



European
Commission

European Innovation Partnership
on Active and Healthy Ageing

Reference Sites

Excellent innovation for ageing
A European Guide



All rights are reserved for all pictures and illustrations in this publication.

Reproduction of the text is authorized provided the source is acknowledged. An e-mail to ec-aha-rs@ec.europa.eu informing of the proposed use would be a courtesy.

Neither the European Commission nor the reference sites are responsible for the use which might be made of the information contained in the present publication.

Table of Content

Introduction	5
Czech Republic	7
University Hospital Olomouc (with its unit Czech National eHealth Center – NTMC).....	7
Denmark.....	8
Region of Southern Denmark.....	8
Finland.....	9
City of Oulu.....	9
France.....	10
• Région Ile de France: Assistance Publique-Hôpitaux de Paris (APHP).....	10
• Région Languedoc-Roussillon: Contre les Maladies Chroniques pour un Vieillissement Actif et en bonne santé en Languedoc Roussillon (MACVIA-LR)	11
• Région Pays de la Loire: Centre D’Expertise National des Technologies de l’Information et de la Communication pour l’Autonomie (CENTICH)	12
• The Lower-Rhine Council.....	13
Germany.....	14
Saxon State Ministry for Social Affairs and Consumer Protection.....	14
Ireland	15
Collaboration on Ageing (COLLAGE).....	15
Italy.....	16
• Regione Liguria.....	16
• Campania Health Care Authority	17
• Regione Emilia Romagna: Agenzia Sanitaria e Sociale Regionale dell’Emilia-Romagna (ASSR)	18
• Regione Friuli Venezia Giulia : Istituto Regionale Rittmeyer per i Ciechi.....	19
• Regione Piemonte: Assessorato Regionale alla Tutela della Salute, Sanità, Edilizia Sanitaria, Politiche Sociali e per la Famiglia, Coordinamento Interassessorile per il Volontariato(AReSS).....	20

Portugal	21
University of Coimbra (Ageing@Coimbra, consortium).....	21
Spain	22
• Regional Ministry of Health and Social Welfare of Andalusia	22
• Basque Country	24
• TicSalut/InnohealthHub Catalunya.....	25
• Galicia.....	26
• Region de Madrid-Consejeria de Sanidad-Hospital Universitario de Getafe	27
• Departamento de Salud Valencia-La Fe.....	28
Sweden	29
Region Skåne	29
The Netherlands	30
• Province of South Holland: Medical Delta	30
• Nijmegen: Health Valley	31
• Northern Netherlands Provinces Alliance (Samenwerkingsverband Noord-Nederland)	32
• Province of Noord-Brabant: Coöperatie Slimmer Leven 2020 U.A. Innovation network for Active and Healthy Ageing.....	33
• Region Twente: Municipality of Enschede	34
U.K.	35
• The Ageing Well in Wales Programme	35
• Yorkshire and the Humber Digital Health Community	36
• Liverpool: Mersey Care NHS Trust on behalf of More Independent (Mi) partnership	37
• NHS24, Acting on behalf of the Scottish Government / NHSScotland.....	38
• Department of Health, Social Services and Public Safety, Northern Ireland.....	39

Introduction

This guide comes with a mission....

This guide aims to take you on a special journey through Europe: a tour of regions, cities and communities where you can see innovation for active and healthy ageing in real life. Now we know where to go when we need inspiring real-life examples of active and healthy ageing. We can finally see what we mean when, for example, we talk about ‘integrated care’, ‘independent living’ or ‘age friendly environments’. And we know how great the variety of technologies, services and approaches that help us make these visions a reality is.

The selection of **Reference Sites** for this guide was mainly done by themselves through a peer reviewed self-assessment based on key criteria such as EIP-AHA relevance, scale, number of specific EIP actions to which they are committed, evidence and replication potential. On this basis they filled out questionnaires on their contribution to the different action areas of the **European Innovation Partnership on Active and Healthy Ageing** and on their overall strategy to tackle the demographic challenge in Europe. Then they scored each other based on this information. The results you find here: after one year evaluation process, we have now 32 Reference Sites from 12 Member States, with a ranking from 1 to 3 stars. Plenty of room for growth and competition for all, as four stars is the maximum.

All Reference Sites are willing to share with you what they have discovered on their expedition to excellent innovation for ageing. They found out what ageing people need to stay, active, independent and healthy for as long as possible, they have good ideas for how to innovate in the systems for health and social care in such a way that they cater to real needs in a more effective and efficient way. And some of them also found out if and how a healthy business can be made out of it.

We hope it inspires you, to learn from, copy, tweak and deploy the best practices in your own community. Or to come up with something even better, to test, deploy and scale up. For example by sharing with the existing Reference Sites. It would confirm that this guide is not just a random catalogue of good practices, but an atlas of locations where these practices are deployed in a coherent way, as part of an integrated approach to active and healthy ageing. Of places also where people really benefit from innovation for ageing well.

One important disclaimer: this guide provides you with no more than a snapshot of on-going developments. Next time the map may have changed dramatically: other Reference Sites will have joined and existing ones may have raised their rankings. Four stars is the limit and no one is there yet... So our advice: use it while it is fresh, and continue your journey to excellent innovation for ageing for the benefit of all of us!



CZECH REPUBLIC

Site: **University Hospital Olomouc**
★ (with its unit **Czech National eHealth Center - NTMC**)

The University Hospital Olomouc is a major regional hospital providing general and specialized healthcare services. They are in particular focusing on *telemonitoring* of patients with *advanced heart failure* or *heart infarct* (of myocardium/ AMI).

The aim is to improve the health conditions of the target population (15% of patients with structural damage of myocardium and left chamber dysfunction and 15% of monitored population in the attraction area of University Hospital Olomouc) in both areas. The implementation of new guidelines will enable easier dissemination of the results to healthcare providers not only in Olomouc region but the whole country.

For further information: <http://www.fnol.cz/>





DENMARK

Site: Region of Southern Denmark



The Region of Southern Denmark has become a centre for innovation in ICT based health solutions.

