Public & Private Partnerships
Building Digital Inclusion into eHealth initiatives

Dan MacFetridge
European Director of Public Private Alliances
Microsoft Corporation
European Leaders Identify Health as #2 Priority for ICT Innovation

Most important societal challenges requiring ICT innovations in the next decade

- Health and social care systems
- Ageing Population
- Energy efficiency
- Environmental sustainability
- Education and learning systems
- Better security for citizens
- Efficient Transport
- Better Governance
- Other
4 Key Areas of Economic Benefit from Digital Inclusion

1. Improved education and employment outcomes, for example as individuals enhance their qualifications and this improves their earnings and/or their probability of finding employment

2. Improved health and well being outcomes - ie. through access to improved health information and health services

3. Efficiency savings for public service providers enabled by greater use of online information and transactional services

4. Potential benefits for consumers able to purchase a wider range of products and services at lower prices.

Building a Digital Inclusion Consortia

Governments
Inclusive social, health & economic development

People
Access to the information society and services

Collaboration

Industry
Market Growth, leadership & citizenship
Outcomes from Digital Inclusion Programs

- Better service
- Improve perception
- Avoid expenses

Sustainability

- Timely information
- Remote treatments
- Improve quality of life

- Reduce costs
- Customize services
- Increase revenues
### Impact of Digital Inclusion on Health & Wellbeing

<table>
<thead>
<tr>
<th>Input</th>
<th>Activity</th>
<th>Output</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital inclusion</td>
<td>Access to health information</td>
<td>Increase in healthy literacy levels and health awareness</td>
<td>More effective decision making about when to access health services</td>
<td>Avoided health service costs to providers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase in user access to the right information at the correct time</td>
<td>Greater efficiency of GP consultations</td>
<td>Avoided health service costs to user</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access to personal medical history</td>
<td>Increase in users’ involvement in screening programmes</td>
<td>Improved health and quality of life</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Increase on users’ involvement in vaccine programmes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Users access the appropriate level of care</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Appropriateness of time spent at GP’s increased</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reduced attendance at accident and emergency</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Early detection of illness</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Avoided illness</td>
<td></td>
</tr>
<tr>
<td>Access to health service information</td>
<td></td>
<td>User has greater choice in health services</td>
<td>Did not attend rates decreased</td>
<td>Increased productivity and efficiency of health services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to find health service providers increased</td>
<td>User control in the decisions about their care increased</td>
<td>Avoided health service costs to providers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to make an informed selection of provider on the basis of preferred criteria increased</td>
<td></td>
<td>Avoided costs to user</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to manage and reschedule services increased</td>
<td></td>
<td>Personal Satisfaction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to access health services faster</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Users’ ability to personalise their health service increased</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to health services</td>
<td></td>
<td>Users accessing care in the appropriate/preferred setting increased</td>
<td>Increase in users accessing care from home</td>
<td>Improved quality of life</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Users’ ability to manage their long-term conditions in the community increased</td>
<td>Reduced demand for hospital beds</td>
<td>Reduced transaction costs for health services user</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduced demand for GP consultations</td>
<td>Reduced user cost in accessing health services</td>
<td>Avoided cost and more efficient use of health services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Greater efficiency of GP consultations</td>
<td>Reduced transaction cost for health service provider</td>
</tr>
</tbody>
</table>

**Benefits that accrue to health service providers**

- Increased productivity and efficiency of health services
- Avoided health service costs to providers
- Avoided costs to user

**Benefits that accrue to health service users**

- Improved quality of life
- Reduced transaction costs for health services user
- Avoided cost and more efficient use of health services
Developing the Sustainable Model

- **Devices Optimized for E-Health**
- **Better Health Care Services for All Citizens**
- **Connecting Health Care Professionals with Patients**
- **Telcos, Banks, Pharma, ICT, Gov’t**

- Hardware & Infrastructure
- Gov’t Policies
- Local Programs
- Public and Private Partnerships
- Software & Services

Microsoft
Microsoft’s Partnership for Digital Inclusion

Microsoft has provided the following types of assistance in more than 50 existing Public/Private Partnership activities worldwide:

- Optimized pricing for software
- Development assistance with infrastructure
- Training content and facilities
- Help desk development
- Local community center empowerment
- Reinvestment to support government sponsored initiatives
- Public/Private Partnership development
- Strategic investment in-country
Connecting 400k special needs patients with Healthcare professionals
Building sustainable partnership in e-Health

400k Healthcare professionals and patients with Special Needs in São Paulo are being offered an e-Health notebook with relevant state-provided content

• The Partnership: São Paulo State Government, the Dep’t of Rights for the Physically Disabled, Microsoft, Intel and the Medicine Dep’t of the University of São Paulo

• The Project: Develop new technology to improve accessibility to computers

• The Technology: A new Health Notebook and a Special Needs Notebook

• The Goal: A Public/Private Partnership to help people with special needs achieve their full potential

Creating 2-way online communication between Patients and Healthcare professionals
Online services whereby users can select the best practitioners, book and reschedule appointments

- Created a significant reduction in ‘did not attend’ rates for in-person patient visits
- Cost savings estimated at >€100M in 2008
- 87% of savings attributed to NHS, with 13% to local Health service users
- Established a two-way flow of information between patients and healthcare providers

Varney, D, ‘Service Transformation: A better service for citizens and businesses, a better deal for the taxpayer’, 2006, page 16 [http://www.hm-treasury.gov.uk/d/pbr06_varney_review.pdf](http://www.hm-treasury.gov.uk/d/pbr06_varney_review.pdf)
### Potential benefits associated with avoided GP consultations in the UK

<table>
<thead>
<tr>
<th>Potential benefits of NHS Choices</th>
<th>Socially and digitally excluded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Families with children</td>
</tr>
<tr>
<td>Population size</td>
<td>760,000</td>
</tr>
<tr>
<td>Average number of Visits per year</td>
<td>4</td>
</tr>
<tr>
<td>Avoided cost of GP consultations</td>
<td>£5.7 million</td>
</tr>
</tbody>
</table>

Based on average number of GP consultations: [http://www.statistics.gov.uk/downloads/theme_compendia/GHS06/GHS06chapter7-Health.xls](http://www.statistics.gov.uk/downloads/theme_compendia/GHS06/GHS06chapter7-Health.xls)
An example beyond eHealth: Portugal’s Digital Inclusion Benefits from ‘Magellan’

- €2.3 billion in indirect economic activity
- Enhanced ability to attract foreign investment
- Increased tax revenues
- 22% wireless broadband growth
- 30,000 teachers trained
- Over 1500 jobs created
- Hundreds of ‘spin off’ jobs created
- National pride and increased competitiveness
- Incumbent government re-elected
Financing and Business Models

Key aspects for consideration:

- Evaluate the implications of distribution
  - Economic expectations will drive delivery models
- Target the right users
  - Address motivated users first – and seek opportunities for exponential impact across audiences
- Plan the purchasing model
  - ‘Contribution according to need’ – scaled investment
- Plan for sustainability
  - Government goal must remain focal point for consortia
  - Industry viability must be maintained
A short summary of learnings...

- Economic viability trumps good intentions
- ‘Cool technology’ is no substitute for need
- Investment should be shared by all in the consortia – citizen, industry, government
- Business models must be sustainable
- Political implications must be raised in advance
- Social outcomes will drive demand
- Use focus groups, not pilots to evolve the solution
- Transparency raises chances for sustainable success
Thank You