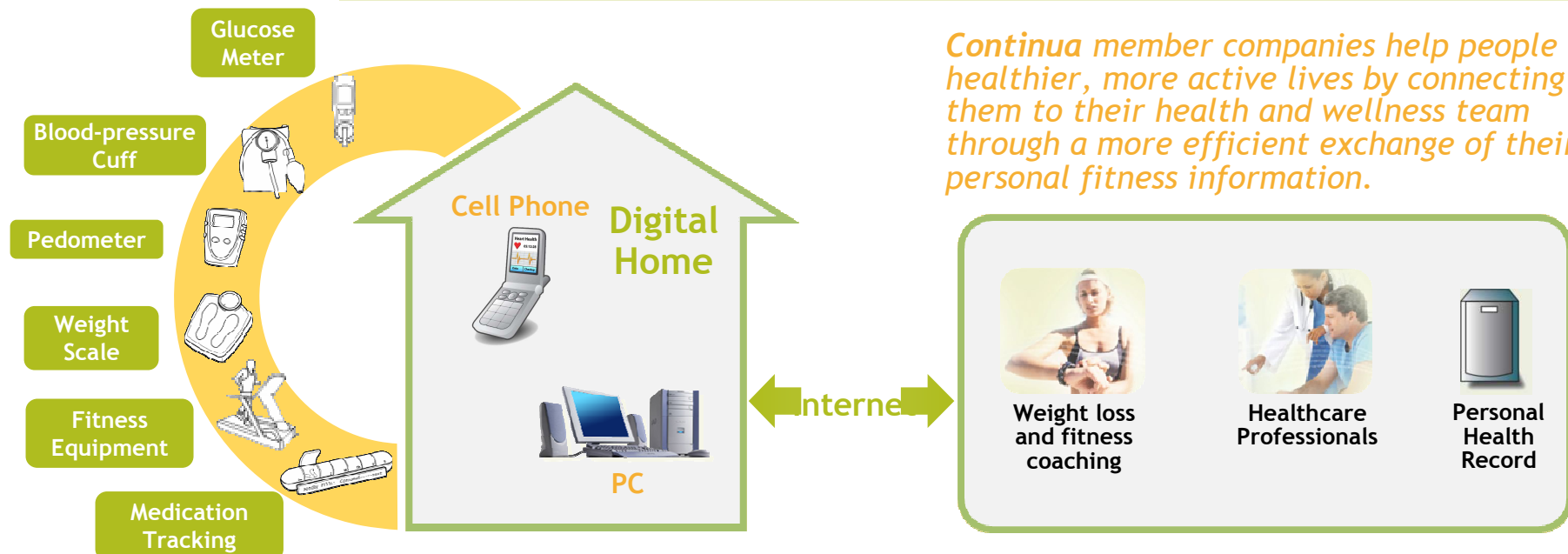Source: World Health Organization; McKinsey

Healthy Family

Health and Wellness

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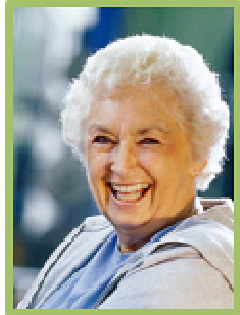 - Cholesterol
  - Activity level

In the future...

- Extension of healthcare system into the home
- Initial triage of non-emergency conditions
  - Vital signs
  - Images
  - Email / chat / video

