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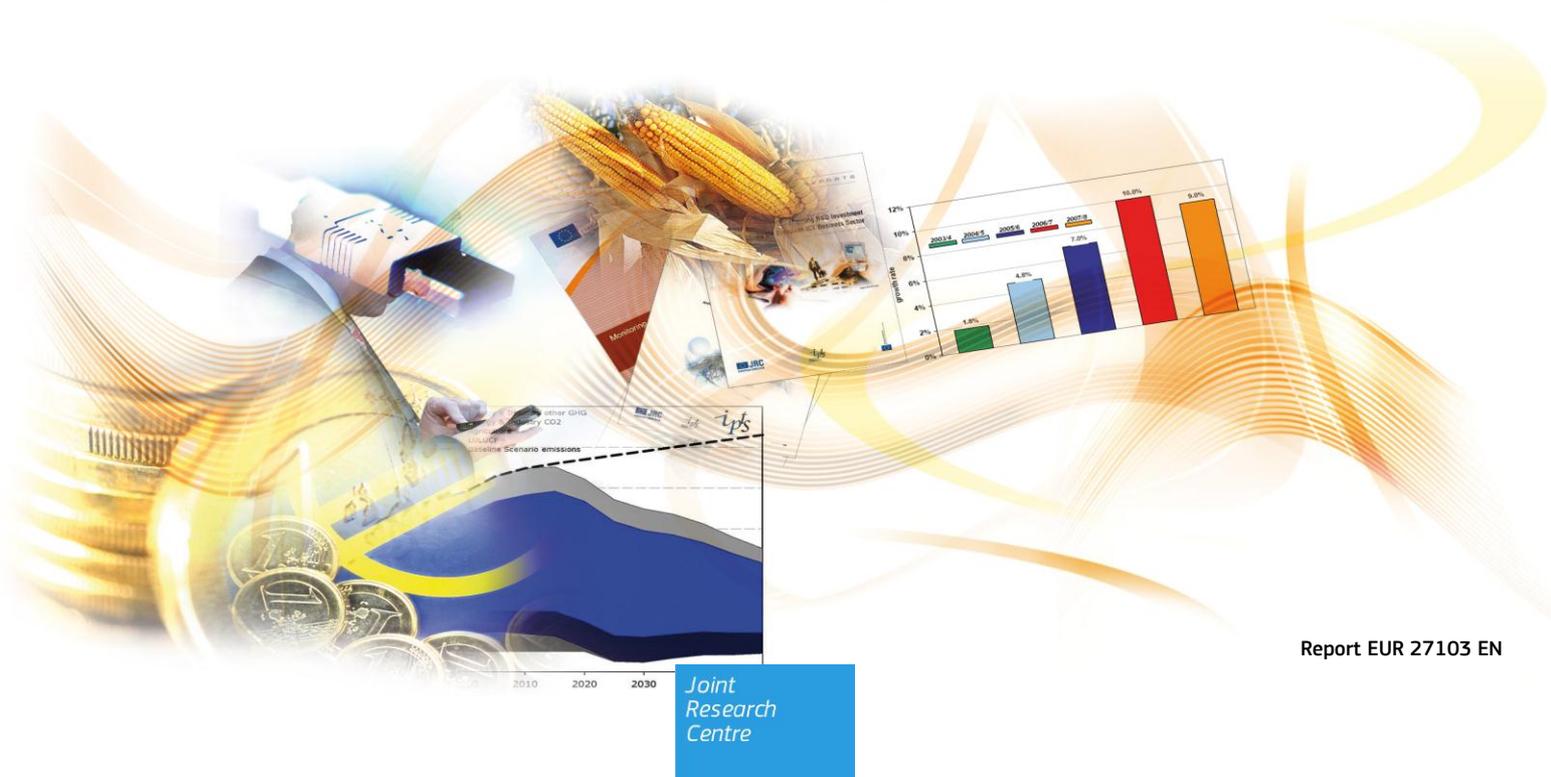
Strategic Intelligence Monitor on Personal Health Systems Phase 3 (SIMPHS3)

ETXEAN ONDO (Spain)
Case Study Report

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Abstract

The ETXEAN ONDO pilot project is an integrated care approach which was implemented in the Basque Country. It aimed to provide adequate support and care for elderly people living at home or in nursing homes, for family members and care professionals.

The key elements of this model were the provision of a single entry point, the adoption of a case management methodology and an individualised service plan that respected patients' dignity, rights, interests and preferences. The initiative was designed to provide highly patient-centred care to the elderly, including self-management strategies and tools for health prevention and promotion. The process started by profiling patients according to their risk factors in order to identify preventive measures adapted to their cases and empower them to adopt a much more active role in managing their illness. This approach was expected to reduce patients' demands on the health service while improving their quality of life and that of their carers, contributing to the sustainability of the system.

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Preface

The Strategic Intelligence Monitor on Personal Health Systems (SIMPHS) research started in 2009 with the analysis of the market for Remote Patient Monitoring and Treatment (RMT) within Personal Health Systems (PHS). This approach was complemented in a second phase (SIMPHS2) with the analysis of the demand side, focusing on needs, demands and experiences of PHS of healthcare producing units (e.g. hospitals, primary care centres), healthcare professionals, healthcare authorities and patients amongst others.

SIMPHS3 builds on the lessons learnt from SIMPHS2 and on the European Innovation Partnership on Active and Healthy Ageing initiative. It aims to explore the factors that lead to the successful deployment of integrated care and independent living initiatives. It also aims to define the best operational practices and guidelines for further deployment in Europe. This case study report is one of a series of case studies developed to achieve these objectives.

The outcomes of SIMPHS2 are presented in a series of public reports which discuss the role of governance, innovation and impact assessment in enabling integrated care deployment. In addition, through the qualitative analysis of 27 Telehealth, Telecare and Integrated Care projects implemented across 20 regions in eight European countries investigated in SIMPHS2, eight facilitators have been identified. These were based on Suter's ten key principles for successful health systems integration.

