Interoperable Personal Health Systems as a Key Tool in New Health Delivery Models

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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"

The Continuum of Care

Infant

Amateur Athlete

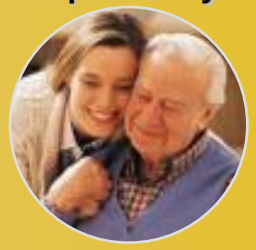
Diet/Fitness Focused

Worried Well

Chronic Patient

Acute Recovery

Elderly Living Independently



CONTINUUM of LIFE

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.

CONTINUUM of CARE GIVERS

New Parents

Fitness Wellness Coach

The Family

Home Nursing Professional

Doctor/NP/Nurse

Eucomed MedTech Forum

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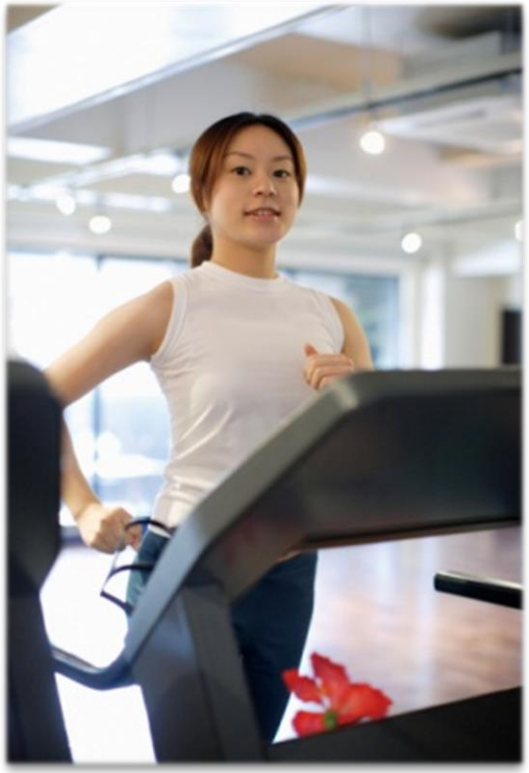
Health & Wellness	Chronic Condition Management	Living Independently Longer



Ecosystem Development

Market ecosystem

- Political focus
- Certification - devices
- Certification – personnel & Services
- Reimbursement
- Incentives
- Skills - education and training