SAM:BO is one of these innovation success stories coming from Southern Denmark. It is an agreement on *collaboration between health sectors* based on *digital technologies*, aiming at higher quality, efficiency and patient satisfaction, and better collaboration between all health and social care players in the Region. Thanks to this agreement and the IT tool adopted by the Region, the information regarding patients' hospitalisation is transferred electronically using an agreed proforma which creates better continuity of care by allowing professionals working in the community to better prepare for caring for the older person at home upon discharge.

SAM:BO builds on the concept of LEON – lowest possible cost level – which means that the patient will receive the best and most efficient treatment, but to the lowest cost possible without compromising the provision of healthcare. The starting point is the individual's needs, so that treatment is offered on a needs basis. The system expresses the essence of *integrated care*, where the citizen experiences consistency from the very beginning in the process where the general practitioner is contacted, to the diagnosis and treatment at the hospital and until the citizen is back in his/her own home for the follow-up rehabilitation therapy.

For the complex patients with one or several chronic diseases, the Region of Southern Denmark is implementing the **Shared Care system**, an innovative solution that runs on the backbone of SAM:BO. The Shared care is an ICT system that is established on the basis of the chronic care guidelines that have been issued both nationally and internationally.

Some examples of the impact of this good practice:

- The services delivered through the SAM:BO approach are available to the entire regional population (1.2 million citizens).
- The integrated flow of information through the healthcare chain increases the discharge rate and enables continuity once the patient is discharged and the municipality/home care takes over the care. The electronic communication also generate cost-savings for all the actors involved in the process.
- Before the Shared Care system, the information of citizens with chronic illness was dispersed over many IT systems and it was up to the citizens to transmit them to the different health actors. Now the chronic care guidelines have been digitalised and all information is available to the relevant actors in the chain, at the right time and place.
- Thanks to the Shared Care system complex patients can be monitored directly from home, with positive impact on their mental health and quality of life.



FINLAND

Site: City of Oulu



Oulu aims at being a global pioneer as a user and developer of wellness technology.

Supporting independent living and home care using technological products and services

The full potential of technology is still to be unlocked. New applications and services can receive interfaces to e-tools, infrastructures are being modified and rebuilt, and processes are changed. The target year is 2020 when the new age services will be ready and 92% people above 75 in Oulu will live at home.

Wellness profile Oulu and Oulu Self – Care system

The elderly can evaluate their well-being by using the *web tool* Wellness Profile Oulu. The individual wellness profile consists of many features: *independence, physical capacity, social network, loneliness, safety, perceived health, lifestyle, quality of life, mental capacity*. There are currently 28,300 registered users. The tool allows for early detection of problems and timely intervention. There are plans to expand the tool so that it can be used for research purposes (the data collected by the tool will however remain anonymous).

TTKaakkuri product testing service and OuluHealth (LivingLab)

OULLabs is an open innovation environment for product and service co-creation with end users. OULLabs provides ideation, development and testing



services for companies and organizations. Thanks to the participation of users in the the development and testing phase, companies gain better insight and provide better services. The lab boasts an active 600+ user community.

For further information:

<http://www.ouka.fi/oulu/english/elderly-people>

<http://oulu.ouka.fi/ttkaakkuri/en/>

OULU



FRANCE

Site: Région Ile de France: Assistance Publique-Hôpitaux de Paris (APHP)



The Regional Health Agency of Ile de France is one of the biggest in France. The two best practices detailed below are led by *Assistance Publique-Hôpitaux de Paris*, the grouping of Parisian hospitals, under the supervision of the Regional Health Agency.

HTLA: Health Territory Local Agreement

This agreement is a long-term project aiming at better coordination between local health and social actors for a more efficient care pathway. The territory agreement seeks to reduce three obstacles:

- “social”: feeling of loss of ownership of the process
- “technical”: the lack of tools to share information
- “cultural”, due to the intensity of professional identities.

The starting point of the agreement is a diagnosis of the situation of the territory in terms of care offer. A toolkit is available to perform this diagnosis and to evaluate the maturity of the agreement project.

Several new agreements, similar to this one, will be signed this year under the umbrella of the French Ministry of Health and its regional representations,

starting with three reference sites, Ile de France, Languedoc-Roussillon and Pays de Loire.

T4H (Technology and Human Help at Home after Hospitalisation)

This project aims to reduce the number of falls and to improve the physical autonomy of frail elderly returning home after hospitalization, maintaining their independence and deferring admittance in sheltered accommodation

The best practice relies on rehabilitation after hospital discharge via e-learning and assistive technologies for both the elderly person and their family and carers who receive adapted training in assisting them at home.

The methods of e-learning and the development of an innovative business model, based on a rental system of the technology rather than the individual acquisition, make this project a good candidate for scaling up. It is planned to have the e-learning programme translated and adapted locally (for cultural differences).

For further information:

<http://prs.sante-iledefrance.fr/>



FRANCE

Site: Région Languedoc-Roussillon:



Contre les Maladies Chroniques pour un Vieillissement Actif et en bonne santé en Languedoc Roussillon (MACVIA-LR) Fighting Chronic Diseases for active and healthy ageing in Languedoc Roussillon (Fighting CD-LR)

Fighting Chronic Diseases for active and healthy ageing in Languedoc Roussillon (Fighting CD-LR) is a cluster of seven ongoing projects.

Dossier Pharmaceutique® (ICT) applied to the elderly in France

The **Dossier Pharmaceutique®** is the electronic pharmaceutical record, a tool in use in 97% of private pharmacies in France, covering 35% of the French population (of all ages). This good practice proposes to promote further the Dossier Pharmaceutique® (i) to prevent drug interactions and improve compliance to treatment in people ≥ 65 years, (ii) to lower risk of falls (for the ≥ 75 years) and (iii) to manage better chronic diseases (in the ≥ 65 years).

Early management and coaching for frailty

The general objective is to prevent frailty using integrated care pathways (ICPs) and a teaching/coaching module. The ICPs will abide by the pathway recommended by the Ministry of Health. Starting September 2013 the ICPs will be tested in four to six French regions before being deployed throughout the country by 2015. The teaching/coaching module (Trans

Innov Longévité) is a trans-disciplinary, multi-sector, private-public partnership that trains and coaches on frailty, ageing and independent living. It is being designed for deployment beyond France, specifically in Canada and French-speaking African countries.