The eight main facilitators identified among these as necessary for successful deployment and adoption of telehealth, telecare and integrated care in European regions are:

- Reorganisation of services
- Patient focus
- Governance mechanisms
- Interoperable information systems
- Policy commitment,
- Engaged professionals
- National investments and funding programmes, and
- Incentives and financing.

These eight facilitators have guided the analysis of the cases studied in SIMPHS3 and a graph showing the relative importance of each facilitator is presented in each case study.

In addition to the analysis of the above facilitators, each case report contains a specific section dedicated to the analysis of care integration. The definition of vertical and horizontal integration used in this research is taken from the scientific literature in the field of integrated care.¹ It should be noted that this definition differs from the one mentioned in the European Innovation Partnership on Active and Healthy Ageing Strategic Implementation Plan.² We define horizontal integration as the situation where similar organisations/units at the same level join together (e.g. two hospitals) and vertical integration as the combination of different organizations/units at different level (e.g. hospital, primary care and social care).

¹ Kodner, D. (2009). All together now A conceptual Exploration of Integrated Care.

² http://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/steering-group/operational_plan.pdf (page 27)

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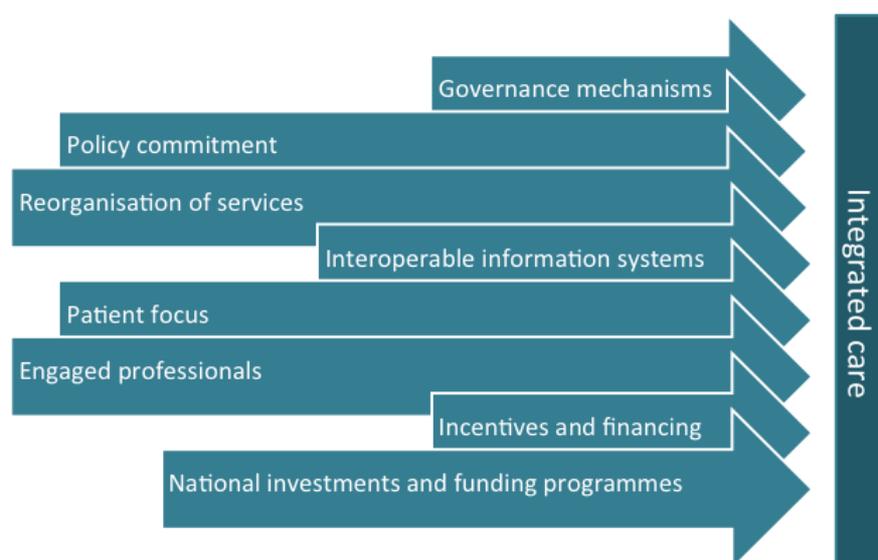
Case outlook

The ETXEAN ONDO pilot project was an integrated care approach which was implemented in the Basque Country. It aimed to provide adequate support and care for elderly people living at home or in nursing homes, for family members and care professionals.

The key elements of this model were the provision of a single entry point, the adoption of a case management methodology and an individualised service plan that respected patients' dignity, rights, interests and preferences. The initiative was designed to provide highly patient-centered care to the elderly, including self-management strategies and tools for health prevention and promotion. The process started by profiling patients according to their risk factors, in order to identify preventive measures adapted to their case and empower them to adopt a much more active role in managing their illness. This approach was expected to reduce patients' demands on the health service while increasing their quality of life and that of their carers, thus contributing to the sustainability of the system.

The main drivers for the initiative were the inter-professional teams that worked across the continuum of care, and the involvement of all the stakeholders in the initiative. Social workers were assigned as case managers in constant interaction with primary care nurses, who in turn interacted with the GPs. These professionals worked together to cover both social and health care needs. In addition, specialists from the hospitals were part of the team providing secondary care. The leaders of the initiative also encouraged the participation of all stakeholders involved in the initiative from both the private and public sectors, including the meso-level institutions (provinces) and local level institutions (municipalities). This engagement allowed the leaders of the initiative to act as enablers, promoting coordination across settings and levels of care.

As regards barriers to the initiative, resistance to technological change was not considered a barrier for health and social care professionals though it was for the patients, mainly because this target population lacked digital skills. The main inhibitor to the deployment of the initiative after termination of the pilot was the lack of funding to ensure adequate resources for sustainable change and up-front costs, and the lack of innovation in reimbursement models.



1. Background

1.1 Spanish Social welfare and health care services

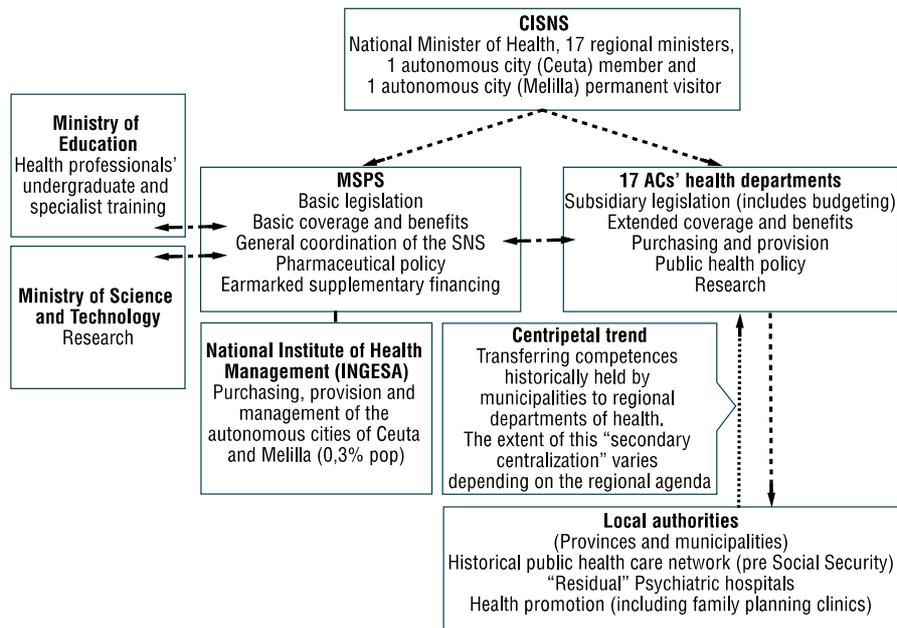
The Spanish Constitution of 1978 established the right to health protection and healthcare for all citizens. As described by the Ministry of Health, Social Services and Equality (2012), the substantive principles and criteria enabling the exercise of this right are the following:

- Public funding, universal coverage and free healthcare services at the time of use.
- Defined rights and duties for citizens and public authorities.
- Political decentralisation of healthcare devolved to the autonomous regions.
- Provision of comprehensive healthcare, striving to attain high levels of quality duly evaluated and controlled.
- Integration of different public structures and health services under the National Health System.

