Basque Node on Ageing in the Knowledge and Innovation Community (KIC) "Innovation for a Healthy Life and Active Ageing"

Brussels, 2nd October 2012
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3. Relevance of the Basque Country in Healthy Ageing
2.171.243

Figures of the Basque Country (Spain)

Table 1. Human Development Index basic indicators

<table>
<thead>
<tr>
<th></th>
<th>Life expectancy at birth</th>
<th>Education index</th>
<th>Per Capita GDP (PPP) (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basque Country</td>
<td>80.80</td>
<td>0.988</td>
<td>34,026</td>
</tr>
<tr>
<td>Switzerland</td>
<td>81.30</td>
<td>0.946</td>
<td>35,633</td>
</tr>
<tr>
<td>Spain</td>
<td>80.50</td>
<td>0.967</td>
<td>27,169</td>
</tr>
<tr>
<td>Sweden</td>
<td>80.50</td>
<td>0.978</td>
<td>32,525</td>
</tr>
<tr>
<td>Italy</td>
<td>80.30</td>
<td>0.956</td>
<td>28,529</td>
</tr>
<tr>
<td>France</td>
<td>80.20</td>
<td>0.982</td>
<td>30,386</td>
</tr>
<tr>
<td>Norway</td>
<td>79.80</td>
<td>0.991</td>
<td>41,420</td>
</tr>
<tr>
<td>Austria</td>
<td>79.40</td>
<td>0.966</td>
<td>33,900</td>
</tr>
<tr>
<td>Netherlands</td>
<td>79.20</td>
<td>0.998</td>
<td>32,684</td>
</tr>
<tr>
<td>Germany</td>
<td>79.10</td>
<td>0.963</td>
<td>29,461</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>79.00</td>
<td>0.970</td>
<td>33,238</td>
</tr>
<tr>
<td>Finland</td>
<td>78.90</td>
<td>0.993</td>
<td>32,153</td>
</tr>
<tr>
<td>Greece</td>
<td>78.90</td>
<td>0.970</td>
<td>23,381</td>
</tr>
<tr>
<td>Belgium</td>
<td>78.80</td>
<td>0.977</td>
<td>32,119</td>
</tr>
<tr>
<td>Ireland</td>
<td>78.40</td>
<td>0.993</td>
<td>38,505</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>78.40</td>
<td>0.942</td>
<td>60,228</td>
</tr>
<tr>
<td>Denmark</td>
<td>77.90</td>
<td>0.993</td>
<td>33,973</td>
</tr>
</tbody>
</table>

Source: Data for selected countries from UNDP report 2007 (data corresponds to year 2005).

The Government of the Basque Country is turning this challenge into an opportunity including a new vision of health care and of the role in society of older people.
1. Who are we? Tecnalia (I)

We are the leading private R+D+i entity in Spain and the fifth largest in Europe, with a staff of over 1,450 and an annual turnover of approximately 125 million Euros.

**R&D in Health**: eHealth // Assistive technology // Rehabilitation Engineering // Biomaterials // Bioprocess.

www.tecnalia.com
1. Who are we? Tecnalia (II)
This Association aims to promote national candidacy to the location in Southern Europe of the "KNOWLEDGE AND INNOVATION Communities" (KIC) on Health and Aging (Healthy Ageing).

Founding partners are:

- **Basque Public Health system** (Deputy Ministry of Health Research and Innovation of the Basque Country, BIOEF -The Basque Foundation for Health Innovation and Research- and KRONIKGUNE -center of international excellence in research on chronicity-)

- **TECNALIA**

- **Ageing Innovation Cluster** (consisting of six Basque companies: Fundación Matia, Policlínica Gipuzkoa, Ikusi, Euskaltel, Tecnalia e Ibermática)

- **MONDRAGÓN Corporation**

- **University of the Basque Country**, UPV-EHU

- **IK4 Research Alliance**

- **MATIA Foundation.** Main care services provider in North Spain
Mission:

Develop an application to the call for KICs in the field of health and aging that will maximize the chances of success, expressing a clear leadership and containing an inclusiveness capacity for multi-agent and regions in a stable way.

An application well connected to European strategies on health and aging (Horizon 2020 and EIT), and the regional strategies themselves and which is equipped with a manifested ambition beyond the contribution of the sum of the parts.

