



Continua Health Alliance:

The Next Generation of Personal Telehealth is Here!

David L. Whitlinger

President & Board Chair, Continua Health Alliance
Director, Healthcare Standards, Intel Corporation
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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

- 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



Alere Medical, Inc.
 All Medicus Co., Ltd.
 AMI Semiconductor
 Analog Devices
 Analogic Corp.
 AT4 Wireless
 AT&T Mobility
 Avita
 BiancaMed
 BIOSPACE Co., Ltd.
 Bluegiga Technologies Oy
 Boston Scientific
 British Telecommunications
Cambridge Consultants Ltd.
 Capital Health
 Cardiff University
 Cardiomedix Inc.
 Cardionet
 CELS, Ltd.
 Centre for Global eHealth Innovation
 Cerner Corporation
 Chiptech Limited
 Christus Health
 Chunghwa Telecom Co., Ltd.
 Claricode, Inc.
 Computerized Screening, Inc.
 Continuity Health
 CSR plc
 CYPAC AB
 Cypress Semiconductor
 Dell
 Digi International
 Dovetail Health
 Dynastream Innovations Inc.
 EarlySense
 empirica GmbH
ETRI
 FitSense Technology
Foundation for Research and Technology
 France Telecom R&D, LLC
Freescale Semiconductor
 Frontline Test Equipment

Fujitsu Limited
 Fullpower Technologies
 GC Healthcare Corp.
 GenerationOne, Inc.
GlaxoSmithKline
 Healthsense
Home Guardian, LLC
 Honeywell HomMed LLC
 Industrial Technology Research Institute
 Infineon Technologies
 INFORSON Co., Ltd.
 InfraRed Integrated Systems Ltd.
 Innomed Medical Zrt.
 In Practice Systems Limited
 Institute for Infocomm Research
 Institute of Biomedical
 InterComponentWare, Inc.
 Konami Sports and Life
 LAXTHA Inc.
LG CNS
 LG Electronics
LifeGate, Inc.
Lifescan
LS Research, LLC
 MedApps, Inc.
MEDCEL
MedSignals
 MedTech Systems Inc.
 Microlife Corporation
Midmark Corporation
 Misys Healthcare Systems
 Molex Inc.
Monitray, LLC
 Motorola
MIR- Medical International Research
 Neusoft Medical Systems
 Nippon Telegraph and Telephone Corporation
 Nitto Denko Corporation
 Novo Nordisk
 nSpire Health, Inc.
 Oracle
 Oregon Medical Labs
 Oregon Scientific Inc.

Pfizer
 Precor Fitness
 Proskauer Rose LLP
 Proteus Biomedical, Inc.
 RMD Networks
 Rossmax International Ltd.
 RTX Healthcare
 Ryoyo Electro Corporation
 Sensor Technology & Devices Ltd
 SHL Telemedicine
 Silicon and Software Systems
 Sinapsys Srl
 Smartlife Technology Ltd
 Sony Electronics Inc.
Southern Nevada Wellness
 Stichting IMEC - Nederland
 Stollmann E+V GmbH
 STMicroelectronics
TaiDoc Technology Corporation
 Tanita Corporation
 Telbios, SpA
 Telecom Italia SpA
 Telehealth Solutions Ltd.
 TeleMedCare Pty Ltd.
 Telus Communications Company
 Terumo Corporation
 Textronics Inc.
 The Scottish Centre for Telehealth
 Toshiba Home Appliances Corporation
 Toumaz Technology Limited
 Training Peaks, LLC
Triage Wireless Inc.
 Tyco Electronics
 Tynetec Ltd
 Ubiquitous Corporation
 UnitedHealth Group
 University of Miami - Miller School of Medicine
 Verizon
 VTT Technical Research Centre of Finland
 Westchester Institute for Human Development
 Whole Health Management
 Wipro
 Zarlink Semiconductor
 Zensys

