Chronicity Health Policy drives Aging Market to Globalization: The end of a Fragmented Health Marketplace

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Basque Government
Agenda

Health Systems need to be redesigned: Chronicity as a global driving force
  • The Basque response: a strategy of organizational innovation based on new products and services
    • Are these products and services local or global? Which is better?
  • Towards a global market for Health: the Basque Living Lab
Chronicity is an increasing epidemic

In 15 years the prevalence of chronicity in the Basque Country has increased notably throughout the region

Percentage

---|---|---|---
4,5 - 6,0 | 6,1 - 7,5 | 7,5 - 9,0 | 9,1 - 10,5 | 10,6 - 12,0

Or should we say a pandemy?
And will continue to grow as the population gets older...

Change in the percentage of persons with chronic problems between 1997 and 2007 according to their age

Source: ESCAV
In short

• Maintaining the current design of the Health System, based on acute incidents:
  
  – Consumes more resources than needed
  
  – Leads to poor quality of care and health results for the population
Is it possible to imagine another Health System?

Towards a new model for the Basque Health System

<table>
<thead>
<tr>
<th>Current Elements</th>
<th>Emerging Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accessibility</strong></td>
<td>Remote</td>
</tr>
<tr>
<td>Face–to-face</td>
<td>Health value</td>
</tr>
<tr>
<td><strong>Product</strong></td>
<td>Citizen focussed</td>
</tr>
<tr>
<td>Health services</td>
<td></td>
</tr>
<tr>
<td><strong>Architecture</strong></td>
<td></td>
</tr>
<tr>
<td>Supplier focussed</td>
<td></td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td>Of the System</td>
</tr>
<tr>
<td>Of Service and of Management</td>
<td></td>
</tr>
<tr>
<td><strong>Care Model</strong></td>
<td>Continuous and coordinated</td>
</tr>
<tr>
<td>Episodic</td>
<td>Proactive</td>
</tr>
<tr>
<td>Reactive</td>
<td>Integrated</td>
</tr>
<tr>
<td>Hospital focussed</td>
<td></td>
</tr>
<tr>
<td><strong>Value Proposal</strong></td>
<td>Health</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Prevention, cure, care</td>
</tr>
<tr>
<td>Focussed on Care</td>
<td>and rehabilitation</td>
</tr>
</tbody>
</table>

Source: Osaberri
The care of chronic conditions nowadays accounts for

- 80% of medical consultations
- 75% of the Health Budget

For a system designed:
- to cure acute problems
- Not to deal with chronic patients
<table>
<thead>
<tr>
<th>Condition</th>
<th>Insufficient attention</th>
<th>Preventable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>Blood glucose not measured in 24% cases</td>
<td>2,600 blindness; 29,000 renal failure</td>
</tr>
<tr>
<td>Hypertension</td>
<td>Less than 65% receives the suitable treatment</td>
<td>68,000 deaths</td>
</tr>
<tr>
<td>Heart attack</td>
<td>Between 39% and 55% do not receive the preventive suitable medication</td>
<td>37,000 deaths</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>36% + 65 years did not receive vaccine</td>
<td>10,000 deaths</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>62% did not receive a screening when indicated</td>
<td>9,600 deaths</td>
</tr>
</tbody>
</table>


Disappearing from the radar screen has a price…
Health Care Spending Increases With The Number Of Chronic Conditions

- Average per capita spending on people with one or more chronic conditions is more than five times greater than spending on people without any chronic conditions.
Poor Care Coordination Leads To Unnecessary Hospitalizations

Source: Medicare Standard Analytic File, 2004
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1 - Vision
2 - Policies
3 - Strategic projects
Chronicity Strategy gives us a powerful and inspiring vision

The Strategy for Chronic Illnesses aspires to substantially improve the lives of patients and carers, health professionals and citizens.