Spain has a statutory national health system (SNS), which is characterised by universal coverage and is funded by taxes. Services are largely provided free of charge at delivery, but most pharmaceuticals prescribed to people aged under 65 require a co-payment of about 40% of the price. Private voluntary insurance (OVI) plays only a minor role in the Spanish health system. The services provided are mainly complementary to the services provided under the statutory health system, and usually imply reduced waiting times for specialised care or access to services that are limited within the benefits package of the SNS. The political control of the Spanish health system rests with the regional governments (Comunidades Autónomas). There are 17 regional health ministries across Spain, each having primary jurisdiction over the organisation and delivery of health services within the respective region. In its most typical form, a regional health system of an autonomous community is composed of a regional ministry (Consejería de Salud) which is responsible for the general definition of health policies, as well as the regulation of health care and its planning, and a regional health service in charge of the provision of services. The regional ministry organises and structures the health services in the region and typically two executive organisations provide primary care and specialist care respectively.

However, it has become very frequent for regional health systems to integrate primary and specialist care under a single management structure. A single primary care team (PCT), which is allocated to a patient and not freely chosen, plays the role of gatekeeper to services, as access to specialist care largely depends on prior referral from the GP. As a means of improving waiting list management, some specialised care delivery is contracted out to private hospitals, but around 40% of all hospitals in Spain belong to the SNS. Most of the public health expenditure in Spain is financed through general taxation (>94%), supplemented by contributions from payroll tax and employers contributions, and the funds from the civil servants' health insurance policy.

Figure 1: Spanish National Health System characterisation

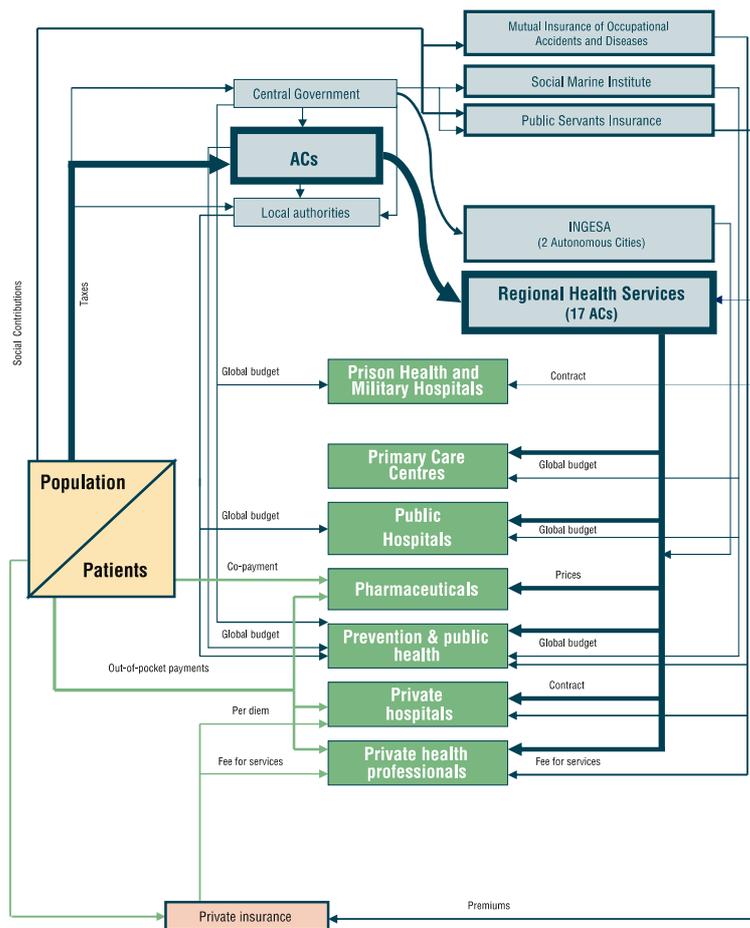


Source: García-Armesto et al (2010)

Public health expenditure relates mainly to both in- and outpatient specialist care (54%), primary health care (16%), pharmaceuticals (19.8%), prevention measures and general public health (1.4%). The regional governments administer the largest share of public health resources, with the central government and the municipalities accounting for a resource allocation of only about 3% and 1.25%, respectively. The primary care network is completely public, with care professionals working in multi-disciplinary teams that can comprise GPs, nurses, social workers, and paediatricians working for laboratories or diagnose centres.

Figure 2 shows the financial flows across the Spanish NHS. The allocation formula is based on a per capita criterion, weighted by population structure, dispersion, extension and insularity of the territory.

Figure 2: Financial flows across the Spanish NHS



Source: García-Armesto et al (2010)

1.2 Basque Country region

Since 2009, the Basque Country's Regional Ministry of Health and Consumer Affairs has been pushing health system reform based on a *Strategy to Tackle the Challenge of Chronicity in the Basque Country* (2010). This strategy aims to improve the health and welfare of all people affected by chronic illnesses and also to reduce both the level and the impact of chronicity, thus tackling the challenge of chronic diseases and the burden it represents. The analysis of the health status of the population in the Basque Country reported in the above document reveals that in 2007, 41.5% of men and 46.3% of women were suffering from at least one chronic condition. Furthermore, the age distribution of chronic pathologies shows that the degree of prevalence and co-morbidities are increasing, especially from the age of 65.