Glucose Meter

Blood-pressure Cuff

Pedometer

Weight Scale

Fitness Equipment

Medication Tracking

Cell Phone

Digital Home

Internet

PC

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.
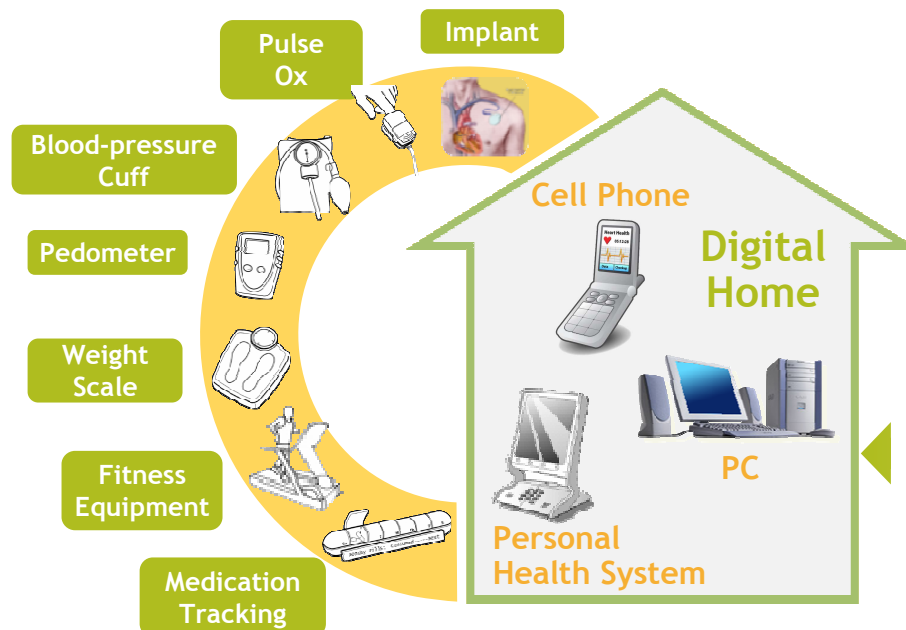
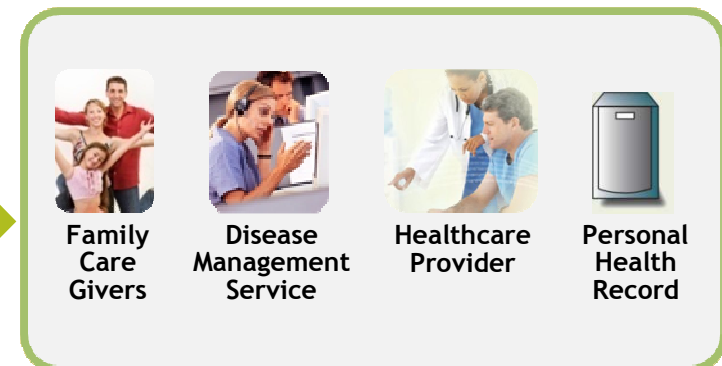**Weight loss and fitness coaching**

Healthcare Professionals

Personal Health Record

Disease Management

- Vital sign monitoring (remote patient monitoring)

