

Emerging Opportunities for eHealth

Jason Sroka
Orange Labs Boston

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Agenda

- What is eHealth?
- Demographic Trends and Cultural Factors
- Technology Trends
- Areas of Opportunity



What is eHealth?

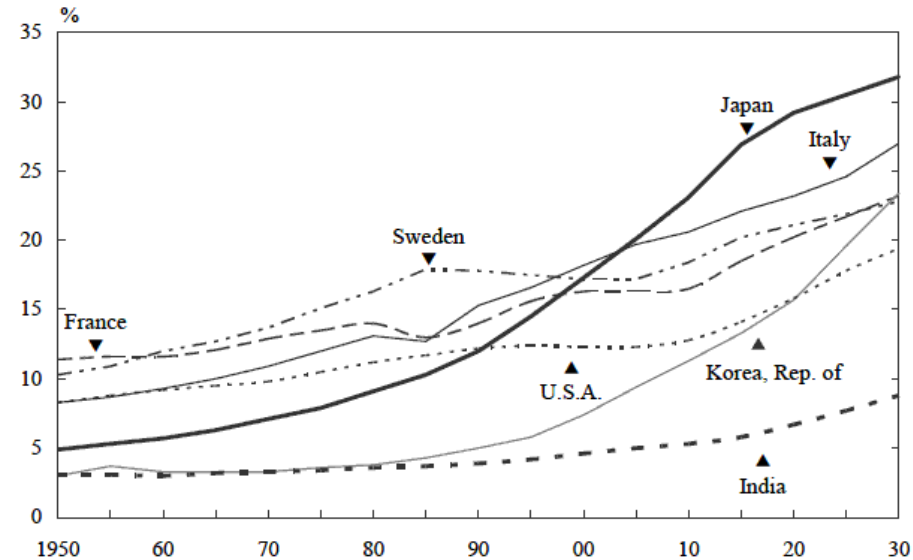
- Relatively new, still somewhat nebulous term
- Refers to application of Information and Communication Technology (ICT) to health care
 - Formal health care settings (hospitals, clinics)
 - Personal health care (home, mobile)
- Encompasses range of technologies
 - Web services
 - Multiple communication modes (audio, video, email, chat, SMS)
 - Machine to machine communications (wired and wireless)
 - Ubiquitous sensors
- Wide range of applications
 - Telemedicine (formal health care)
 - Remote monitoring (formal and personal)
 - Personal health & wellness goal setting and tracking
 - Electronic Health Records



Demographic Trends and Cultural Factors: Japanese Example

- Demographics:
 - Increasing % of elderly in developed societies
 - Result: Smaller pool of supporters and caregivers
- Cultural Factor:
 - Physicians prefer to work in urban settings
 - Preference for face to face communications

Proportion of Elderly Population by Country (Aged 65 years and over)



Source: Statistics Bureau, MIC; United Nations; Ministry of Health, Labour and Welfare.

Courtesy of Statistics Bureau, Ministry of Internal Affairs and Communications (Japan). Used with permission.

Japanese situation is a clear case where telemedicine can address a need



Technology Trends

- Communication devices increasingly ubiquitous
 - Internet access nodes (PCs, laptops, etc.)
 - Mobile phones
- Sensors increasing in utility
 - Personal measurement devices: heart rate, blood pressure, glucose levels, accelerometer
 - Easy machine-to-machine data transfer: wireless standards, USB sticks, etc.
- Standards emerging for different market segments
 - Increases overall market size by increasing consumer willingness to use (avoids lock-in to proprietary solution)
 - Allows larger ecosystem of contributors
- Expanding and improving infrastructure
 - Increases volume of information readily available
 - Enables high-bandwidth services (e.g. videoconference for telemedicine)



Areas of Opportunity

- Aging Independently
 - Use monitoring tools to reduce demands on caregivers while allowing elderly to live at home
 - 600 million people aged 60+ worldwide
- Chronic Disease Management
 - Monitor evolving condition outside of formal health care settings
 - 75-85% of healthcare spending is for disease mgmt
- Personal Health & Wellness
 - Empower individuals to take control of their health and realize their health goals
 - 1 Billion overweight adults
- Electronic Health Records
 - Standardize medical information storage and allow exchange across personal and formal settings
 - ~8% of US hospitals have some kind, <2% have comprehensive system
- And many more...



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HST.921 / HST.922 Information Technology in the Health Care System of the Future
Spring 2009

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