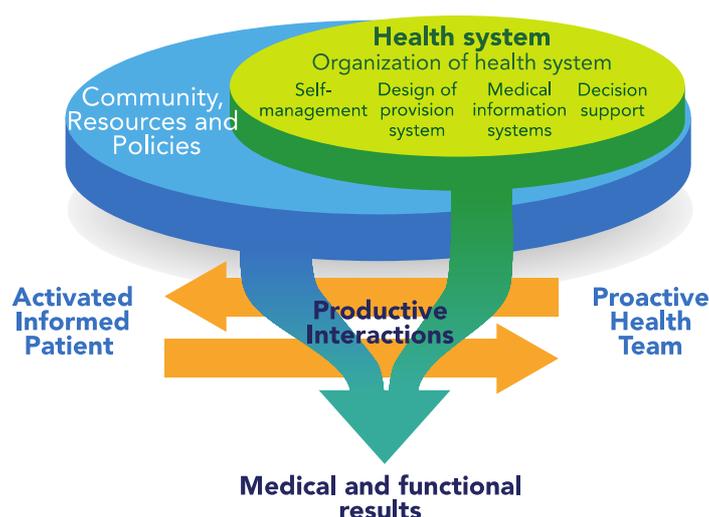
Table 1: General information about Basque Country

Geographical coverage km²	7,234
Inhabitants per km²	297
Number of inhabitants	2,155,000
Life expectancy at birth, years	74.8 males – 81.7 females
Regional GDP (2012), billion €	68
Regional GDP per inhabitant (2012), €/inhabitants	31,200
General Practitioners /1,000 inhabitants (2010)	0.74
Specialists /1.000 inhabitants (2010)	2.3
Regional Budget for health services management (2013), billion €	6.4
Health care professionals / 100.000 inhabitants	304
Regional health care budget, € per inhabitant (2013)	2,964
Hospital beds (2012)	7,900
Hospital beds/1.000 habitants (2012)	3.6
Chronic diseases mortality rates: 63% cancer; 31% cardiovascular diseases; 6% COPD	

Source: Basque Country Health Statistics (2014)

The Basque Government's Ministry of Health understands this challenging situation as an opportunity to transform the health system through reorganisation. This is expected to have an impact on health results, satisfaction, patient and carer life quality, and also sustainability. To carry out this organisational change, the Basque Department of Health has adapted the Chronic Care Model (CCM) developed by Wagner and collaborators from the MacColl Institute for Healthcare Innovation to the Basque context. As mentioned in the Strategy (2010), the framework identifies the following six essential and interrelated elements: (1) organisation of the healthcare system, (2) strengthening of links with the community, (3) fostering and supporting self-care, (4) design of the care system, (5) decision making support and (6) developing clinical information systems.

Figure 3: Adaptation of the care model for Chronic Patients



Source- Developed by Ed Wagner and collaborators from the MacColl Institute for Healthcare Innovation. Adapted by O+berri Basque Institute of Health Innovation

Source: Regional Ministry of Health and Consumer Affairs. Basque Country (2010)

The aim of this system transformation is not to replace the current system for acute care but to complement it in order to offer better and more efficient care to chronic patients. The

following table shows the elements of the current system and how they will be complemented by the emerging elements of the new model.

Table 2: Current and Emerging Elements

	Current Elements	Emerging Elements
Accessibility	Face-to-face	Remote
Product	Health services	Health value
Architecture	Supplier focussed	Citizen focussed
Quality	Of Service and of Management	Of the System
Care Model	<ul style="list-style-type: none"> • Episodic • Reactive • Hospital focussed 	<ul style="list-style-type: none"> • Continuous and coordinated • Proactive • Integrated
Value Proposal	<ul style="list-style-type: none"> • Accessibility • Focussed on Care 	<ul style="list-style-type: none"> • Health • Prevention, cure, care and rehabilitation

Source: Regional Ministry of Health and Consumer Affairs. Basque Country (2010)

The above-mentioned strategy consists of 5 main policies that are expected to be implemented through 14 projects over the next 3 years. These five policies are: (1) Focus on stratified population health combined with a predictive risk approach, (2) Health promotion and prevention of chronic illnesses, (3) Greater responsibility and autonomy of patients, (4) Continuous care for chronic patients, and (5) Efficient interventions adapted to patient needs (patient-centred approach).

Figure 4: Strategic Projects within the Chronic Illness Strategy



Source: Regional Ministry of Health and Consumer Affairs. Basque Country (2010)

Nuño & Piñera (2010) have linked these policies to the following actions:

- **Stratification and targeting of the population.** To establish a predictive model of stratification of the population, according to care requirements and future demand for resources (considering demographic, diagnostic, utilisation and socioeconomic data), enabling the design of specific actions for each group, with particular emphasis on polypathology.
- **Interventions targeting the main risk factors.** To construct a common framework of health promotion and early prevention, combining the strategic lines on the main risk factors with innovative bottom-up pilot projects. For example, the De-Plan project aims to offer primary prevention of the progression to Type 2 diabetes in high risk subjects between 45 and 70 years of age. Another example is Prescribe Vida Saludable which aims to integrate the promotion of healthy lifestyles in primary care settings.
- **Self-care and patient education, e.g. the Active Patient Program.** Launching of the "Chronic Disease Self-Management Program" of the University of Stanford.
- **Setting up a network of activated patients, connected through web 2.0 with patient associations.** Support for the associations of chronic patients in the adoption and use of new communication technologies (web 2.0) in order to facilitate access to information and promote interactions and mutual support among their members.
- **Integrated electronic health record.** To create and deploy Osabide Global, an integrated solution for health records for all levels of care throughout the whole network of centres, which will enable professionals to access patient data in the Basque Country and modify it when necessary.
- **Integrated care.** To explore through pilot projects new ways of working and of organising the delivery of healthcare, integrating primary care and specialised care.
- **Development of sub-acute hospitals.** Definition of a model of care for chronic patients, consolidating an intermediate level of care (focused on rehabilitation) between specialised and primary care for the specific care of these patients.
- **Advanced nursing competencies.** To define and develop in Osakidetza advanced nursing competences in dealing with chronic patients, in particular complex chronic patients (care management approaches).
- **Healthcare - Social Services collaboration.** To develop a framework of socio-health collaboration with all the social service stakeholders (Regional Government, Provincial Councils, Municipalities). This would enable the definition of working master guidelines on how to provide an integral response to chronic patients with a concurrent need for social and health care.
- **Financing and contracting.** To adapt the mechanisms of financing health providers, moving progressively from an activity-focus to a risk-adjusted capitation scheme (considering also several aspects of quality of care), in order to provide care which fulfills the objectives of the chronic illness strategy.
- **Multi-channel centre.** To design and implement a technological and organisation platform which permits multi-channel interaction (Internet, phone, mobile phone, etc.) with the health system for the entire population of the Basque Country. This

would make citizens' lives easier and reduce the administrative health professionals' workloads.