Vision

Chronic Patients and their Carers

Better health results
Greater life satisfaction and quality

More time for work which has greater added value
Fewer routine jobs

Health Professionals

Basque Health system adapted to deal with Chronicity

Citizens

Efficient use of resources
Prevention of chronicity and its development

Osakidetza
A Global System response (Re-Health) to meet every Chronic Condition

Health care for chronic patients will change with the introduction of five strategic policies.

1. Focus on stratified population health
2. Promotion and Prevention of chronic illnesses
3. Responsibility and autonomy for patients
4. Continuous care for the chronic patient
5. Efficient interventions adapted to the patient’s needs

Source: Own elaboration
Because it is a patient centric model

Diagram of a possible pyramid of population stratification:

Level 1: Patients with no chronic illnesses
Recently diagnosed
Healthy population

Level 2: Patients with reduced complexity
Well managed
Recently diagnosed

Level 3: Patients with medium level complexity
Suffer from complications and need a certain level of management

Level 4: Patients with severe complexity
Requires urgent health care coordination

Source: Adaptation of the Kaiser Permanente risk stratification
To accelerate the transformation process we have launched **14 strategic projects**

Policies are introduced by way of 14 strategic projects

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**Vision**

**Strategic Projects**

<table>
<thead>
<tr>
<th>Population Focus</th>
<th>Prevention and Promotion</th>
<th>Patient autonomy</th>
<th>Continuity of care</th>
<th>Adapted interventions</th>
</tr>
</thead>
</table>
| **1** Stratification and targeting of the population | 2 Interventions aimed at the principal risk factors (e.g. giving up tobacco, prescribing a healthy life, care for the elderly) | 3 Self care and patient education: Active Patient – Paziente Bizia  
4 Setting up a network of activated patients, connected through the adoption of new Web 2.0 technologies by the Chronic Patients Associations | 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 OSAREAN: Multi-channel Centre  
12 e-prescription  
13 Chronic illness research centre |
|--------------------------------|----------------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------|-----------------------------------------------|

**14 Innovation on the part of the medical professionals**

Source: Estimates made by Osakidetza, data from Osabide and international examples, own elaboration
Most of these projects require the co-creation of new products and services and the incorporation of new technologies.
5 Unified Medical Record: Osabide Global

Flagship Objective
To create and deploy Osabide Global, a sole solution for medical records for all levels of care throughout all the network of centres which will enable professionals access patient data in the Basque Country and modify it when necessary.

Expected impact
Universal introduction of the unified medical record by the end of 2011, offering an integral treatment to the patient, increasing medical precision and reducing the time spent by doctors to clearing up questions related to the patient’s medical record.

Calendar – Principal Milestones

Jan - June 2010
- Design of the data fields to be included and developed
- Feb - Dec 2010
  - Piloting
    - Home hospital
    - Outpatients
- Jan - Sep 2011
  - Extension to all centres and for all health professionals
  - Hospitalitation
  - Emergencies

Source: own elaboration
Smart Home: Home as a Place for Care

Remember your medicine
Socio-Health Collaboration

Flagship Objective

To develop a framework of socio-health collaboration with all the social service protagonists (Ministry, Provincial Councils, Town Hall), which enables the definition of the working master guidelines in order to be able to provide an integral response to chronic patients which have simultaneous need for social and health care.

Expected impact

Multi-disciplinary PC teams with the home as the principal provider of care in 2010: 4 municipalities with integrated working, 1 hospital with an admission plan with dependence prevention, 1 unit of orthogeriatrics

Calendar – Principal Milestones

Jan – March 2010
Definition of the socio-health framework (health vision)

April – May 2010
Uniting the socio-health framework with the social protagonists

June 2010-2012
Joint work on specific lines and introduction of agreements

Source: own elaboration
OSAREAN: Multi-Channel Service Centre

Flagship Objective

To construct a technological and organizing platform which permits multi-channel interaction for all the citizens of the Basque Country with the health system, enabling procedures, simplifying the life of the citizens and lending prestige to the work of the doctors.