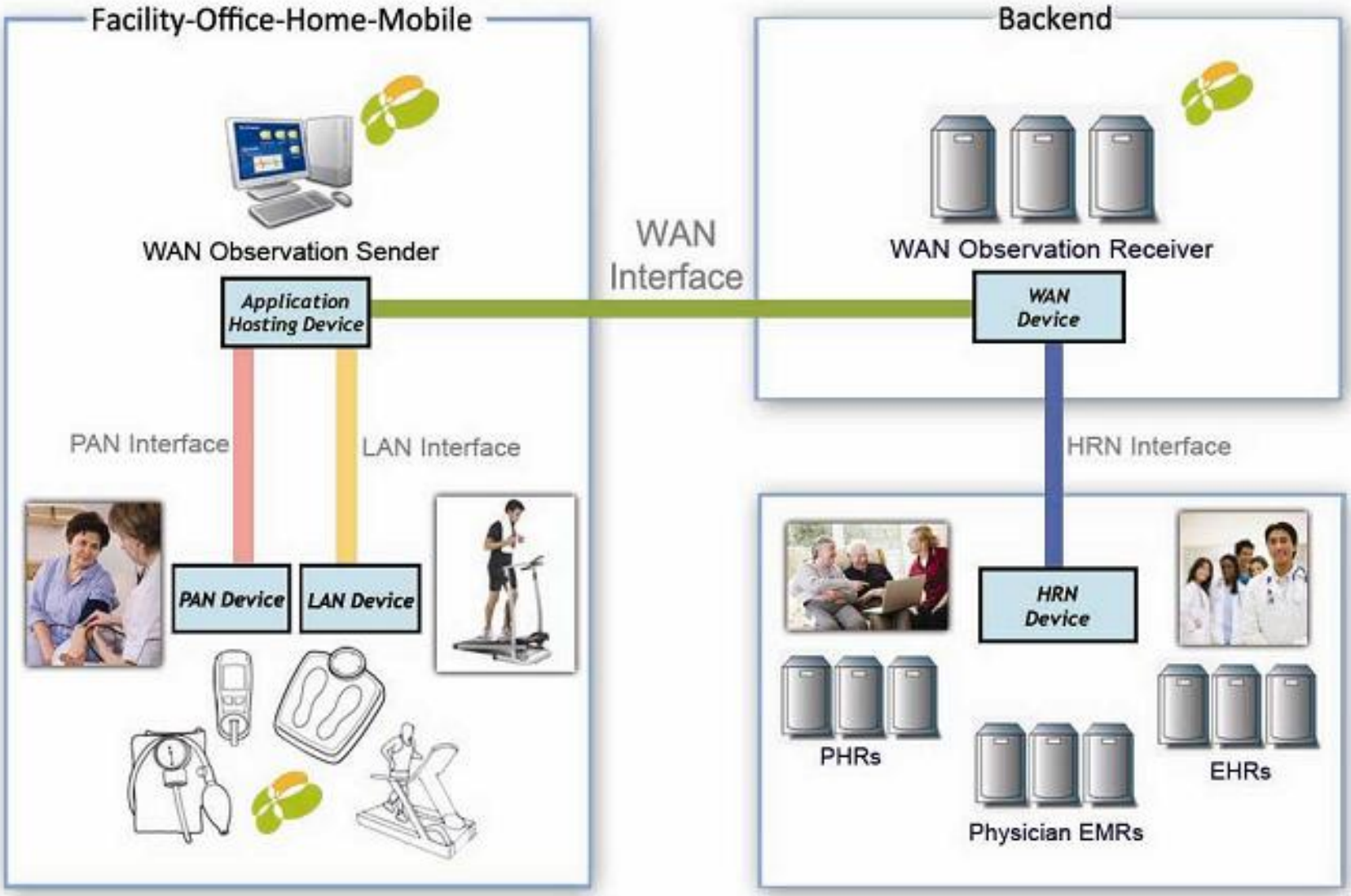
Developer Resources

- Web-based environment (repository, collaboration tools)
- Reference source code
- Market intelligence

Device and Service Certification

- Continua test and certification tools
- Recognisable logo

Interfaces & Standards



Interfaces & Standards

Personal Device

- Thermometer
- Pulse Oximeter
- Pulse / Blood Pressure
- Weight Scale
- Glucose Meter
- Cardio / Strength
- Independent Living Activity
- *Peak Flow*
- Adherence Monitor
- *Physical Activity*