**New
 Members
 Since
 June!**

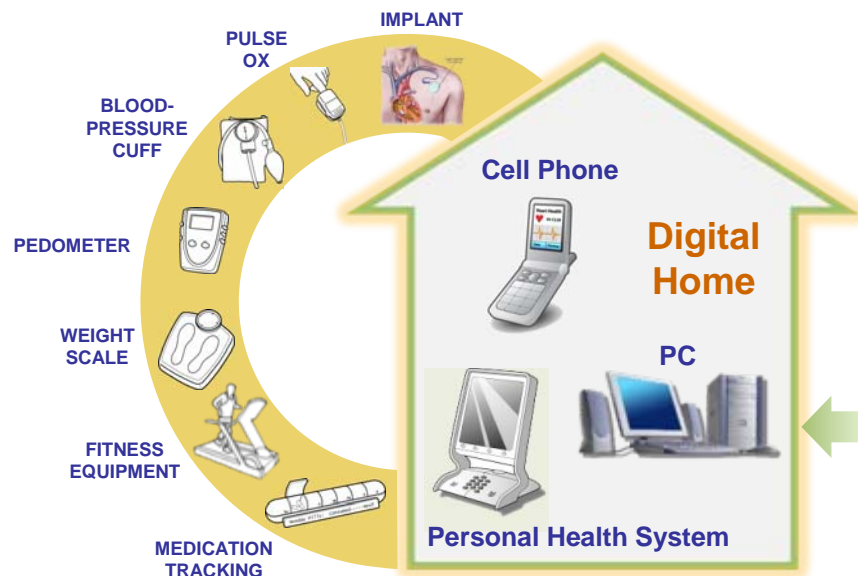
“Our Mission is to establish an eco-system of interoperable personal health systems that empower people & organizations to better manage their health and wellness”



- Chronic disease
- Post trauma
- Pre-op

Disease Management

- Vital sign monitoring (Remote Patient Monitoring)
- Medication reminders and compliance
- Utilize home network to locate devices in logical places:
 - Scale in bathroom
 - Pill minder in kitchen
 - Blood Pressure cuff in living room
- Trend analysis and alerts
- Email, chat, video
- Appointment scheduling



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.





Cell Phone

Bonnie

Nursing Bag

Video Conferencing Equipment

ID Badge

Stethoscope

Coagulometer

Point of Care Device (Laptop)

Ultrasound

Glucometer

Telemonitor

Pulse Oximeter

Weight Scale (missing: Baby Scale)

Pager

Instant Camera

Sphygmomanometer (Blood Pressure Cuff)

Trunk Box of Medical Supplies

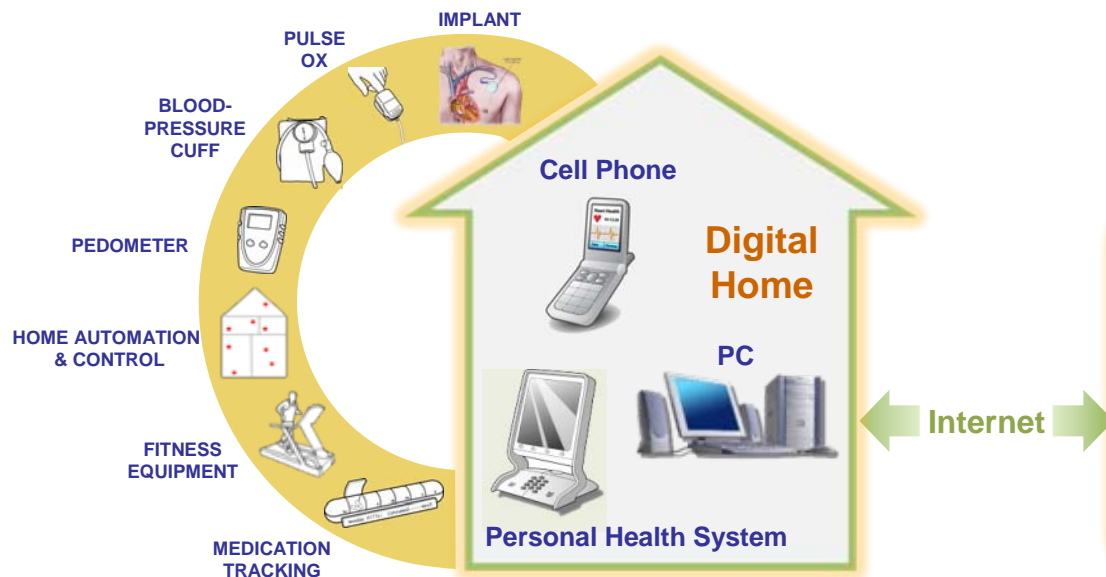
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- **Independent living**
- **Chronic disease**

Aging Independently

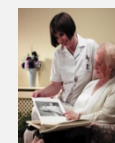
- An adult child helping their elderly parents age gracefully in their own home
- Basic life monitoring as appropriate (ADL):
 - Bed pressure (sleep)
 - Bathroom sensor
 - Gas / water sensor
 - Emergency sensor
- Vital sign monitoring (RPM)
- Medication reminders and compliance
- Trend analysis and alerts
- Email, chat, video
- Appointment scheduling