Expected impact

Deployment in the Basque Country of all the services of the Multi-channel Service Centre by the middle of 2013, offering to the citizen greater ease of interaction with the system and an improvement of the efficiency in the provision of services and assignation of resources.

Calendar – Principal Milestones

- **March- Nov 2010**: Development of the platform and basic deployment to 400,000 inhabitants.
- **Nov- March 2011**: Incorporation of new services and basic deployment to 1,000,000 inhabitants.
- **March- Nov 2011**: Deployment and extension of new services – basis deployment 100.
- **Nov- March 2013**: Progressive deployment of all the planned services.

Source: own elaboration
## Ambient Assisted living and telemedicine

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Medical Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assisted living telemedicine and support to self-help network</td>
<td>H. Donostia</td>
</tr>
<tr>
<td>Patient with pacemaker assisted living telemedicine</td>
<td>H. Txagorritxu</td>
</tr>
<tr>
<td>Assisted living telemedicine</td>
<td>Comarca Bilbao</td>
</tr>
<tr>
<td>EPOC and ICC assisted living telemedicine</td>
<td>H. Donostia</td>
</tr>
<tr>
<td>Assisted living telemedicine and self care</td>
<td>H. Txagorritxu</td>
</tr>
<tr>
<td>Teledermatology</td>
<td>H. Galdakao y Comarca Interior</td>
</tr>
<tr>
<td>Tele diagnostic</td>
<td>H. Cruces y Comarca Uribe Costa</td>
</tr>
<tr>
<td>Teleoftalmology</td>
<td></td>
</tr>
</tbody>
</table>
12 Strategic Project of e-prescription

Flagship Objective
To introduce the system of e-prescription
Creating a single electronic pharmacotherapeutic record of the patient encompassing all care levels, making the necessary information available to each of the different protagonists involved and reaching integration of the prescription-dispensation

Expected impact
Effective introduction of the e-prescription system throughout the Basque Country by 2013, increasing the safe and efficient use of medicines, eliminating “administrative” visits to the centres and saving time and trips for citizens

Calendar – Principal Milestones

<table>
<thead>
<tr>
<th>June 2010 – Dec 2011</th>
<th>2012 (approx)</th>
<th>2013 (approx)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of the system and extension to Primary Care. Initiate the deployment in Specialized Care</td>
<td>Extension to all the Specialized Care centres, socio-health, residential and nursing centres</td>
<td>Extension to associated centres, other doctors and interoperability and dispensation in hospitals</td>
</tr>
</tbody>
</table>

Source: own elaboration
Research Centre for Chronicity

Flagship Objective
The establish a research centre to identify, adapt, pilot, and introduce the best practices to deal with the challenge of chronicity, generating “glocal” knowledge for innovation in organization and management and to improve the health systems.

Calendar – Principal Milestones

<table>
<thead>
<tr>
<th>April – July 2010</th>
<th>September - October 2010</th>
<th>June 2012 - February 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and functions proposal for the Research Centre</td>
<td>Feedback process from stakeholders</td>
<td>Set up of the Research centre</td>
</tr>
</tbody>
</table>

Source: own elaboration

Expected impact
To be a an international point of reference for knowledge about chronic illnesses, generating evidence that will offer support to the different initiatives and projects related to them.
Innovation and change must combine clear strategic direction with the commitment of the first line of doctors and managers.

**Interventionism is not enough**

- Status Quo
- New way of integrated working in the health sector
- Implemented by middle management
- The plan is presented and commitment is sought
- Need to change is perceived
- Top management create a Plan
- New strategy, New vision

**Development focus is not enough**

- Clear direction
- Extension mechanisms
- Leadership and energy for innovation, implementation and extension

**Not acceptable for Doctors**

- Does not achieve scale, nor supports nor expands successful interventions

**No encouragement for local leadership and no adaptation to local conditions**

- Does not create a common direction with which to galvanize all the energy

Source: own elaboration
14 Innovation from the medical professions

Flagship Objective

To design the process, the tools and the leaders with the aim of facilitating and promoting emerging innovation by means of pilot "bottom up" projects, and to ensure its sustainability and extension throughout the Basque Country, when the desired results are reached.