Interoperable Integrated Care Pathways (ICPs) for co-morbid chronic diseases in the elderly

The objective is to develop multi-sector ICPs for chronic diseases based on a comorbidity clinic and its deployment in remote rural areas. Integrated care pathways for chronic diseases have been initiated in hospitals (secondary care) and remote rural areas (primary care). The pilot studies should be deployed to the entire region by 2015. The nine-step scaling up strategy of ExpandNet/WHO is used for (i) dissemination and advocacy; (ii) organisational process; (iii) cost-resource mobilisation; (iv) monitoring and evaluation.

For further information:

<http://www.macvia.cr-languedocroussillon.fr>



FRANCE

Site: **Région Pays de la Loire: Centre D'Expertise National des Technologies de l'Information et de la Communication pour l'Autonomie (CENTICH)**



CENTICH is an information and communication technologies national center of expertise for independent living. It brings together research labs, manufacturers, SMEs, as well as user associations in order to accelerate the development and the use of ICT to increase independence among elderly people and people with disabilities. The candidacy submitted by CENTICH is strengthened by the involvement of the *gérontopôle* of Pays de Loire, a multidisciplinary institution, for autonomy and longevity.

Regional House for Autonomy and Longevity and the Living Laboratory « Léna »

The Regional House for Autonomy and Longevity is a showcase dedicated to the economic and societal challenges of demographic ageing. It informs and advises through exhibitions, seminars etc about structures and assistive technologies designed to improve the quality of life of the elderly. The living lab “Léna” provides information and advice on how to adapt one’s home with new technologies dedicated to independent living and health. 400 persons a year receive such information and advice. “Léna” integrates

more than 30 technologies dedicated to independent and assisted living and to telehealth ranging from safety tag to ambient or digital equipment for the kitchen monitoring systems. It is partner in a number of European projects that develop, integrate and facilitate access to technologies dedicated to independent living and health.

Hearing Impairments and Low Vision Regional Centre

The centre offers a new approach that optimises the use of residual functional hearing or vision and the development of other possible substitution sensory capacities and promotes compensation techniques, with the aim of increasing patient’s independence and quality of life. It has 3.000 visits a year, which corresponds to about 600 patients.

For further information:

<http://www.centich.fr/>



FRANCE

Site: **The Lower-Rhine Council**



In 2008 the Council of the Lower-Rhine region initiated an “innovative policy for active and independent ageing”, built on a long-term vision and structured around public-private partnerships.

« Innovative policy for active and independent ageing » public policy

The policy aims to explore the potential benefits of innovative solutions, including ICT, in promoting the independence of elderly people in their own homes. With this comprehensive approach the Lower-Rhine Council promotes and supports collaborative projects on technical solutions in the field of prevention and early diagnosis of functional decline.

In 2010 the Council launched a call for projects. Seven innovation projects were selected and tested over the period 2010-2012, with an overall budget of €2.6 million. Two projects received additional funding from the European Agricultural Fund for Rural Development. The Council and its partners have developed an expertise on



Direction de la Communication CG Bas-Rhin / mars 2013 / Photos : Denis Guichot/CG67

usages, acceptance of the solutions and business models, giving priority to mature technologies. By promoting the know-how of the local industrial and research base the Council nurtures the growth of the sector in the region.

For further information:

<http://bit.ly/12YZplO>



GERMANY

Site: **Saxon State Ministry for Social Affairs and Consumer Protection**



The Saxon State Ministry of Social Affairs and Consumer Protection is responsible for health care, social affairs and elderly people for about 4.1 million citizens. Three among its most innovative initiatives for ageing are outlined below.

The **Saxon Housing Cooperatives (VSWG)** operate in the context of the project “**Living the Age**”, a cooperation project of housing cooperatives, research institutions and companies working to adapt housing units of Saxon cooperatives to the changing needs of their ageing inhabitants. The ambient-assisted living technologies and systems developed and tested link the health, security, comfort and leisure aspects with the housing. The Saxon Housing Cooperatives link together 229 associated housing cooperatives with 286.000 housing units.

The **Tele-diabetological Competence Centre** was founded by the University Hospital of Dresden with the objective to use telemedicine for better care delivery, enhancing at the same time patient’s self-management. The core activity of the centre is directed to the improvement of primary, secondary and tertiary prevention of diabetes mellitus. Although the centre is still being built up, a pilot project in the neighbouring region of Brandenburg has already covered 20.000 patients.

According to the **Geriatric Concept**, developed by the Ministry, the elderly patients shall get access near to their living places to high-quality and efficient care



diagnosis, treatment and rehabilitation. This objective is pursued through the care nets, geriatric centers attached to hospitals and rehabilitation facilities cooperating with hospitals, specialized medical practices, family practitioners, specialists, outpatient and inpatient rehabilitation facilities, nursing homes and services, municipalities, social services and housing companies. The Geriatric Concept is based on four principles: interdisciplinary approach, professionalism, subsidiarity and regionalism. To date, four pilots have been launched in different regions of Saxony.

For further information:

<https://webgate.ec.europa.eu/eipaha/initiative/index/show/id/218>

<http://www.mk3.uniklinikum-dresden.de/html/de/praevention/index.html>

<https://publikationen.sachsen.de/bdb/artikel/11680>



IRELAND

Site: Ireland: Collaboration on Ageing (COLLAGE)



COLLAGE is a collaboration formed by Cork Healthy Ageing (through Resource Generation & Education - University College Cork) and Louth Age Friendly County. This cross-sectorial initiative includes healthcare providers, local authorities, older people economic development agencies, SMEs, industry partners, community groups and academia.

The **CARTS (Community Assessment of Risk and Treatment Strategies) Programme** aims to delay or prevent *functional decline* and *frailty* and 3 adverse outcomes: *institutionalisation*, *hospitalisation* and *death*. It is an integrated screening assessment and treatment package that uses a rapid screening tool (providing a global assessment in 2-5 minutes) helping identifying and understanding the risk factors and thus to define the most beneficial interventions for the patients.