- **E-prescription.**
- **Chronic illness research centre.** The creation of a research centre that would generate "glocal" knowledge for innovation in organisation and management and to improve health systems by focusing on chronicity.

It is worth pointing out that the Strategy claims that all the interventions involving patients are designed to be adapted to their needs and to ensure an efficient use of resources.

Figure 5: Interventions adapted to the patient's need

	Self care	Telephone consultation with doctor	Appointment with nurse PC	Doctor's appointment PC	Appointment with specialist	Case management	Home hospitalization	Mid-term hospitalization	Chronic hospitalization
Cost per action / stay €/day	0€	<10€	25€	35€	~50€	100-150€	50-200€	400-500€	700-900€
Level of attention	Care for basic simple needs		Medical analysis and intermediate care	Complex diagnoses PC	Specialized complex diagnoses	Interaction of care and integral management	Basic medical monitoring	Intermediate medical monitoring	Advanced medical monitoring
Level of disruption for the patient	Minimum	Limited	1-3 hours to including travel and appointment		2-5 hours including travel and appointment	Periodic contact	Changes at home and frequent visits/contacts	High level of disruption	Very high level of disruption

Source: Regional Ministry of Health and Consumer Affairs. Basque Country (2010)

1.3 ETXEAN ONDO integrated care approach

The ETXEAN ONDO pilot project sought to implement an integrated care approach that ensured that elderly people living at home or in nursing homes, their family and caregivers received the support and care they needed. The key elements of this model were a single entry point, a case management methodology and an individualised service plan which respected patients' dignity, rights, interests and preferences, and involved patients in the entire process.

This initiative was designed to provide highly patient-centered care to the elderly, including self-management strategies and tools for health prevention and promotion. The process started by profiling patients according to their risk factors in order to identify preventive measures adapted to their case and empower them to adopt a much more active role in managing their illnesses. The approach is expected to reduce patients' demands on the health service, while increasing their quality of life and that of their carers, contributing to the sustainability of the system.

The intervention went beyond traditional health and social care services and included home services (such as food delivery, laundry, hair dressing, physiotherapy, podiatry, health care

transport and social activities), advance tele-care services, housing design, and support programmes for informal carers and family.

Furthermore, for people living in nursing homes, the ETXEAN ONDO project strongly emphasised the need to create a homelike space. Homely elements that were familiar to the patients were recreated, and during the project they were encouraged to bring elements of their lives with them to the nursing home.

The focus on the individual was reflected in the approach adopted by the ETXEAN ONDO project in both nursing homes and home care. A “Care and Life Plan” was developed for each resident/patient, incorporating their life story, medical history and a psychological assessment. In addition, this initiative included regular evaluations that were not limited to residents/patients only, but were also extended to carers, in order to identify potential issues early and avoid instances of burnout.

This initiative was implemented in the three Basque provinces of Guipuzkoa, Alava and Bizkaia, where 513 individuals were recruited for the study (intervention group 264 – control group 249). The following tables summarises the main characteristics of the target population. The pilot ran from 2011 to 2014.

Table 3: Participants

	GIPUZKOA	ALAVA	BIZKAIA	TOTAL
INTERVENTION	147	93	24	264
CONTROL	143	85	21	249
TOTAL SAMPLE	290	178	45	513
MALE	99	58	22	179
FEMALE	191	120	23	334
AGE (average)	81,7	76,67	80,64	79,67
AGE (ranges)	24/100	5/104	49/91	5/104
LIVING ALONE	78	56	5	139

Source: Departamento de Empleo y Políticas Sociales. Gobierno Vasco (2011)

2. Integrated care analysis

2.1 Dimensions

ETXEAN ONDO targeted frail elderly people, and thus directed its integrated care service to this vulnerable subgroup, as well as patients with complex illnesses covering chronic disease, cognitive impairment and comorbidities.

The main focus of the service was homecare and nursing home management, including health and social services integration. All the experts we consulted stated that the type of integration achieved related to back-office and support function coordination across all units involved (functional integration), with relationships among different organisations (organisational integration) and within/across organisations (professional integration) supported by services coordination in a single/seamless process across time, place, and discipline (service/clinical integration).

Organisational and service delivery integration was achieved by the intervention through vertical coordination among social care workers, primary care centres and hospitals. In this regard, social workers acted as gatekeepers to social care in close collaboration with the

nurses from the primary care centres who were the health care managers. The GPs functioned as gatekeepers to the health system, working in close collaboration with the nurses in the same primary care centres and the specialists in the hospitals.

There was no consensus in terms of presence of normative and systemic integration. This was due to the different levels of support of the initiative at a local level. It is worth pointing out that the project was carried out in different areas (provinces) of the Basque Country with different levels of engagement of health and social care authorities. Although the initiative was funded and supported by the regional social care authority, implementation took place at the local level, where the municipalities had full control of the social care process. Moreover, there was an intermediary government level –the provinces– that was set up between the regional level and the municipalities. This entity coordinated the different municipalities within its territory.

2.2 Impact

The impacts of the intervention are still being evaluated. The results will be made public, but those responsible for the initiative already indicate that there was an improvement in the nursing home residents' quality of life and satisfaction. Qualitative data show similar trends about participants who lived in their homes. It is important to emphasise that health and social care professionals involved in the intervention were also satisfied with the initiative, especially the social workers who were given the opportunity to perform their tasks as case managers.