ISO IEEE

Aggregation Manager

ZigBee

Local Area Network (LAN) Interface

Bluetooth

CERTIFIED USB

Personal Area Network (PAN) Interface

Telehealth Service Center

IHE HL7

W3C

Wide Area Network (WAN) Interface

HL7

IHE

Health Record Network (HRN) Interface

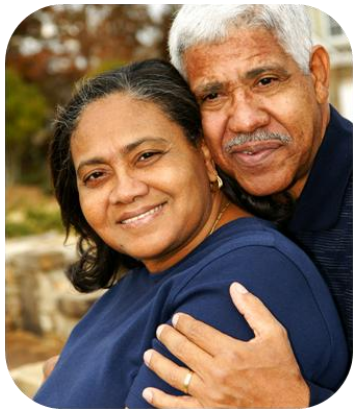
Health Records

EHR

PHR

The Challenge

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



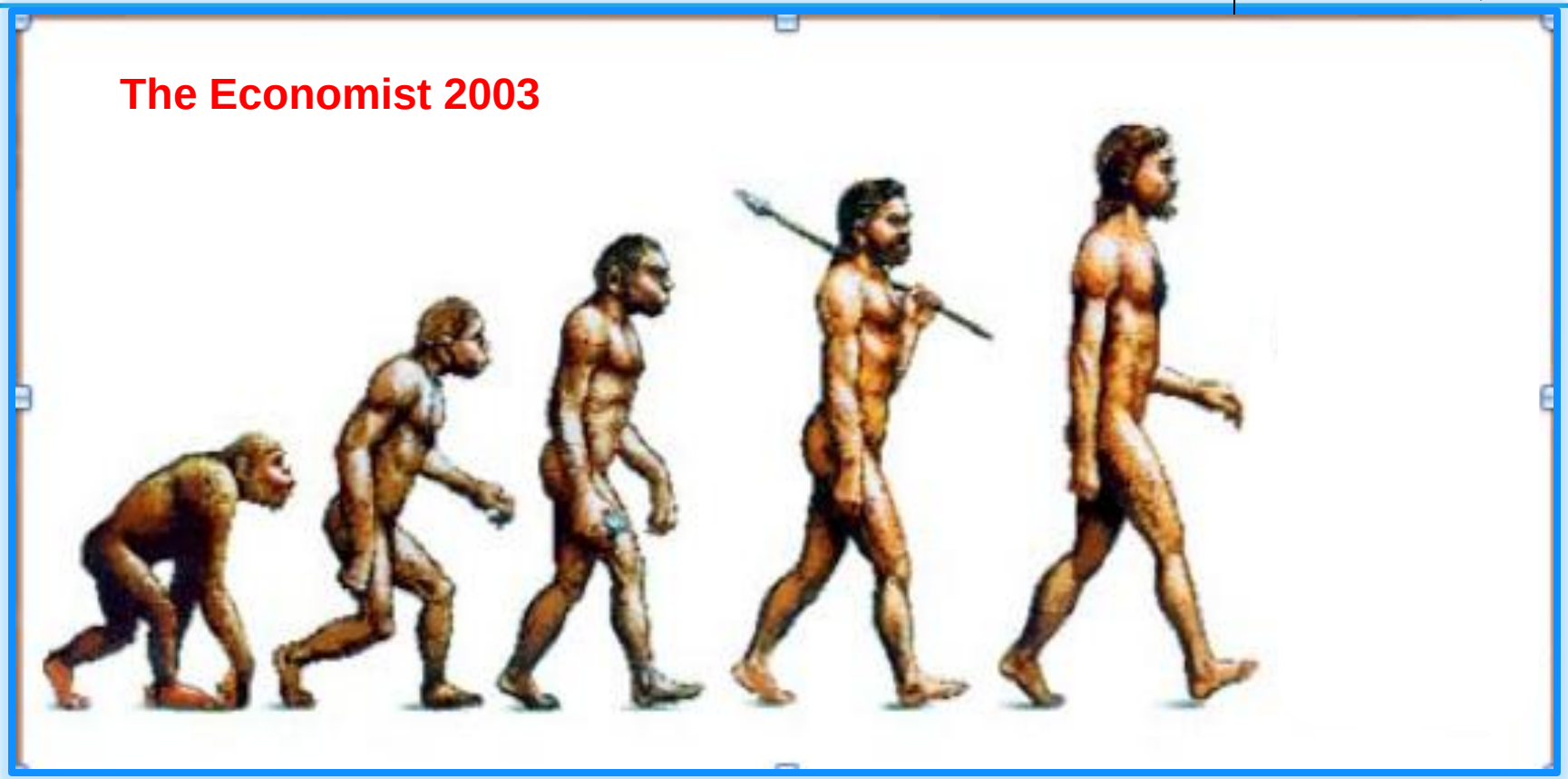
  - 75-85% of healthcare spending is on chronic disease management