- Chronic disease
- Post trauma
- Pre-op

Pulse Ox

Implant

Blood-pressure Cuff

Pedometer

Weight Scale

Fitness Equipment

Medication Tracking

Cell Phone

Digital Home

PC
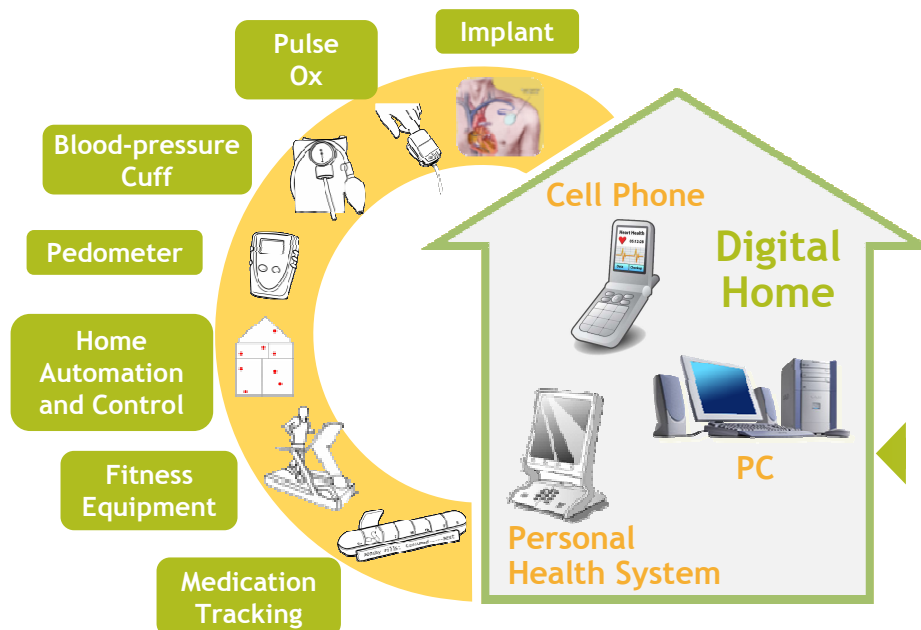
Personal Health System

Internet

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.

Family Care Givers

Disease Management Service

Healthcare Provider

Personal Health Record
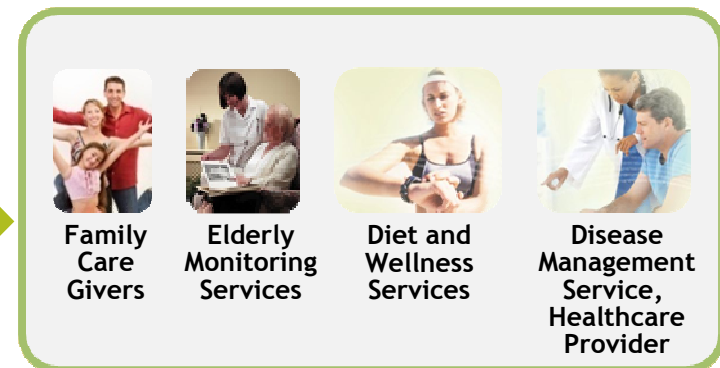
Continua HEALTH ALLIANCE
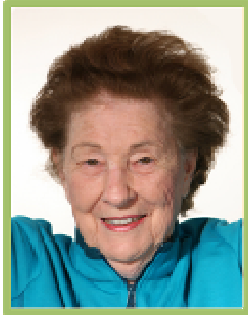
Aging Independently

- Independent living
- Chronic disease

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

Pulse Ox

Implant

Blood-pressure Cuff

Pedometer

Home Automation and Control

Fitness Equipment

Medication Tracking

Cell Phone

Digital Home

PC

Personal Health System

◄ **Internet** ►

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.

Family Care Givers

Elderly Monitoring Services

Diet and Wellness Services

Disease Management Service, Healthcare Provider

Version One Device Connectivity Standards

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Left panel (devices):
- Pulse Oximeter
- Pulse / Blood Pressure
- Weight Scale
- Glucose Meter
- Cardiovascular and Strength Fitness Monitor
- Independent Living Activity
- Medication Monitor

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

Bluetooth
Bluetooth Medical
Device Profile Specification

CERTIFIED USB
USB Personal Healthcare
Device Class Specification

Right panel (devices):
- PC
- Personal Health System
- Cell Phone
- Set Top Box
- Aggregator

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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

Continua xHR Interface
(Data, Message, Security)

HL7

Healthcare Provider

Electronic Health Record System

Labs

EHR

Ecosystem Development

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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

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.

Electronic Media / Software

Product Packaging

POCKETpedometer

Product Applications

Product Substrates

Continua™
CERTIFIED

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. Planning on $1M in 2008...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

Not optimized for a specific device:
- Operating system: Windows XP
- Hardware: X86-based
- Language: C/C++