2.3 Drivers and barriers

The main drivers were the inter-professional teams that worked across the continuum of care, and the involvement of all the stakeholders in the initiative. Social workers were assigned as case managers in constant interaction with primary care nurses who in turn interacted with the GPs. These professionals worked together to cover both social and health care needs. Furthermore, specialists from the hospitals were also part of the team providing secondary care.

In addition, the leaders of the initiative encouraged the participation of all stakeholders involved in the initiative from both the private (local home care services) and the public sectors, including the meso-level institutions (provinces) and local level institutions (municipalities). This engagement allowed the leaders of the initiative to act as enablers, promoting coordination across settings and levels of care.

From a policy perspective, and despite the fact that the project was funded by the Department of Employment and Social Policies, it is important to stress that the ETXEAN ONDO initiative was grounded in the current Basque health system reform, where policy leaders are strongly pushing integrated care, fostering innovation and a cohesive culture. This made a continuum of care possible and provided organisational support through the strategy mentioned in Section 1.2.

At regional level, this project was perceived as an opportunity to link the Department of Health and the Department of Social Care. Nevertheless, there were differences with respect to the implications for policy-makers in each of the sites subject to the implementation of the ETXEAN ONDO initiative. It could be considered that the lack of policy support at a meso (province) and local level (municipalities) was a barrier to the full deployment of the initiative at local level.

Resistance to technology was not considered a barrier in the case of health and social care professionals, but the experts we consulted stated that it was seen as a barrier for patients, because of this target group's lack of digital skills. It is worth pointing out that the main inhibitors to the deployment of the initiative, once the pilot was finished, was the lack of funding to ensure adequate resources for sustainable change and up-front costs, and the lack of innovation in reimbursement models. Funding for the part-time social workers was cut once the project was finished.

Some constraints were identified in relation to the current regulatory framework. For some of the home services offered by the initiative, such as hairdressing or catering, the regulatory framework in place was insufficient, as these services were not considered suitable for funding. This meant there was no specific budget available for these types of services. In the same way, the regulatory framework on nursing homes was insufficient to allow modifications to the home settings.

Lastly, lack of IT interoperability was considered a major barrier for coordination between health care and social care. Even though there was a common EHR in place, the social care record was still not connected to the clinical record.

2.4 Organisation, health professional and patients

In the design and implementation of the ETXEAN ONDO project, the following organisations were involved:

- Basque Country Department for Employment and Social Policies.
- Guipuzkoa, Alava and Bizkaia health care districts departments.
- San Sebastián, Tolosa, Oiartzun, Zarautz e Irún municipalities and another ten small municipalities in Añana (Álava).
- Department of Álava (Diputación Foral de Álava).
- Health care providers located within the municipalities mentioned above (hospitals and primary care centers).
- Social care providers including home care providers and other type of services providers such as food delivery, laundry, hair dressing, physiotherapy, podiatry, health care transport and social activities.
- MATIA Foundation, and MATIA INSTITUTE and Pillars for Personal Autonomy Foundation.

The Basque Country Department for Employment and Social Policies funded the project. It was designed and controlled by the MATIA Foundation, and MATIA INSTITUTE in close collaboration with the Pillars for Personal Autonomy Foundation, a local partner for technical support in the Basque Country. These two institutions worked in close collaboration with the municipalities and the health care district at a policy level, and also with health and social care providers, including nursing home and other private services providers, at a functional level.

The ETXEAN ONDO project gave the social care workers from the municipalities a key role in the intervention as case managers within the social system, and enabled them to coordinate all the social services provision. These professionals worked in close collaboration with the primary care nurses (who worked as case managers within the health domain) to coordinate health and social care services. The GPs, working in the same team, continued to be the gatekeepers to the health system and referred patients to the specialists in the hospital when necessary.

Lastly, the initiative was designed with a patient-centred approach which considered not just the patients' needs, but also the respective context of caregivers and families. Each patient included in the pilot was provided with an individualised service plan, including self-management strategies and tools for health prevention and promotion.

2.5 Information and Communication Technologies

The ETXEAN ONDO pilot project was not supported by any special IT system developed on an ad hoc basis for this intervention. Instead, the initiative was carried out using the current IT infrastructure of the Basque Country, which includes:

- **Osabide Global**, a unified electronic medical records programme which provides comprehensive patient-focused information. The tool contains all the health-related information of a patient, facilitates service delivery and enables the provision of new forms of healthcare such as tele-consultation between primary and specialised healthcare. The new unified medical records programme enables healthcare professionals to consult the medical records of patients from any healthcare service organisation, with complete access to primary healthcare, hospitals and non-hospital based outpatient services of all microsystems. This increases coordination between healthcare services, with up-to-date information improving the medical decision-making process for all patients.
- **Electronic prescription (or e-prescription)** has been developed with a view to ensuring the standardised use of a single prescription mechanism for both primary and specialised healthcare. The initiative includes a vademecum and guidance on common prescriptions. E-prescription covers the whole process: validation, dispensing, administration and follow-up of medication, and involves doctors, nurses and pharmacists working together with a single programme, thereby ensuring access to the same information with an immediate update function.
- **Multi-channel Health Service Centre (MHSC)** is a Customer Relation Management platform that provides alternative ways for the public to interact with the health system. The aim of the project is to use all the available channels of interaction (Web, telephone, SMS, television, etc.) between citizens and the health system in order to facilitate care procedures, making them swifter and increasing decision-making capacity. The MHSC enables: (1) administrative procedures (primary care appointments, reminders and/or confirmation of dates, medical certificates, reports, personal health insurance cards, etc.), (2) the provision of information on services portfolio, health center directory, A&E departments, on call services and pharmacies, (3) the delivery of health promotion, information and education, through the patient forums for the promotion of healthy lifestyles, vaccination reminders and information regarding public health programmes, (4) chronic illness management, follow-up calls after hospital discharge according to clinical care pathways, telehealth monitoring, including alerts management and health counseling online and via telephone, (5) the provision of medical counselling and advice through a 24/7 call center staffed by trained nurses, available to the general public.
- **Telecare service BetiON Osatek** is part of a comprehensive system of care services provided at home. It represents a single point of access to social and health services for the users. BetiOn Medallion provides access to professionals who help users on any healthcare issue.