Within the framework of Ireland's National Age-Friendly Counties Programme, Louth has set out as the first county in Ireland to develop and implement an *age-friendly county* action plan: the **Louth Age-friendly County Initiative (LAFCI)**. Among its objectives there are an improvement in the seniors' health and well-being, an increased participation of older people in the community life and the delivery of services through imaginative and cost-effective partnerships. Housing, building and transport are among the "physical" environments that are object of innovation in order to increase their age-friendliness.

The **Let Me Decide" Advance Care Planning and Palliative Care Programme in Long-term Care** implements



an advance care planning programme and a palliative care educational initiative into long-term care settings. The objective is to increase older people's independency and reduce unnecessary treatments.



Some examples of the impact of these good practices:

- CARTS is improving patients' empowerment, allowing them to take part in the definition of their specific management plans, based on their personal risk level. 803 patients were tested in the pilot phase, currently 5000 older adults are being assessed.
- Preliminary data on the use of CARTS show that high-risk individuals are 33 times more likely to be institutionalised, 3 times more likely to be hospitalised and 16 times more likely to die than the low-risk group within 6 months from the assessment. The tool proved to have a superior sensitivity, accuracy and specificity in predicting long term care, hospitalisation and death, improving care delivery, detection of frailty, communication and integration of care settings.
- 13,500 citizens aged 65+ participated in the pilot of the Louth Age-friendly Initiative. The guidelines for "Place to Flourish", directed to improving the person-centred characteristics of the environment in long term care setting, were adopted in 181 out of 581 places in residential care.

For further information:

<http://www.collage-ireland.eu/>



ITALY

Site: **Regione Liguria**



The **Memory Training (MT)** programme aims to maintain, as long as possible, a good quality of cognitive life for the elderly, easing the conservation of functional and psychic autonomy and, consequently, relying less on the local health system. It mainly consists of a course, specifically based on the cognitive functions, to improve mental performances both at medium and long term. The course is open to everybody, but people aged over 65 have preferential access.

The **Adapted Physical Activity (APA)** is a preventive programme, directed to ease the acquisition of healthy lifestyles and to keep the best quality of life possible. Liguria Region supports the diffusion of the AFA project for primary prevention, with the aim to: identify the frail elders at risk, develop monitoring systems for not self-sufficient elderly people, provide useful advice for the planning of interventions oriented to prevent disability of high functional risk elders, contribute to reduce the hospitalization expenditures.

For further information:

<http://www.regione.liguria.it/argomenti/sanita-e-politiche-sociali.html>





ITALY

Site: **Regione Campania** Health Care Authority



In the context of the national Public Health Service, Campania's regional government outlines health service planning for the region through the Regional Public Health Plan. The population comprises about 1 million people aged 65+, leading to particular attention to the age-related policy and actions.

Campania is implementing a **regional integrated model** involving all relevant stakeholders to identify, validate and implement programmes to prevent and reduce *functional decline* and *frailty* among older people. Its objectives are awareness raising among professionals on relevant health care and cure innovations, screening of the population inside and outside clinical settings, evaluation of the effectiveness of innovative diagnostic tools and nutritional interventions.

The “Campania nel Cuore” project adopts the ICT paradigm for chronic disease management of patients, adapted to the prevention of cardiovascular events in high risk populations. The initiative started in Naples 15 years ago and the aim is now to extend the use of ICT for follow-up of chronic patients in the region. So far 433,000 hypertensive elderly and patients with heart failure rate have been treated (46% of total over 65 years population).

The Campania Electronic Health Record (eHR) has the aim to aggregate fragmented information about the population in the regional area, to improve the effectiveness and efficiency of the services provided

to the citizens. 10% of the citizens living in the three pilot Local Health Units (Avellino, Benevento and Salerno) territories are currently involved. Together with an improved efficiency of internal process in the healthcare system, there is an estimated potential for public health savings of 3-5% per citizen.

For further information:

<http://www.beta.regione.campania.it/it/tematiche/sanita>





ITALY

Site: **Regione Emilia Romagna:**



Agenzia Sanitaria e Sociale Regionale dell'Emilia-Romagna (ASSR)

The Regional Agency for Health and Social Care (ASSR) is the technical agency for the Regional Health and Social Policies Department of the Emilia-Romagna Region. With reference to the elderly, in 2011 in Emilia-Romagna there were 1.004.450 people aged over 65 years, 22.5% of the population. This figure has been continually rising for more than two decades.

PROFITER is an initiative for the prevention of falls. Its main objectives are to establish a regional network for the digitalisation and retrospective analysis of fall-related information, the development and validation of a personalised fall risk model, and the deployment and evaluation of ICT solutions for detection and prevention of falls. Future deployment of the PROFITER systems, services and approaches to the falls will also contribute to the sustainability and efficiency of regional health services.

SOLE (Healthcare online) and **EHR (Fascicolo Sanitario Elettronico - FSE Emilia-Romagna)** aim to create an integrated network of local health trusts, hospitals, general practitioners and paediatricians and to provide, through the Electronic Health Record (EHR) the clinical history of every citizen of the region. The system allows a reduction in the risks of the clinical errors at the point of care, smoother and continued transfer between different points of care and time savings. Electronic capture of data through

Electronic Health Registries (EHRs) facilitates clinical research, as well as improves evidence-based care delivery, promotes prevention and increases stakeholder cooperation. The whole regional population has access to the services provided by SOLE/HER. Currently three quarters of the population, including 600.000 elderly, joined the system, which also involves almost the totality of general practitioners.

The **ARIA** project evaluates the feasibility of an innovative home-based follow-up program, combining tele-monitoring, early integrated care and physiotherapy, for prevention and early treatment of acute respiratory episodes in patients affected by neuromuscular, neurological and rib cage diseases. The objective is to reduce hospitalisation and maintain good clinical conditions as long as possible. The results of the projects are so far very positive: 10% of the patients serviceable remotely at home; reduced hospital stays (per patient yearly from 40 to 2 days); increased total check-up hospitalisation days from 0 to 1.42; reduced hospital costs. For this reason, the project, currently limited to the Province of Reggio Emilia, will probably be extended to the entire Region.