Strategic objectives:

i. Creation of a new industry and diversification of the existing one (innovation)
ii. Creation of new business models and opening new markets
iii. Incorporate the necessary training of new professionals and citizens
iv. To provide a new model for providing social and health services of higher quality
v. To meet the growing needs of an aging population
vi. Involve different regions, agents and policy makers to implement these models
2. BASQUE PUBLIC HEALTH (I)

- **Euskadi as international benchmark** in innovation on chronicity and ageing
- **R&D&I promotion environment:** KRONIKBASQUE Strategy within the Science, Technology and Innovation Plan 2015
- New structures at local, regional, national and international level to build bridges between research and innovation and to improve healthcare services: creation of **Kronikgune** (Research Centre of Excellence on Chronicity) and **Etorbizi** (Basque Foundation for Social Healthcare Innovation)

- **2.1 million citizens**
- **Osakidetza – Basque Public Health Service**
  - covers *80% of hospital care and 90% of primary health care.*
  - *25,000 members* of staff
  - *249 research groups*
  - *1110 medical researchers*
    - *82% combine research and health care*
    - *266 with full-time dedication to research*

Basque Healthcare R&D €43.5M in 2010
2. BASQUE PUBLIC HEALTH (II)

RESULTS

<table>
<thead>
<tr>
<th></th>
<th>Patients (No.)</th>
<th>Emergency Average</th>
<th>Admissions Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to strategy</td>
<td>3.76</td>
<td>3.76</td>
<td>2.4</td>
</tr>
<tr>
<td>March 2012</td>
<td><strong>47</strong></td>
<td><strong>1.36</strong></td>
<td><strong>1.1</strong></td>
</tr>
<tr>
<td>% Diff</td>
<td><strong>-63%</strong></td>
<td><strong>-54%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Result of one of them: management of patients with multiple disorders.

170 organisational innovation projects using ICTs and innovative healthcare products.

Policies are introduced by way of 14 strategic projects:

- **Vision**
  - Strategic Projects
    - Population Focus
      - 1. Stratification and targeting of the population
    - Prevention and Promotion
      - 2. Interventions aimed at the principal risk factors (e.g. giving up tobacco, promoting a healthy lifestyle, care for the elderly)
    - Patient autonomy
    - Continuity of care
      - 4. Setting up a network of activated patients connected through the adoption of new Web 2.0 technologies by the Chronic Patients Association
    - Adapted interventions
      - 5. Unified Medical record
      - 6. Integrated medical care
      - 7. Development of sub-acute hospitals
      - 8. Advanced nursing responsibilities
      - 9. Socio-health collaboration
      - 10. Financing and contracting
      - 11. CSAREAN: Multi-channel Centre
      - 12. e-prescription
      - 13. Chronic illness research centre

Source: Estimates made by Osakidetza, data from Diadema and international sources, own elaboration.
2. AGEING INNOVATION CLUSTER

Aim:

• To develop a project in the field of ageing, working from a rigorous multidisciplinary research approach and the competition of multiple collaborating agencies and alliances with other institutions, producing innovative actions, products and services in practice and transferring them to society, generating a high impact on four aspects:

- Social Innovation
- Technological Innovation
- Care Model Innovation
- Economic activity and employment

7,000 employees // 1.100M€ turnover
2. MONDRAGON

Company providing Healthcare services for elderly people.
Nowadays it manages 12 residence centres, with a total of more than 700 beds.

LKS CONSULTORÍA
Consultancy company with more than 100 references in public and private hospitals, Health department, primary care and healthcare associations.

LKS INGENIERÍA
Engineering company which has built 4 projects of sheltered homes, 14 healthcare centers, 2 hospitals, 3 health centres and 1 private hospital.

83,000 employees // 5.900M€ turnover

LKS CONSULTORÍA
Consultancy company with more than 100 references in public and private hospitals, Health department, primary care and healthcare associations.

LKS INGENIERÍA
Engineering company which has built 4 projects of sheltered homes, 14 healthcare centers, 2 hospitals, 3 health centres and 1 private hospital.

GSR
Company providing Healthcare services for elderly people.
Nowadays it manages 12 residence centres, with a total of more than 700 beds.

Solutions for the self-management prevention and improvement of the health and welfare at home.

Assistive technologies company for people with disability.

Range of dairy products with less salt, less sugar and less fat, or a specific nutrient (fiber, Omega 3, phytosterols) to help care for the elderly.