Source: World Health Organization; McKinsey

Life Style is out-paceing biology

5-6 Million Years

30-40 Years



One billion adults overweight world wide

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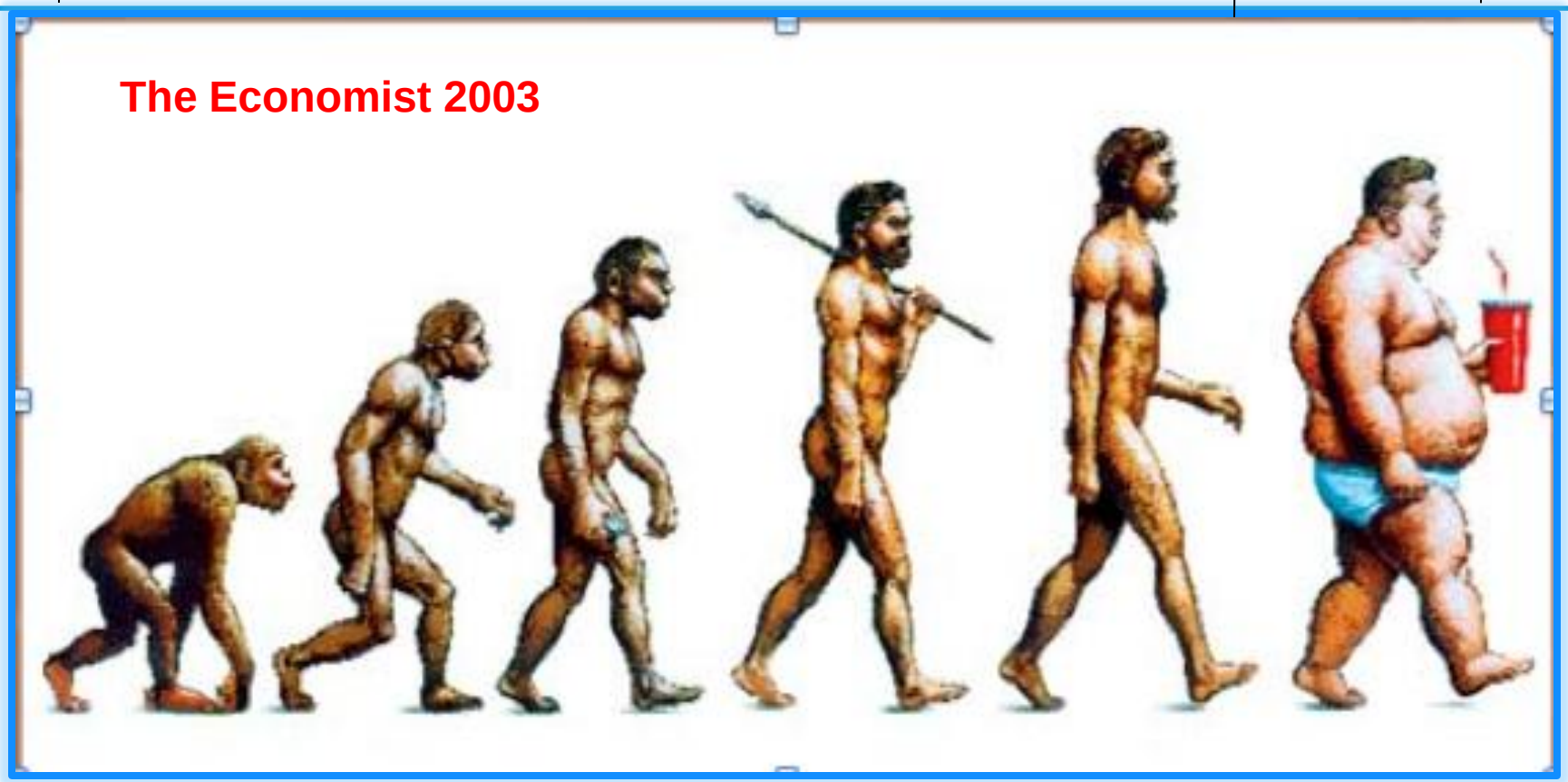
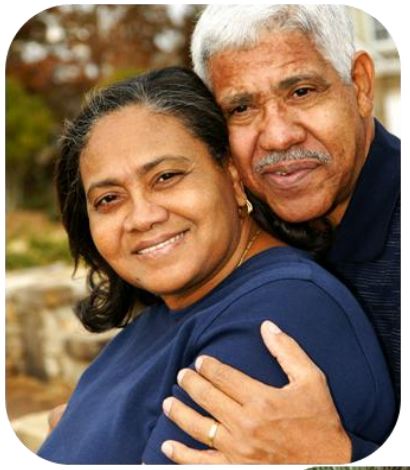


One billion adults overweight world wide

One Opportunity: Healthy Gaming

- Shorter-term
  - Integrating health activities into games
  - Simple secondary inputs
- Longer term
  - Chronic disease
  - Diagnostic gaming
  - Rehabilitation



Source: World Health Organization; McKinsey

Devices in market:

- **Activity monitor**
- **Cardio monitor**
- **Pulse rate**
- **Weight Scale**
- **Thermometer**
- **ECG**
- **Glucometers**
- **Pulse/Oximeters**
- **Spirometry**
- **Blood Pressure**
- **Medication Adherence**

Collection hubs in use:

- **Mobile Handset**
- **PC Software**
- **Purpose built units**

Organized Competition for engagement:

Studies repeatedly show that:

- Competition is highest driver
- In a group that is non-threatening
- Group results

Can provide optimized results

- Near real-time
- Multiple measurements for diversity

Can provide a safety measure in sports

- Sensor technology can be deployed for safety

Getting on the Treadmill – Economist 8th Oct 2011

Devices are portable and can be shared in situ

Eucomed MedTech Forum

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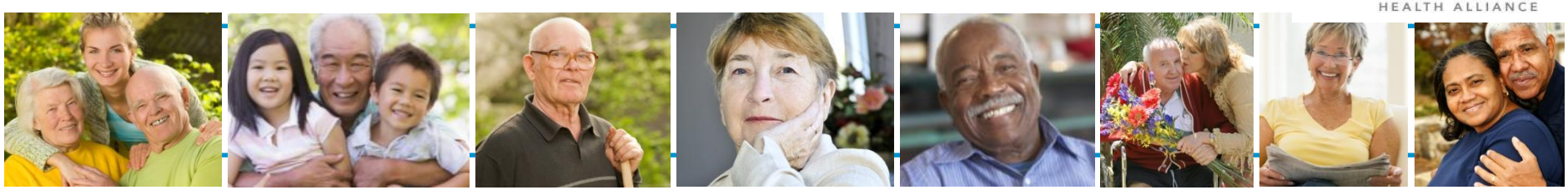

Focus on the Individual

Industry Standards

IHE · IEEE · HL7 · Bluetooth · CERTIFIED USB

End to End Architecture

Thank you

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