For further information:

<http://assr.regione.emilia-romagna.it/it>



ITALY

Site: **Regione Friuli Venezia Giulia**



Istituto Regionale Rittmeyer per i Ciechi

The Institute provides services for blind and visually impaired people of all ages in education, rehabilitation, social and labour integration, recovery and development of skills.

Some of the results of the scheme include better levels of quality of life for the elderly population with visual disabilities achieved through increased home care services, monitoring of technical personnel specialized in welfare systems and specific technologies for the blind and visually impaired people.



For further information:

http://www.istitutorittmeyer.it/istit_rittmeyer.html



ITALY

Site: Regione Piemonte:



Assessorato Regionale alla Tutela della Salute, Sanità, Edilizia Sanitaria, Politiche Sociali e per la Famiglia, Coordinamento Interassessorile per il Volontariato (AReSS)(Regional Agency for Healthcare Services)

Over the last decade the Piemonte Region has brought about an organizational change directed to the enhancement of primary care facilities and the implementation of integrated care pathways, in order to avoid useless or inappropriate hospitalisations for patients. This new organisational model implied the 'reconversion' of smaller hospitals into primary care facilities (CAP).

One of the recent actions in favour of older people was the establishment in 2007 of a **University 'nurses advanced learning programme'**, aimed at training the professionals to a new multidisciplinary activity in order to facilitate their skills reconversion and to pave the way to the implementation of a new model of healthcare delivery. The first edition of this University Master's started in 2007, providing a proactive management model of care for chronic diseases. The model identifies the family and community nurses as the central carers who support the community empowerment and the case/care management. The final aim is to increase the quality of life for frail old people, mostly from isolated territories, through innovative models of healthcare delivery with multidisciplinary professional teams.



For further information:

<http://www.regione.piemonte.it/sanita/cms/>



PORTUGAL

Site: **University of Coimbra** (Ageing@Coimbra, consortium)



The University of Coimbra, together with the other members of the consortium “Ageing@Coimbra” supports a holistic ecosystem of stakeholders and it implements innovative practices to manage cognitive ageing, dementia, vision impairment, human kinetics and mobility.

The Cluster for early diagnosis and management of cognitive ageing, dementia and vision impairment boasts good results, such as the 1350 patients/yearly under specialty evaluation in the medical consultation of dementia, the creation of over 100 jobs within different projects under the cluster, 18.5% of the patients integrated in the detection programme with biomarkers. Such successes have led to the adoption of some of the solutions and tools at national level.



The **Cluster for human kinetics and mobility in senior people** involves partners that are national references for neurology, rheumatology, osteoporosis, human kinetics and territory planning. The results of the close cooperation between the partners are numerous: physically frail seniors experience greater mobility between care settings and in the city; an improved efficiency of care pathways in the primary Care Unit with waiting periods reduced by 50%; reduced operational costs due to electric care for seniors; over 200 jobs created (inside Portugal and outside).

The **innovation model for ICT technological transfer in health and well-being** aims to support the transfer of the innovation e-health ecosystem of Coimbra at the highest standards at the European level. The model facilitates the development of innovative products, the creation of new companies and of highly qualified jobs, giving a boost to the economy through e-health technology.

The partners are achieving good results in terms of business volume and system usage. Just to give a few examples, one of the partners reached in 2012 a business volume of € 9million in 2012, with 10.500 professional users, while another partner developed an open source solution for electronic medical prescription, which is currently available to more than 850 healthcare providers, covering more than 5 million of people.

For further information:

<https://webgate.ec.europa.eu/eipaha/initiative/index/show/id/302>



Site: Regional Ministry of Health and Social Welfare of Andalusia



The Regional Ministry of Health and Social Welfare is in charge of health and social welfare policies as well as the leadership of the Andalusian Public Healthcare Service (APHS) and the Andalusian Social Services Agency. The Andalusian Health Plan defines the overarching goals of the health policy and is complemented by a number of specific and transversal plans, such as those presented below.

The **Andalusian e-Health Strategy (AeHS)** enhances the quality of life of citizens and the coordination of their health and social carers through electronic integration of health information. The scheme is available to the entire population (8.5 million inhabitants) and includes all professionals involved in public healthcare and all pharmacies in the region. Some of the innovative services provided to the population include: the Diraya system that unifies in one single *electronic health record* the health information on each patient, the *electronic prescription*, *telemedicine services*, *mobile health applications*.

The stakeholders and resources mobilized by the AeHS promoted the participation of several Andalusian and Andalusia-based companies to EU-funded projects, such as Commonwealth, Palante, Independent.

The **Andalusian Strategy on Active Ageing (ASAA)** applies to all 65+ citizens (1.280.000 citizens) and improves the social welfare of older people by integrated policies around: living in safety, healthy living, participation, contribution and innovation, and lifelong learning. The ASAA is made up of four pillars areas: health, participation, security and training. Some of the innovative care services offered to the elderly in the context of this scheme are: the One Million Steps programme, to promote *physical activity*, the Andalusia Junta 65 card, to obtain *discounts and benefits in transport, cultural, sport, and leisure activities*; the *University Programme for the Elderly*, addressed to people aged 55+; the *elderly annual check-up* for people aged 65+.

Some examples of the impact on the territory:



- The AeHS services are registering a growing success over the years in terms of usage and satisfaction: the yearly number of e-prescriptions reached approximately 139 million in 2012; the mobile health applications reached a 100% training coverage in mobile intensive care units; high number of patients requiring primary care appointments using the phone (20.36% in 2012) or the internet (23.33% in 2012); the portal ClicSalud received 7,532 queries to access the EHealth Record in 2012; 12,470 people subscribed to SMS alerts; the health apps have been downloaded 4,000 times (1,308 in the region) in more than 30 countries.
- The economic impact of the AeHS is also significant: the e-prescription enables early savings of € 3,1 million due to elimination of printing costs and € 3.2 M due to data management; more savings are related to the decreasing number of hospital admissions (from an average stay of 7.50 days in 2008 to 7.16 in 2012) and of consultations in family medicine (-16,11% from 2007 to 2012).
- The services provided under the umbrella of the ASAA have a wide outreach: about 1 million people over 65 years old are Junta-card holders; the University Programme for Elderly counts nearly 50,000 participants since 2004; 138.891 patients have used the Physiotherapy and rehabilitation services and 3.699 patients the Mobile Units; the health check-up for people over 65 reached so far 63% of the target (population over 65 years old).
- In terms of economic investment and return, the ASAA is also rather successful: the Junta card has brought savings of €200 million; €1 million is the investment in supporting care material for people with special needs; in the specific programme SENIOR, dedicated to entrepreneurship, 829 companies have registered and 2.672 jobs are estimated to have been created.