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 & wellness services



Disease management Service, Healthcare provider



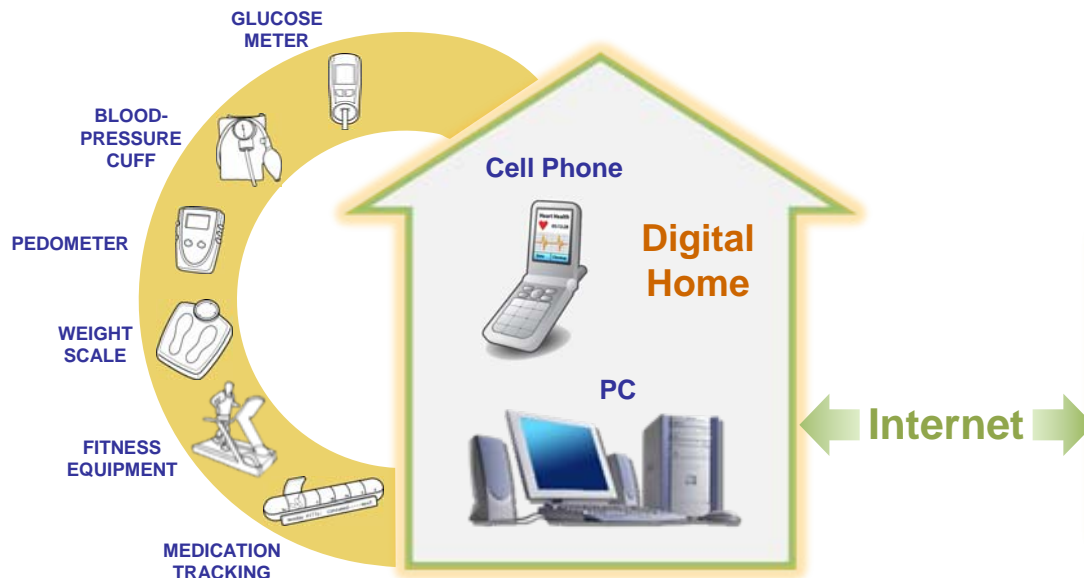
**Healthy
Family**

Health & Wellness

- Weight loss
- Fitness
- “Worried Well” vital sign monitoring:
 - Weight
 - Blood pressure
 - Glucose
 - Cholesterol
 - Activity level
- Personal Health Records
- Appointment scheduling

In the future...

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



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**



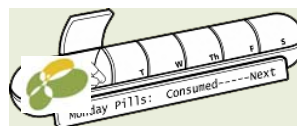
**Personal
Health
Record**

- **GUIDELINES:**

Continua member companies will select connectivity standards and publish Guidelines for strict interoperability.

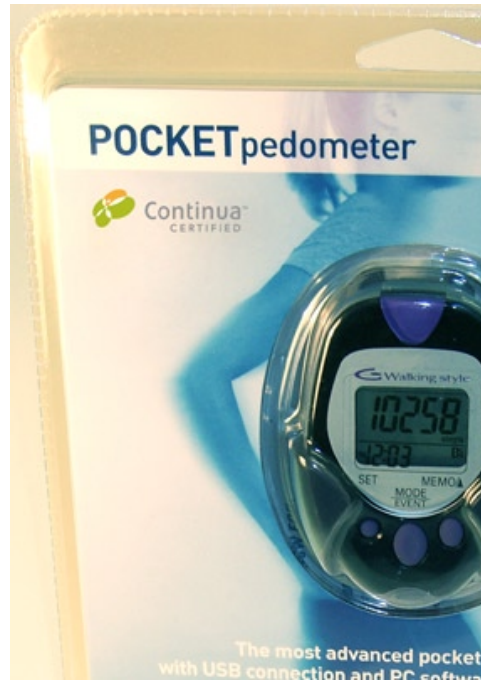
- **CERTIFICATION & LOGO:**

Continua will establish a certification program with a consumer recognizable logo signifying the promise of interoperability with other certified products.