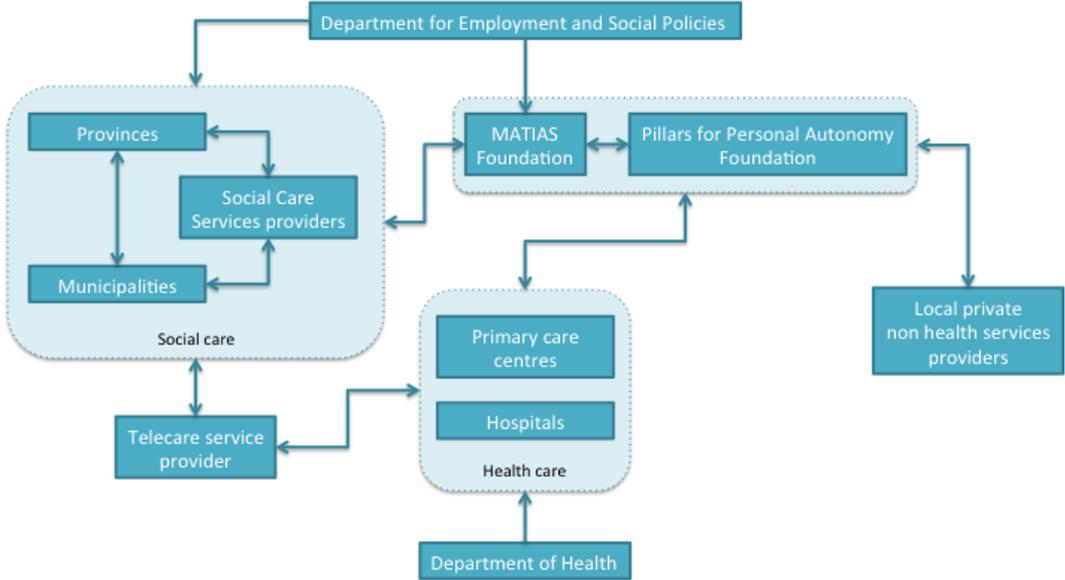
The Department of Health and the Department of Employment of Social Care are currently working together at a regional level, to develop an electronic care system covering both areas in order to provide health and social care professionals with a tool, which integrates all aspects of care.

2.6 Governance

No specific governance model was developed for the deployment of the ETXEAN ONDO initiative. The leaders of the initiative established different formal framework agreements of collaboration with the 3 provincial councils, 16 municipalities, telecare services (e.g. Telecare service Osatek Basque Government) and the primary care health centres and hospitals in the territory, in close collaboration with the Department for Employment and Social Policies. The MATIAS foundation, supported by other foundations, became the central node of the initiative, working in close collaboration with all the actors involved in the process without modifying the governance of the social care and health care systems. The integration of social and health care was achieved through the re-organisation of the services provision that allowed inter-professionals teams to work across the continuum of care, ensuring cooperation between health and social care, without modifying the governance structure of either health care or social care systems.

Furthermore, beyond the formal agreements among the public bodies, alliances were made with different stakeholders such as foundations, innovation centres, foundations for older and disabled people, associations, health providers, documentation and studies centres, adapted sports centre, home care service suppliers, and training centres.

Figure 6: ETXEAN ONDO Governance



Source: Authors elaboration

2.7 Organisational processes

ETXEAN ONDO re-organised the provision of health and social care ensuring cooperation between tiers of care, and health and social care, and providing access through multiple points. Social care workers played a key role as case managers, facilitating a patient-centred philosophy, focusing on patients' needs and providing self-management support

methods to them. The social workers acted as gatekeepers to social care services, facilitating the coordination and the provision of this type of services efficiently and effectively, and helping patients to navigate through the system.

These tasks were performed in close collaboration with primary care nurses, who also applied the case methodology in the provision of health care services. The nurses were part of the primary care team that included the general practitioner, who was the gatekeeper to the health system and worked in close cooperation with the specialists in the hospital. Nurses and social care professionals interacted according to the needs of the patients. This cooperation enriched the work of both professionals, who were able to assess not just health status but the patient's entire context, including his/her social capital and social network within the community. The organisational process established ensured the cooperation between tiers of care and between health and social care enabling real access to a care continuum with multiple points of access.

As a result of this assessment, which included profiling patients according to their risk factor, the professionals developed a personalised care pathway together which went beyond clinical care (primary and specialists) and included home care services, tele-care devices (BetiON), local services (such as laundry, hairdressing, personal support; transport, etc.), as well as programmes to support formal and informal carers and patients' families. These programmes included training sessions at the patients' homes and other assistance, so as to avoid burnout and to alleviate the burden for these individuals.

The same type of organisational process was developed in the context of nursing homes. In addition to the re-organisation of service provision, special efforts were made to redesign the environment, making it more friendly and personalised in order to prevent patients from feeling isolated in their new environment.

2.8 Reimbursement model and economic flow

ETXEAN ONDO was funded by the Department for Employment and Social Policies as a pilot project. Therefore, neither the Department of Health nor the Department of Employment introduced a specific reimbursement model on an ad hoc basis for the provision of the integrated care services. The funding allocated included provisions for a part time social care worker in each area as a case manager.

3. Transferability

The experts consulted were cautious when assessing the transferability of ETXEAN ONDO to other regions in Spain or to other countries with similar health systems. The main barriers that hinder its transferability are related to institutional, organisational and cultural issues, i.e. the difference between social workers and health care professionals, and the way these professionals interact under the umbrella of social and health system.

In this case, it is not just the integration of social and health care system, but also the integration within each system which is at stake. It is worth noting that the continuum of care is not exclusively related to the fragmentation of primary care centres and hospitals, but also to social care services that can be considered as fragmented, especially in densely populated areas with fewer social care workers per inhabitants.