For further information:

<http://www.juntadeandalucia.es/salud/sites/csalud/portal/index.jsp>





SPAIN

Site: Basque Country



The Basque Country mobilizes social, healthcare, community and third sector resources to improve the quality of life and the health of the elderly in the region. The good practices outlined below are linked but have a specific focus respectively on health, social and community dimensions.

The **Basque Strategy for the chronic conditions** covers all the 860,000 chronic patients of the Region (18,4% of 65+ population). Through its 14 projects, the strategy is operating a shift in the healthcare system, from a reactive model centred on acute medical care to a proactive model designed to prevent, care and cure on the basis of risk factors and patients' specific needs. ICTs are key drivers of the process: the unified *electronic clinical record*, the *multichannel platform* and the *e-prescription system* amongst others have been connecting rural and urban areas, patient homes and hospitals, informal carers and physicians, primary care doctors and consultants and social workers and nurses.

Extean Ondo is a pilot project seeking to implement a model of person-centred care and case management, promoting older people's *active life style* at home, based on coordination between different actors in the care value chain. The target population is mainly composed of seniors who are at risk of being moved into a nursing home and those at risk of falling. Different intervention programmes, such as *prevention of falls* and *rational use of physical and chemical restraints* are designed and implemented to prevent this situation.

The Basque Country, having the largest elderly population and one of the lowest birth rate of Spain, presents ideal

demographic characteristics for the development and testing of **age-friendly environments**. The aim is to promote, coordinate, develop, implement the action plan for Age friendly environments in Biscay, and replicate the models existing in San Sebastian and Bilbao.

Some examples of the impact on the territory:

- The Basque strategy for chronic conditions has achieved a 38% reduction of hospitalisation of highly complex patients and a 26% decrease of the visits to emergency room, high citizens' satisfaction from the modernised public health system (76%), the development of processes of innovative public procurement processes involving technology development companies; 2% of the population is currently participating in self-management programs.
- The telecare public service handles every month around a thousand enquiries, approximately 30% of which are resolved from the patient's home. 97% of these calls are answered within 20 seconds. 27000 people are currently using this service.
- 100% of senior citizens will benefit from the initiatives on age-friendly environments.

For further information:

<http://cronicidad.blog.euskadi.net>

<http://www.osasun.ejgv.euskadi.net/r52-ghhome00/eu/>





SPAIN

Site: [TicSalut/InnohealthHub Catalunya](http://ticsalut.cat)



The **TicSalut/InnohealthHub Catalunya** connects several stakeholders gravitating in the healthcare system, from hospital and research centres to IT companies, and the Department of Health of the Government of Catalonia. The organization is very active in the areas of prevention and care of age-related diseases: cancer, cardiovascular, neurodegenerative and metabolic diseases, mental health, prevention through diet and nutrition, atherosclerosis, problems resulting from falls, among others.

The **NEXES** project is conducting large scale trials of four ICT-enabled integrated care services – *well-being and rehabilitation, enhanced care for frail patients, home hospitalization and early discharge, remote support for diagnostic and/or therapeutic procedures* – and is identifying strategies for extensive regional deployment. The focus is on highly prevalent chronic conditions (*COPD, chronic heart failure and diabetes*). The programme covers the population of Barcelona-Esquerre (540.000 inhabitants), with the aim to be extended to the rest of the region.

The **Colorectal Cancer Early Detection Programme (PDP-CCR)** started in 2009 with the objective to reduce the incidence and mortality of colorectal cancer, representing the second cause of death by cancer in Catalonia, both in men and women, with 2,600 deaths per year. The key elements in the programme are effective screening and early diagnosis in order to detect and treat colorectal adenomas and cancer during initial stages. The programme has been progressively expanded to the health care regions of Barcelona, Camp de Tarragona, Terres d'Ebre, Girona, Central Catalonia and Lleida. The aim is to cover 100% of the target population of Catalonia by 2015.

MECASS is a project that seeks to put in place an integrated, patient-centred, care model, based on coordination, collaboration and continuity of care. It is developing collaborative model between health and social care for chronic diseases patients, which will be deployed for selected areas/patients.

Some examples of the impact of these good practices:

- In Barcelona all the four integrated care services of Nexes showed positive results: for the well-being and rehabilitation module, it achieved higher sustainability of trainings effects over time and improved physical activity levels; through the Enhanced care, the Pulmonary Medicine Department reached a significantly lower (10%) rate of early readmissions after discharge than those observed in the whole region (15%), in Spain (30-35%) and at EU level (30-35%); the home hospitalization programme has been successfully deployed as conventional care; in the field of remote support to primary care Nexes explored the role of a web-based application to enhance quality of forced spirometry in primary care done by non-specialized professionals.
- Thanks to the PDPCCR programme early diagnosis of patients with colorectal cancer improved (27,000 patients living in Catalonia) and tumour cancer (6,000 cases yearly); the in vitro diagnostics (IVD) market expanded following the ageing society increasing demands for laboratory tests. In terms of coverage, 50% of the target reached in screening, with detection of cancer in 5% of the people screened.
- Expected results of MECASS (started in 2013): 15% increase in early diagnosis, 10% reduction of waiting lists for diagnosis and interventions; 25% decrease in costs, 30% increase in resource efficiency.



SPAIN

Site: Galicia



The Galician Department of Health leads the Galician Public Health System. Over the years it has developed several strategies to address the needs of the elderly, representing a significant quota of the total population (23% of the citizens are aged 65+). The implemented actions focused in particular on the *integrated management of chronic patients*.