Recognizable Logo

PRODUCT PACKAGING



ELECTRONIC MEDIA / SOFTWARE



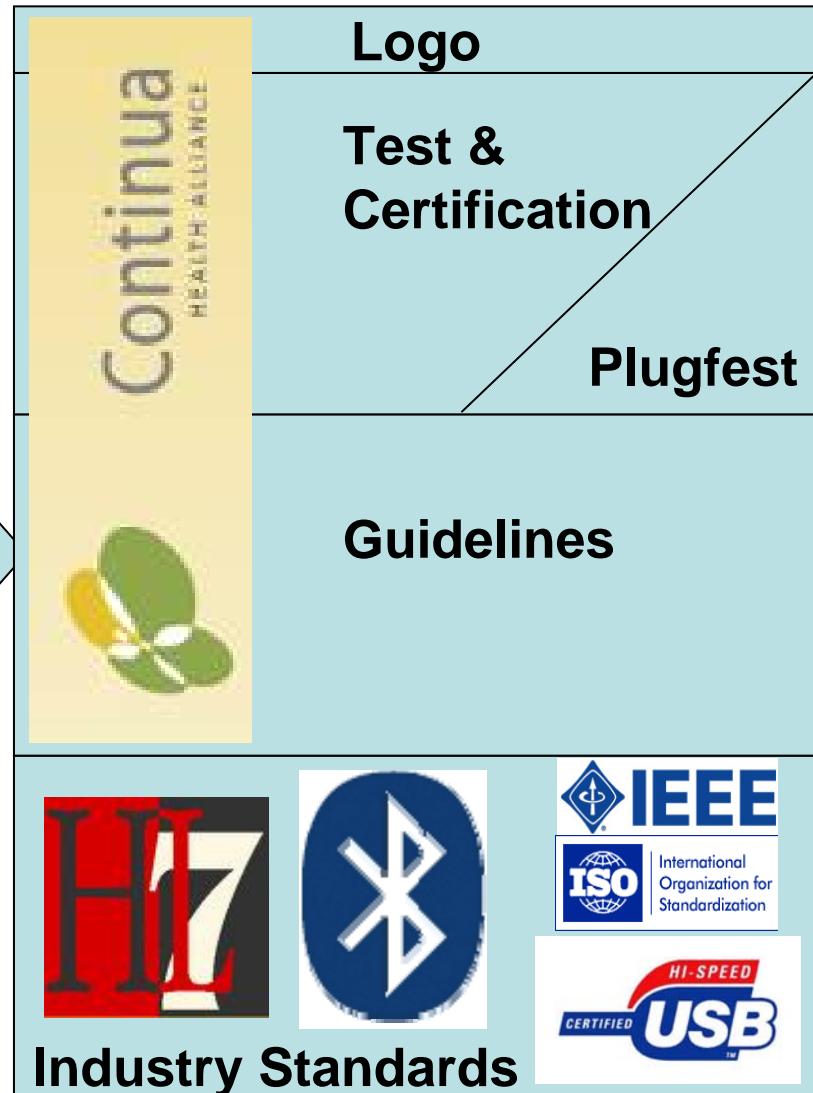
PRODUCT APPLICATIONS

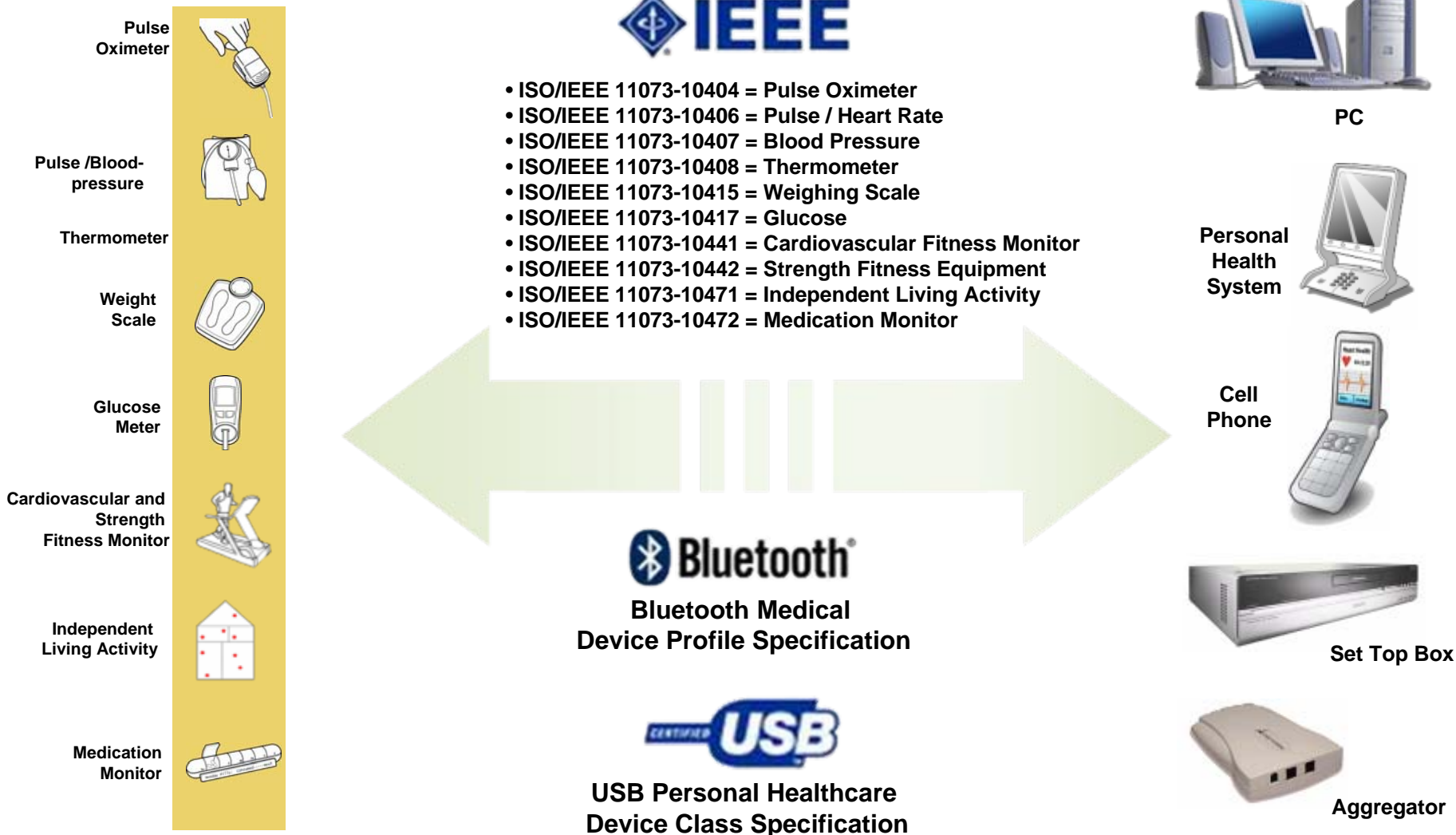


PRODUCT SUBSTRATES



WiFi Alliance- Successful Example





Disease Management Service Provider



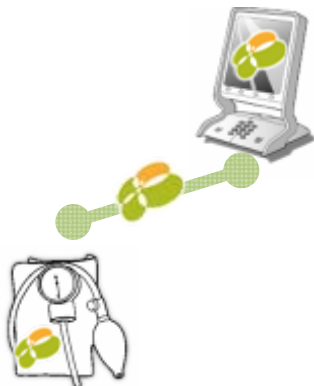
Disease management nurse or home care nurse

Remote Patient Monitoring (RPM) Server

Home based Remote Patient Monitoring (RPM) System



Patient



Vital Sign Devices

Continua xHR Interface
(Data, Message, Security)



Healthcare Provider

Electronic Health Record System


Labs



EHR

Free Reference Source Code

- Continua has roughly 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.
- 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
- Structured as Library of modules w/ API