Expected Impact

Generation of 15-25 innovation projects a year and the extension of those which produce health results and sustainability (it is hoped that 90% will produce results).

Calendar – Principal Milestones

- May 2010 - June 2010
  - Detailed definition of the process and tools
  - Innovation Pilot projects 2010: Learning
  - Carrying out and monitoring the official process - 2011

Source: own elaboration
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The need to meet the challenge of chronicity is increasingly a global one

On a global level chronic illnesses bear the characteristics of a pandemic in expansion
Forecast of the change in levels of diabetes on a global level

Source: International Diabetes Federation: Diabetes Atlas
Why the products and services should be local?

**Health System View**

- At the start:
  - it promises a short development process and
  - a better adaptation to our needs or current situation (interesting to minimize initial costs)

- In the long term…
  - it requires lone financing of upgrading and updating
  - Switching costs also increase, making it difficult to adopt better standards

**Provider’s View**

- At the start:
  - Each Health system has different priorities, strategies and administrative processes
  - Historic Business Models based on individual projects and not on scale
  - Fidelization links gives them a market advantage

- In the long term:
  - Economies of Scale are never achieved
  - Budget shortages will reduce potential margins

We have strong incentives to develop global products and services for global market needs
But Health is a multidomestic industry...

<table>
<thead>
<tr>
<th>Multidomestic Industry</th>
<th>Global Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sectores nacionales heterogéneos: restricciones gubernamentales, necesidades diferentes, demanda en pocos países, regulaciones específicas...</td>
<td>Sectores más homogéneos</td>
</tr>
<tr>
<td>Competidores locales o multidomésticos</td>
<td>Competidores globales</td>
</tr>
<tr>
<td>Ventaja competitiva de las empresas sobre una base nacional</td>
<td>Ventaja competitiva vinculada a la capacidad de integración de los negocios en una base mundial</td>
</tr>
<tr>
<td>Marketing nacional</td>
<td>Marketing global</td>
</tr>
</tbody>
</table>

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Sectores nacionales: restricciones gubernamentales, necesidades diferentes, demanda en pocos países, regulaciones específicas...  
Competidores locales o multidomésticos  
Ventaja competitiva de las empresas sobre una base nacional  
Marketing nacional

Sectores más homogéneos  
Competidores globales  
Ventaja competitiva vinculada a la capacidad de integración de los negocios en una base mundial  
Marketing global

Industrias:  
Sanidad  
Conservas alimentarias  
Industria farmacéutica  
Telecomunicaciones  
Ordenadores  
Industria del juego  
Hoteles, segmento precio bajo, medio: moteles  
Hoteles, segmentos empresarial y de lujo
Risks of competing multidomestic in a global industry (and viceversa)

<table>
<thead>
<tr>
<th>Multidomestic Strategy</th>
<th>Global Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Imposibilidad de conseguir los factores clave de éxito que marquen los competidores globales</td>
<td></td>
</tr>
<tr>
<td>• Dificultad de mantener las ventajas competitivas existentes en cada país</td>
<td></td>
</tr>
<tr>
<td>Global Strategy</td>
<td>Multidomestic Industry</td>
</tr>
<tr>
<td>Best choice</td>
<td></td>
</tr>
</tbody>
</table>

Best choice

Riesgo de no conseguir cuota de mercado suficiente en ningún país
Opportunities from competing globally in a (current) multidomestic industry

<table>
<thead>
<tr>
<th>Multidomestic Strategy</th>
<th>Global Industry</th>
<th>Multidomestic Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Strategy</td>
<td></td>
<td><strong>Best choice?</strong></td>
</tr>
</tbody>
</table>