IANUS is a system to improve the fluidity of health care processes, the access of health professionals to medical data and the continuity of care for patients with online/ICT models and systems. It consists of *electronic medical records* that provide an integrated view of clinical information that has been generated from a patient. Through IANUS, services like *electronic prescriptions* and dispensations of all medication throughout all of the Galician Public Health System are guaranteed. Currently 100% of health centres and hospitals of Galicia and 100% of pharmacies are connected.

The “**Innova Saude**” and “**Hospital 2050**” are two strategic programs that are implemented via respectively 9 and 14 innovation projects. The projects (timeframe 2011-2015) are funded with an investment of over 90M€ and received €79,2 million from the European Regional Development Fund (ERDF). The main goals of these programmes are to build the future model of Galicia Health System

and provide a sustainable model for patient-centred healthcare services.

Some examples of the impact of these good practices:

- IANUS enables the access to a larger amount of information relevant for decision making, resulting in better diagnosis and more personalised treatments and thus enhanced security, together with an increased preservation of data.
- 2,700,000 citizens have access to IANUS and can retrieve via internet basic information about their own medical records using their national identification number. This is especially beneficial to those patients with chronic illnesses. It is estimated that the use of IANUS reduced hospital visits, by 4% in ER and consultations at primary care by 10% and it lead to a 19% reduction in the number of patients waiting for an appointment.
- IANUS enabled public savings, for example it helped achieve 75% savings in costs due to elimination of the film supporting medical imaging.

For further information:

www.sergas.es



SPAIN

Site: Region de Madrid-Consejeria de Sanidad-Hospital



Universitario de Getafe

The Consejería de Sanidad de la Comunidad de Madrid is responsible for the healthcare services in the Region of Madrid. The services are provided through the Servicio Madrileño de Salud (SERMAS), which integrates all the public health organisations, including the Hospital Universitario de Getafe, whose good practices are presented below.

The **Falls and Fractures Clinic** offers integrated care for older people with or at *risk of falls* and *fractures*. The approach is to assess the risk of falls and fractures in all subjects at risk, intervene where it is needed and follow up with rehabilitation programs. The clinic has established a research environment for development and validation of assessment tools, intervention models of care. It also offers specialized training in falls and fractures for health workers. Currently the clinic serves 550 elderly.



The **integrated care programme for older in- and out-patients** offers continued, progressive and coordinated attention to patients, at home or in residential care, at high risk of functional decline, institutionalization, and hospitalization. The objective is to offer the most appropriate care to the changing needs of the patients. The programme is organised in two parts: for the people admitted to the hospital, the caring teams responsible for the different phases of the treatment are coordinated through periodic meetings (both physical and remote, to coordinate care with other hospitals) and connect before discharge with the primary care team; for the patients at homes or in residential care structures, the programme includes follow-up of the patient, directly or in close collaboration with Primary Care, an open line of phone calls with the patients and monitoring of the patients via ICT-based solutions like mobile health applications for patients with Heart failure.

Some examples of the impact:

- Falls and Fracture Clinic: the initiative was launched in 2009 and since then the average stay in the Orthogeriatric Unit decreased by more than two days per patient, €120,000 savings were registered, and the waiting time to surgery has decreased from 5.1 to 3.2 days.
- In the context of the integrated care programme for older in- and out-patients it is possible to appreciate a reduced length of stay in hospital, which leads to about €1,000 /patient and a reduced number of inappropriate admissions, so far bringing about €1.5million savings. In general, the programme is moving long-term care from institutionalisation to home care.

For further information:

http://www.madrid.org/cs/Satellite?language=es&pagename=HospitalGetafe%2FPages%2FHGET_home



SPAIN

Site: Departamento de Salud Valencia-La Fe



The Hospital La Fe is the reference hospital coordinating the Health Department of Valencia-La Fe, one of the 23 geographical areas defined within the Valencia Health Region. Together with the Hospital Clínica de Benidorm, it constitutes the reference site for Valencia Region.

The **integrated care at home** programme provides patients and informal care givers with comprehensive care at home, favouring transition from hospitalization to home care. The programme includes several services particularly valuable for the older population: a specific home based *training* for patients and caregivers to empower *self-patient's management* and increase *adherence to treatment*; a specific score for the *stratification of the risk of falls* and a set of intervention guidelines to prevent the occurrence of falls; *mental health and cognitive decline assessment* test for early diagnosis and prevention; multidisciplinary integrated care teams supporting patients and informal care givers at home. The service includes specific IT support: home monitoring devices, electronic health and social care records both in primary care and hospital and mobility support for professionals while doing home visits.

The **Integrated Chronic Disease Management Model (GECHRONIC)** aims to improve the care of complex chronic patients in the health department with the support of an organizational change and remote monitoring technologies. The complexity of the patient is based on the results of a stratification analysis identifying those consuming the greatest portions of the healthcare resources dedicated to chronic conditions. The programme, whose outcomes are under evaluation, currently covers around 750 patients (with the aim to reach 3000 by 2015).



The **Electronic Health Care Record and Integrated Information Systems** is an initiative of the Valencian Health Agency in application to the whole region. The objectives are to enhance integration and interoperability of all systems, to ensure their sustainability with improved efficiency and quality of service, having a citizen-focused approach.

Some examples of the impact:

- In the context of the integrated care at home programme, about 7.000 patients were treated in the last 3 years with a global index of satisfaction of 92,7% in 2012 (target: 90%); 154€ saving per stay, length of stay at hospital 30% less than Spanish expected value
- The EHCR is accessible to 50.000 healthcare professionals and 373 pharmacies. 5.1 million patient summaries are available, 43 million clinical documents are registered, 150.000 daily hits searching records. All this integrated information enables better control of treatment interactions and drug administration and more quality support for decision making for the professionals.
- The development of the system has created a boost for the IT industry present in the region: 1.320 IT specialists and 107 companies were involved.

For further information:

<http://www.lafe.san.gva.es/departamento-de-salud-valencia-la-fe>

Valencia Reference Site



SWEDEN

Site: Region Skåne



Better life for the most sick elderly

Region Skåne has implemented an action plan to encourage, strengthen and intensify cooperation between home care, primary care and hospital care for the most ill elderly people. In order to implement the process, regional Improvement leaders have been appointed to support the processes. The role of the development leaders is to serve as focal points of knowledge between home care, primary care and hospital care. Additional objectives are promotion of best practices, as well as spreading practice of quality registers, teaching improvement work and monitoring results. The project has now been implemented in 21 other counties in Sweden.