**Save \$500-600K
on product
development!**

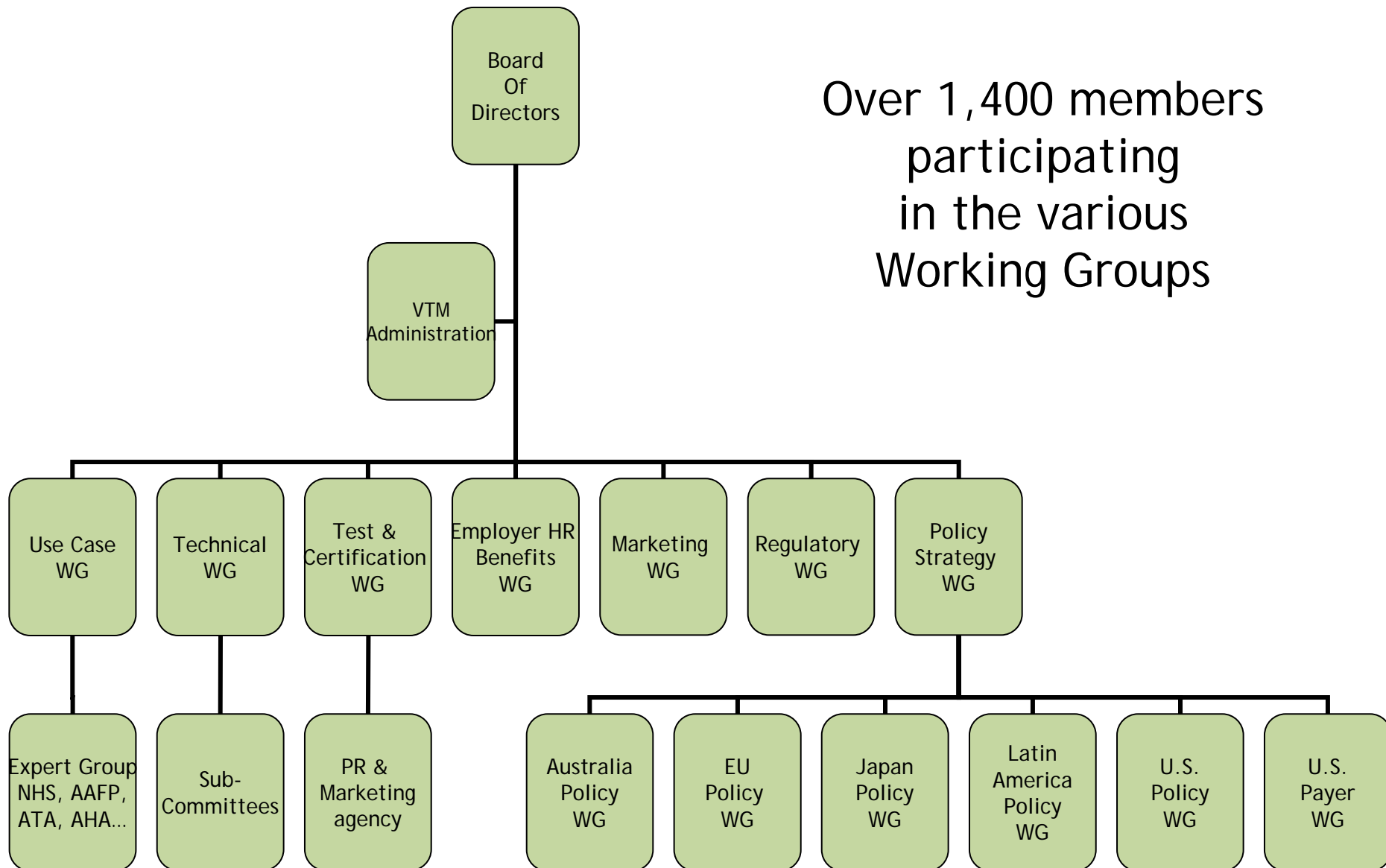
Pre-product components arrive!



- Groundbreaking platform allows medical devices to communicate wirelessly
- US\$5 platform lets consumers effortlessly monitor health at home
- Cambridge Consultants today announced the first demonstration of the emerging industry standards for medical device interoperability. The 'Vena' platform is a breakthrough software solution on a single chip that allows medical devices such as blood pressure monitors to transmit data wirelessly. The development gives consumers, especially those with chronic conditions, the ability to monitor their own health accurately, systematically and independently. This platform uses low-cost wireless technology and will allow devices to deliver medical readings to a central monitor located in the home, or even to an online health record such as Google Health or Microsoft Health Vault. The Vena software solution can be added to a medical device using hardware with a potential cost of less than US \$10 at the appropriate volumes and could even be available in medical devices by the end of 2008.
- For the first time, the Vena platform embeds both the emerging IEEE11073 standard, which ensures compatibility of data exchanged between different types of devices, and the emerging Bluetooth Medical Device Profile, optimised for the secure transport of medical data, onto the single chip. Successfully concept tested with a pulse oximeter and weighing scales, the platform will be expanded to include other types of devices including blood pressure monitors. The platform is also capable of delivering a complete display, which means that device manufacturers now simply need to add their sensor of choice and the device is wireless-ready.