Global solutions for global needs

- Economies of Scale reduces cost
- Standardized solutions attains more easily the required cost-effectiveness
- Big Market Share increases the potential to maintain a quality and innovation differential
- The reduction of costs can be partially invested in local adaptation
- Transform the dominant logic in the industry: good deal for innovators
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**Small… but big enough**

- **Euskadi–Basque Countr**
- **EU -27**

<table>
<thead>
<tr>
<th>Socio-demographic data</th>
<th>Euskadi–Basque Countr</th>
<th>EU -27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (no, inhabitants)</td>
<td>2,172,175</td>
<td>499,753,500</td>
</tr>
<tr>
<td>Population density (inhab/km²)</td>
<td>300.2</td>
<td>117.8</td>
</tr>
<tr>
<td>Life expectancy (years) - Men</td>
<td>77.2</td>
<td>76.1</td>
</tr>
<tr>
<td>Life expectancy (years) - Women</td>
<td>84.3</td>
<td>82.2</td>
</tr>
<tr>
<td>Hospital beds (per 100,000 inhabitants)</td>
<td>375</td>
<td>590</td>
</tr>
<tr>
<td>Internet access (% homes)</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>Per capita GDP (EU 27= 100)</td>
<td>136</td>
<td>100</td>
</tr>
<tr>
<td>Population aged between 20 and 24 with secondary studies (%)</td>
<td>78.0</td>
<td>78.5</td>
</tr>
</tbody>
</table>
A recognized Health System that Offers

- Universal Health Assurance
- Financed through general taxes
- Beveridge System (National Health System)
- End-user co-payment formulas not considered (except in pharmacy)
- Broad portfolio of services
- Widespread access to resources
A Health System that is also recognized for its Chronicity Strategy and its potential for transformation

• Internationally:
  – *The Basque Country is one of the 5 regions in the world that is creating the Health provision model of the future*
    » Alex Jadad

• In Spain:
  – Headquarters of the CNIE (Centro Nacional de Investigación en Envejecimiento)
  – Reference of effective and quality health system for the Health and Social Care Ministry
… that creates strong internal alliances

• With other ministries and constituencies in the Basque Country:
  – KRONIKBASQUE as PCTI 2015 Strategy
  – Ministry of Industry is supporting our Chronicity Strategy for promoting the diversification of firms and the emergence of a global health market:
    • Special programme on Innovative Public Procurement already launched
    • Lidera Initiative, with prioritized access to the R&D&i programmes
  – Ministry of Social Affairs is working with our Osarean capacity to supply virtual care and defining with us new ways of providing Social care

• With main technological corporations and CIC’s:
  – Chair on the Board
  – Committees on Health
and aspires to develop a strong international network

• With other Health and Social systems that share our vision and means:
  – Remember: our vision gains adepts

• With the corporate and technological world:
  – The potential gains of a Global Health Market for products and services are enormous
  – It’s possible to maintain business models based on local adaptation, with business models based on standards and a global approach to set needs

It’s a WIN-WIN deal!
The biggest Chronicity Living Lab
The Big Picture of Basque Re-Health System

Osakidetza's Communities of Practice

PROsakidetza

HCP externals to Osakidetza & outside Euskadi

HCPAssociations

Non-Basque Patients

Osakidetza Orain

Osarean Multi-chanel Service Centre

e-pharmacy e-prescription

Unified Medical Record

Up to 14 projects from Chronic Patients Strategy

Patients

Patients' Associations

Osakidetza
Architectural Drivers

Organic Order

BHS Digital Architecture

Integration

Habitability

Emotional Affinity

Osakidetza

Orain

ProSakidetza

Kronikoen Sarea
And Inside? The Integration Bus

Tele-Health

Wireless Monitoring

Mobile Health

Mobile Dispatch

Health Domotics

Monitoring Brokers

Pharmaceutical e-Care

e-Health Identifierrs

Health 3.0

Re-Health!
YOUR BEST ALLY
For more information about the general strategy and concrete projects, please visit the web site:

http://cronicidad.euskadi.net

Thank you!