Medical Dispenser is a personalised service for dispensing medication, providing a full solution for pharmacies while helping to improve the patients' quality of life patients and follow-up treatments.

eHealth company providing ubiquitous solutions for people requiring vital signs monitoring and/or online detection of risky situations.
University of Basque Country leads the Campus of International Excellence (Euskampus), an strategic alliance with Tecnalia and DIPC that is based on a community of 10 education, research and transfer clusters that shape the three main specialization areas of Euskampus
2. IK4

Total Income: 102.3 M€

Scientific & Technological Excellence (2011)

- Publications-Communications: 511
- ISI Articles: 208
- Communications for Congresses: 268
- International Congresses organized: 4
- International books publishers: 35
- Dissertations related to projects: 48

12 locations
93 companies and entities in the governing bodies

Alliance of sovereign research centers with a common strategy

Strategic areas of the Alliance

Patents
- Requested: 197
- Granted: 152

Spin – Offs
- Spin-Offs (last 5 years): 47
- Turnover (2011): 88 M€
- Staff (2011): 739

Request for information: 208

Funding from the European Union: 6.3 M€
TECNALIA is very active in Active and Healthy Ageing on an EU and international level, mainly through leadership of / active participation in:

• **Numerous European RTD projects** in the domain of ICT and Robotics for Ageing and Ambient Assisted Living (AAL) such as SOPRANO (FP6), AMIE (ITEA 2006), DUSTBOT (FP6), COMPANIONABLE (FP7), HAPTIMAP (FP7-ICT-2007-2), BEDMOND (AAL-2008-1), HMFM (AAL-2008-1), FLORENCE (FP7-ICT-2009-4) and European Network on Robotics for Neuro-Rehabilitation (COST-2009), ASSISTANT (AAL-2011-4).

• 2 EU Thematic Networks on Assistive Technology (ETNA, ATIS4ALL) and one (in negotiations) on Active and Healthy Ageing (ENGAGED).

• AALIANCE2 FP7 Coordinated Support Action.

• Feasibility study of the set-up of a **cluster on Assistive Technologies** in the Basque Country in the framework of the EU project TECFORLIFE (FP7-REGIONS-2008-2).

• **Innovation Partnership** on Active and Healthy Ageing.

• **EU CORAL network of European regions** related to the AAL JP framework.

• **AAATE** (Association for Advancement of AT in Europe), eVIA and RIBERDISCAP (Net of AT in Latin-America).

• Collaboration with several leading EU research institutes through its nodes in Italy, Germany, France, Serbia.

• Recently organizer together with Basque Government of **AALSUMMIT 2012**
The Healthy Ageing KIC aims at transforming higher education and research towards promoting innovation and top talent entrepreneurial spirit in the ageing domain, through 3 main action lines:

- Achieving **excellence in teaching and learning** in order to remain the benchmark for higher education at national and international level.
- **Cooperative research between entities in the priority areas of expertise**, developing an open and creative intellectual property (IPR) policy whereas common interests share resources, information networks and know-how.
- Developing **entrepreneurship and supporting the creation of innovative and new technology-based companies (NEBTs)** with high added value.

The KIC manages the ideas with a business approach: From a cross-border approach to multi-disciplinary solutions, business models are defined for promising ideas, **focusing on the innovation in healthcare services**: from local pilots to global solutions, with the involvement of public health services.

Health-care is approached as a social right, strengthening the **importance of the role of the public services as prescriptors, supporters and validators**. Local community stakeholders are involved from the beginning: sanitary services, caregivers, civil society representatives.
3. Relevance of the Basque Country in Healthy Ageing

The Basque Country has a leading role in the context of Active and Healthy Ageing, based on several existing initiatives at regional level:

- **KRONIKGUNE**, International Centre of Excellence in Research on Chronicity
- “**O-SAREAN flagship initiative**” within the Basque Health Ministry
- Active participation in “**AAL Forum of Regions**” (co-organiser of AAL SUMMIT 012, June 2012)
- Active participation of the Basque Country in “**CORAL Network**”, European Network of leading regions collaborating in Regional Policies for Active and Healthy Ageing
- TECNALIA and INGEMA proposed together activities for the framework of the **European Innovation Partnership on Active and Healthy Ageing** (EIP AHA)
- Candidacy of the Basque Health Ministry for **Reference Site** within the EIP AHA.
- Headquarters of the CNIE, **National Centre on Ageing Research**, in San Sebastian (Basque Country, Spain)
- Creation of the **Health provision model of the future**
- “**Ageing Cross Action**” within TECNALIA
- **FIK initiative**, a private research initiative initiated and promoted by TECNALIA on Ageing and Disability with 44 M€ budget and supported by 26 enterprises and institutions during 10 years (2007-2017)
- **TECFORLIFE**: to identify the feasibility of setting up a new research-driven Assistive Technology Cluster for Quality of Life in San Sebastian
THANKS FOR YOUR ATTENTION!