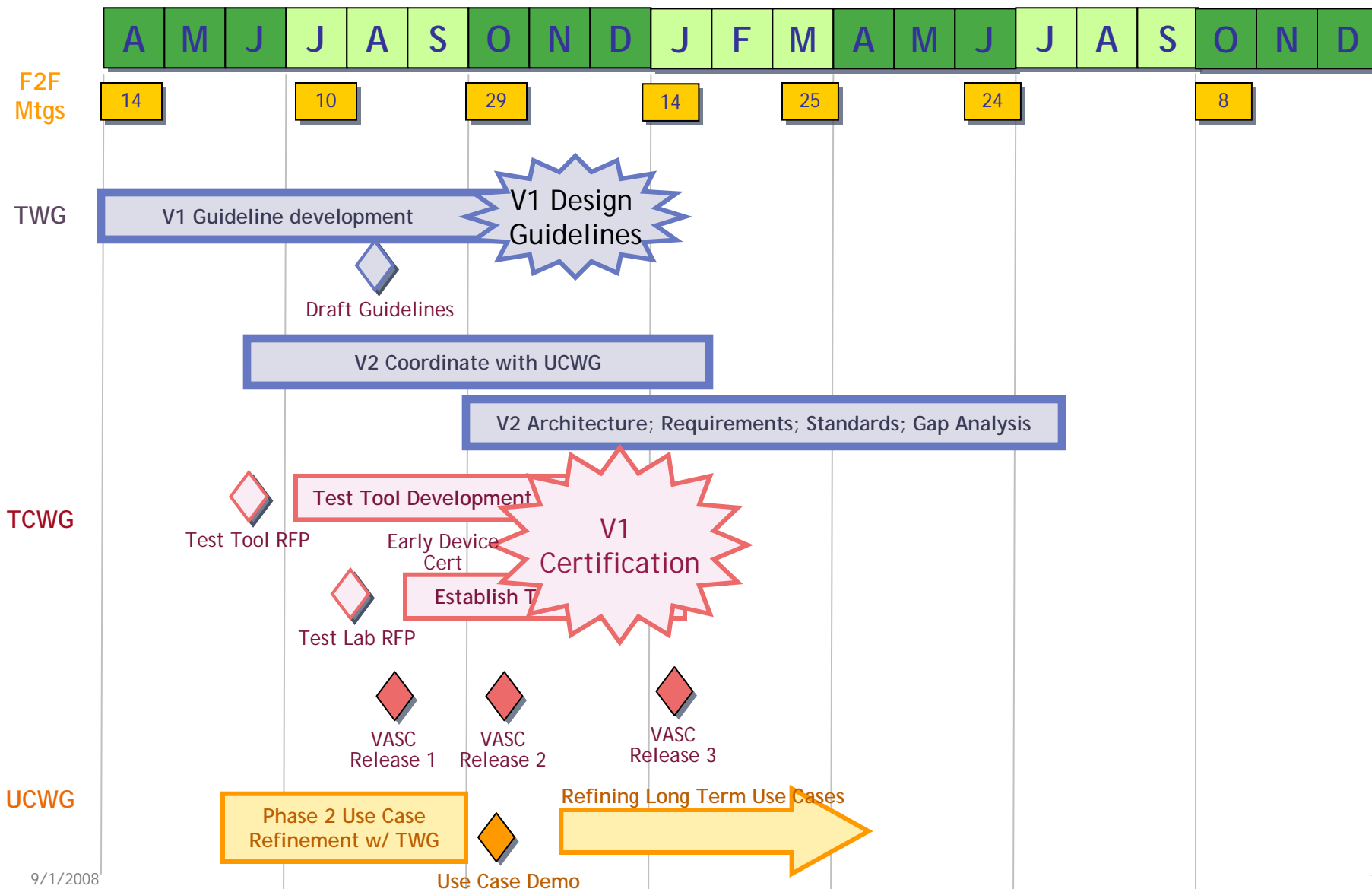
Working Group Structure

Over 1,400 members
participating
in the various
Working Groups



2008 / 2009 Roadmap

Q2 '08 Q3 '08 Q4 '08 Q1 '09 Q2 '09 Q3 '09 Q4 '09



2008 / 2009 Roadmap

Q2 '08 Q3 '08 Q4 '08 Q1 '09 Q2 '09 Q3 '09 Q4 '09

A M J J A S O N D J F M A M J J A S O N D

F2F
Mtgs

14

10

29

14

25

24

8

HR WG

Future
State
Paper
Available

Pilot
specification,
pilot
specification,
and Exec.
Presentation

Global
Policy
WG

US Advocacy
Day

US Policy
Environment Paper

US Legislative /
Regulatory
Proposals

EU Advocacy
Day

EU Advocacy
Day

US Advocacy
Campaign

RWG

Finalizing FDA Paper

Regulatory
Panel

Submit standards to FDA

MWG

Product Showcase Dev.