Transferability within the Basque Country could nevertheless be considered feasible, given the fact that the Strategy (2010) aims to tackle the challenges of chronicity in the Basque

Country, and is clearly pushing integrated care in this region. For example, the Department of Health has announced an initiative to develop an Electronic Social and Health Record that links the information systems of both health and social care. The positive results achieved by ETXEAN ONDO may foster this transferability. However, no funding has been secured for further deployment

At EU level, the initiative's transferability seems feasible in health systems in which service provision is made through public agents and where integration could be more easily implemented through adequate institutional arrangements. Contextual and cultural model customisation would be required in these cases as well.

4. Conclusions

The ETXEAN ONDO pilot project aimed to implement a patient-centred integrated care approach that ensured that the elderly, their families and caregivers received an adequate level of support and care. The main target groups of this pilot project were vulnerable sub-groups and patients with complex illnesses, including chronic diseases, cognitive impairment and comorbidities.

The main focus of the service was homecare and nursing home management, including health and social services integration. The ETXEAN ONDO intervention included organisational and service delivery integration through vertical coordination among social care workers, primary care centres and hospitals.

The main organisational innovation was the role of social workers who acted as gatekeepers to social care and worked in close collaboration with nurses from primary care centres who acted as health care managers. The GPs functioned as gatekeepers to the health system and worked in close collaboration with the nurses in the same primary care centres and the specialists in the hospitals. Therefore, the initiative led to the development of inter-professional teams across the continuum of care, including health and social care systems. This re-organisation included the provision of health and social care, ensuring cooperation between tiers of care, health and social care, and access to services through multiple points.

The impact of the intervention is still under evaluation, but preliminary results suggest that the initiative led to an improvement in patients' and carers' quality of life and satisfaction.

The main facilitators of the initiative were the re-organisation of the services and professional engagement, both facilitators being clearly interrelated. On the one hand, the re-organisation of the services was achieved by giving social care professionals the opportunity to use case management methodologies in their service provision. This methodology has a strong tradition in health care, but less so in social care. The use of this tool somehow functioned as a bridge to connect both areas of care, while facilitating the establishment of common care pathways for these workers and health professionals. In this regard, the health system in the Basque country has an interoperable EHR for primary care and hospitals, but a similar system that would cover both health and social care is lacking. It is worth mentioning that the telecare services in the Basque Country are currently well established and they are used to work in close collaboration with both social and health care systems.

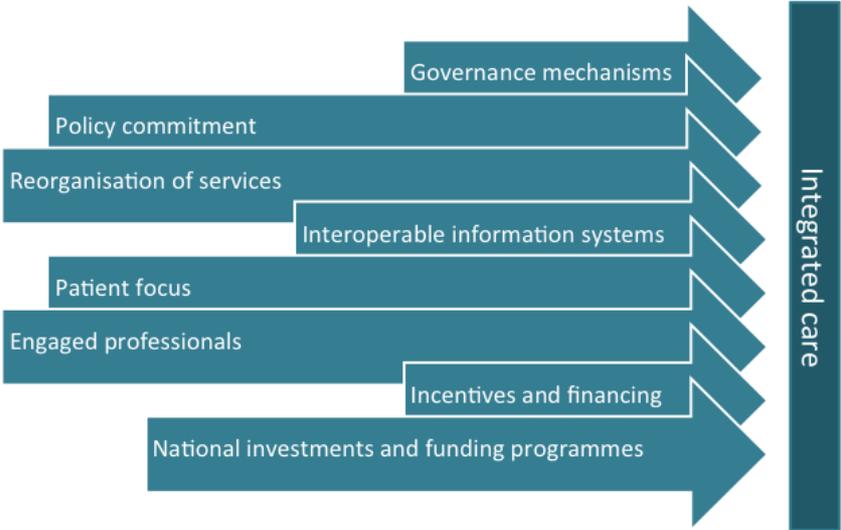
On the other hand, primary care professionals and social workers perceived the use of the new care management approach as a way to engage in the initiative, as it allowed them to

participate in the design and deployment of the intervention as key players. These two drivers were supported by policy commitment at regional and local level. However, the low commitment on the meso level (provinces) hampered the progress of the initiative in the region. The ETXEAN ONDO case therefore reveals the importance of the different political levels within the region, emphasising that all levels must be aligned if integrated care is to be fostered.

Another important facilitator of this initiative was the strong patient-centred approach, which focused not only on patients but also on their respective contexts, including their home environments or nursing homes, and the community.

The Department of Employment and Social Policies funded the initiative, covering the cost of a part time social care worker in each region. Without this funding, the initiative could not have been developed. A lack of national investments and funding programmes can therefore be considered as the main inhibitor of the initiative. In terms of governance, no specific mechanisms or incentives were put in place for the implementation of the pilot project. However, the current transformation of the health system envisages the use of this type of measure to foster integrated care.

Figure 7: ETXEAN ONDO facilitators



References

Basque Country Health Statistics (2014)

http://en.eustat.es/estadisticas/opt_0/id_4/ti_Health/

Documento Marco para la elaboración de las directrices de la atención sociosanitaria en la Comunidad Autónoma Vasca (Diciembre 2010)

Encuesta de Salud de Euskadi llevada a cabo en 2007 (ESCAV'07)

El estudio "El impacto de las diferentes enfermedades en la salud de la CAP V" (2008)

Encuesta de condiciones de vida de las personas mayores de 60 años (2010)

Informe Consejo País Vasco de Servicios Sociales año (2011)

Ley 8/1997, de 26 de junio, de Ordenación Sanitaria de Euskadi

Ley 12/2008, de 5 de diciembre, de servicios sociales de la CAPV

Nuño R, Piñera K. "Strategy for tackling the challenge of chronicity". Health Policy Monitor, October 2010.

Plan Estratégico para el Desarrollo de la Atención Sociosanitaria en el País Vasco 2005-2008.

Public Telecare Services of the Basque Government: an integrated health and social care provision mode (2013). BetiON Memorandum

Departamento de Empleo y Políticas Sociales. Gobierno Vasco (2011) Proyecto Etxean Ondo. Ámbito domiciliaria. Modelo Centrado en la Persona

Regional Ministry of Health and Consumer Affairs. Basque Country (2010) A Strategy to Tackle the Challenge of Chronicity in the Basque Country.

The Social Services Law of the Basque Country (12/2008)

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