Implement Mandatory Features of Guidelines

Continua
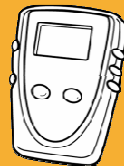HEALTH ALLIANCE

V1 PAN Interface Using ISO/IEEE PHD Standards

10 Companies

2 PAN Interface Transports
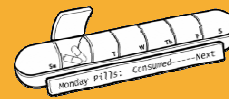
Bluetooth

CERTIFIED USB

7 Devices

Cardio | Glucose Meter | Pulse Oximeter | Medication Monitor | Blood Pressure Monitor | Weighing Scale | Thermometer
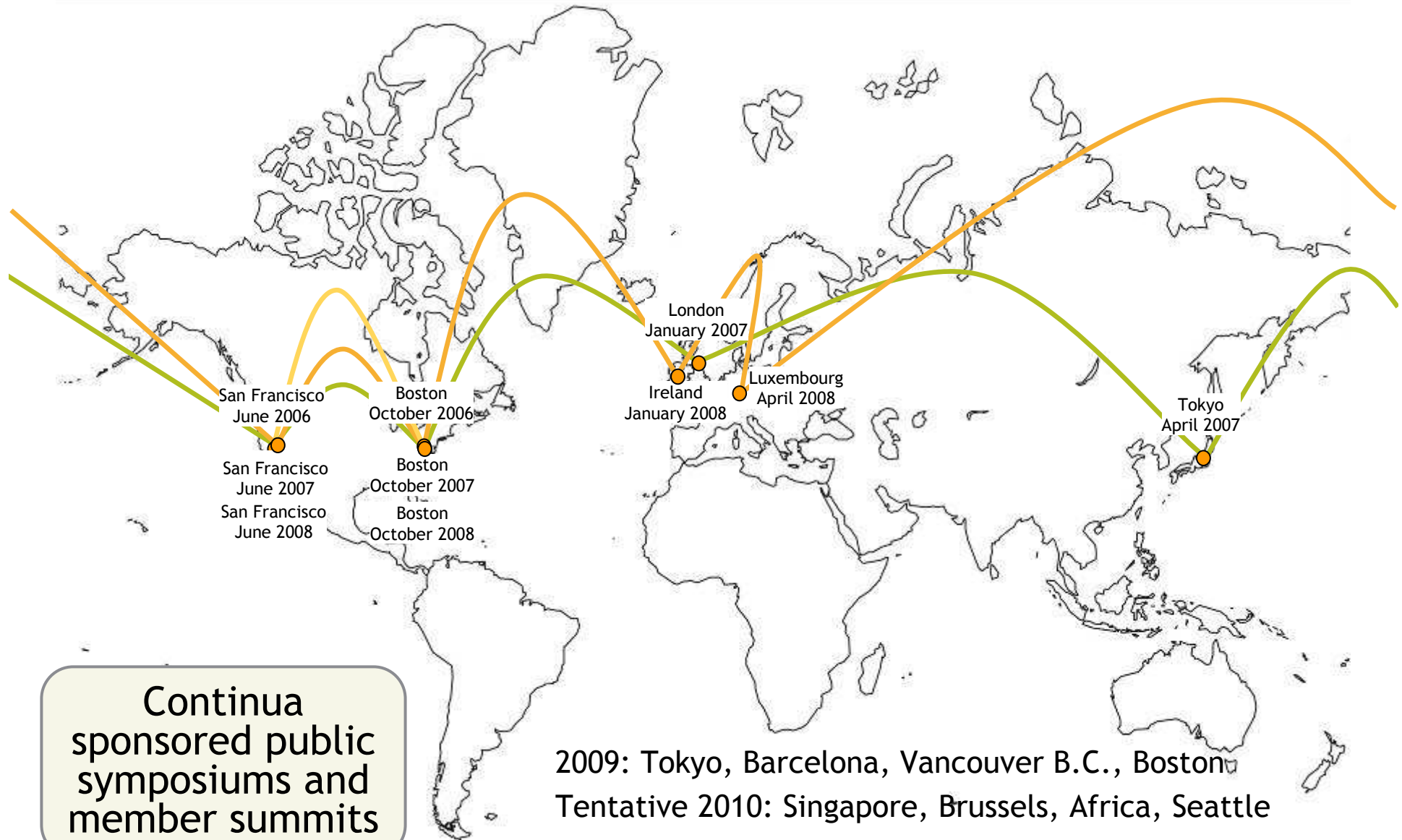
First Public Interoperability Demonstration
Harvard Medical Amphitheater | October 27, 2008

Continua Matchmaking

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

Thank you!