Web site Revamp / Consumer Site

MKTG Plan Dev.

2009 MKTG Plan

Healthcare
Unbound

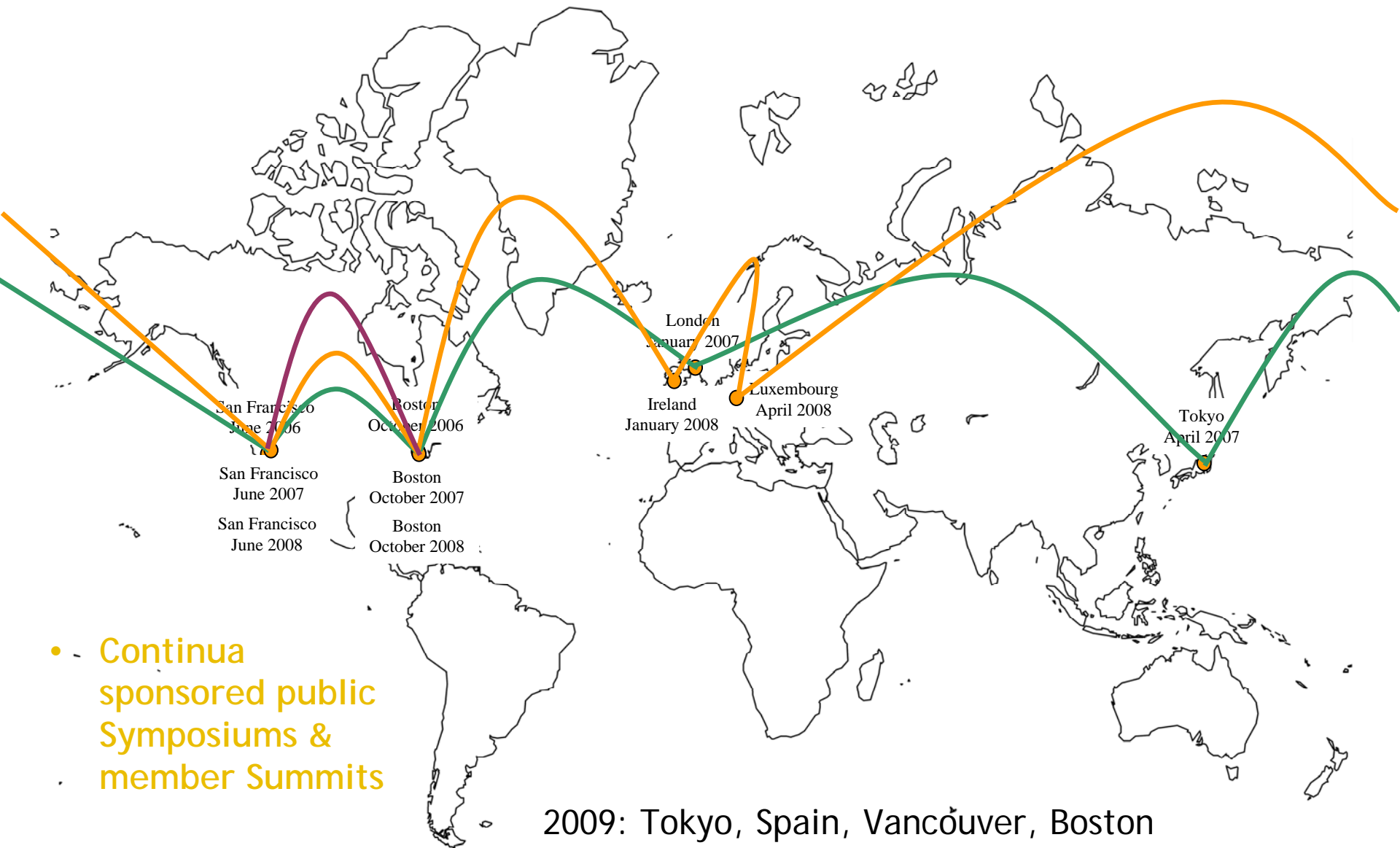
IMHS

HIC

Partners
Symposium


Medica

CES



- Continua sponsored public Symposiums & member Summits

- Continua has received numerous inquiries from members and non-members requesting help in finding appropriate vendors for new health and chronic disease management programs



Let Continua
help you
find partners!

- **The Continua Matchmaking Program:**

- 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/



Come see us in our booth! Thank you!

admin@continuaalliance.org

www.continuaalliance.org