For further information:

<http://bit.ly/11ltwce>



THE NETHERLANDS

Site: Province of South Holland: Medical Delta



The Medical Delta collaboration is concentrated in the cities of Delft, Rotterdam and Leiden, but with extension to surrounding municipalities and the city of The Hague as well as remote areas in the province of South Holland. The organisation comprises several stakeholders (universities, primary and community care networks, industry government, patient organisations, investors) whose core activities include healthcare provision, education, research and development as well as commercialisation. Three among the good practices implemented by Medical Delta are outlined below.

The **Leiden Lab on Health&Wellbeing** works on *patients' empowerment*, where citizens become creators of their own health and the local community is the laboratory for the development, implementation and upscaling of innovations. The Lab provides "vitality" solutions for and with active and independent living seniors, including: prevention and early diagnosis of functional decline in older people protocols; assisted daily living for older people with cognitive impairment; education and training programmes for health workforce and carers; interoperable independent living solutions, including guidelines for business models.

The **Walcheren Integrated Care Model (WICM)** is a comprehensive integrated model for the detection

and assessment of needs and the assignment and evaluation of care for independently living frail elderly. It encompasses the entire chain, from detection to care provision, in the fields of prevention, cure, care, welfare and residence, in primary, secondary and tertiary care. Approximately 900 elderly aged 75+ were contacted to participate in both the experimental and control practices (80% response rate). The results of the evaluation showed high satisfaction in terms of quality of care and improved quality of life for the elderly and the caregivers, while the professionals perceived an improvement in their working environment.

The **Network for integrated falls prevention and management** seeks to create an integrated service pathway that links prevention, screening and early diagnosis, personalised intervention, assessment and follow-up. The model, currently disseminated in Rotterdam, Delft, The Hague and Leiden, is based on early identification of seniors at higher risk of fall, who can benefit from pro-active assessment and interventions. The awareness among seniors, the public and professionals is increased and falls are also better reported.

For further information:

<http://www.medicaldelta.nl/society/eip-active-and-healthy-ageing/best-practices>



THE NETHERLANDS

Site: Nijmegen: Health Valley



The Health Valley is a regional network platform for companies, knowledge institutes, healthcare providers, healthcare insurers, private and public investors and local and regional authorities. It covers the Province of Gelderland and province of Overijssel.

The Nijmegen Model of Networking for Active and Healthy Aging fosters the collaboration between healthcare providers and professionals through innovative networks (ParkinsonNet, the Frail Elderly Network and the Network for Palliative care). The model is leading to important improvements for the older population in prevention screening and diagnosis, care and cure and active aging and independent living. For example, where it was applied, the ParkinsonNet, an evidence based model for delivering multidisciplinary care by experts in the field of *Parkinson's disease* reduced the risk of hip fracture by 50% and it has also led to savings of 15 to 20 mil € per year.

The **Innovation Living and Care Programme** is run by the ZZG Caregroup, which combines small scale living groups located in different neighbourhoods in

the city to provide a proximity service to the elderly. The core principle of the model is independent living: the Caregroup supports the seniors and the people with chronic conditions to live their lives where and how they want and delivers care services only when necessary. Between 2010 and 2011, with the adoption of the model, a drastic reduction of the number of unnecessary hospitalisations took place (from 1561 to 365).

AchterhoekConnect is a system consisting of a set of iOS WebApp and the Medical Call Center "MooiZo" which together provides a 'window to the outer world' for the elderly (the majority aged 80+) staying at home alone. The functionalities of the system enable to prevent loneliness, give access to care immediately (using video communication and/or wireless sensors) and facilitate community building and healthcare monitoring.

For further information:

<http://www.health-valley.nl/>

THE NETHERLANDS

Site: Northern Netherlands



Provinces Alliance (Samenwerkingsverband Noord-Nederland)



The Alliance is the result of a joint agreement between Drenthe, Groningen and Fryslân. In the context of active ageing, a key role is played by the **Healthy Ageing Network Northern Netherlands** (HANNN), which represents all the major actors, from medical and research centres to public authorities and industry.

The Groningen Active Living Model (GALM) is one of the successful initiatives implemented in the area and it is dedicated to the promotion of the active ageing, particularly with regard to regular *physical activity* to improve elderly people's *functional capacity* and quality of life. Regular physical activity, in fact, is an important component of a healthy lifestyle that decreases the risk of some illnesses and debilitating conditions, like coronary heart disease, diabetes mellitus type 2, hypertension, while it improves functional capacity. The model implies two phases: the neighbourhood-oriented recruitment phase, where the elderly are approached through a door-to-door campaign, and the recreational sports activity program which is based on behavioural change and evolutionary-biological play theories.

The EurSafety Health-net was built to tackle one of the most important factors limiting regular cross-border healthcare: the differences in healthcare system. The Euregional Network for Patient Safety and Infection Prevention focuses on the Healthcare Associated Infection (HCAI) with Methicillin-resistant *Staphylococcus aureus* (MRSA) and works to harmonize the healthcare quality in the Dutch-German border region.

The Northern Netherlands Provinces also launched an integrated elderly care programme, **Embrace (SamoOud)**, whose piloting phase ended in April 2013. The programme is the result of the redesign of the care delivery system into personalized, coherent, proactive and preventive care and support for elderly people of 75+ years living in the

community. At the heart of the programme there is the Elderly Care Team (ECT), dedicated to integrated, proactive, and preventive care and counselling for elderly patients.

Some examples of the impact of these success stories:

- The Groningen Active Living Model (GALM) has been applied to over 60% of the target group (citizens of age 55-65) and around 68.000 elderly have participated in the programme. The results showed that of the 12.3% of older adults who were included, 79.4% could be indeed considered sedentary or underactive.
- Participation in the GALM increased leisure-time physical activity and indicators of health only after 6 months, but recreational sports activities increased from baseline to 12 months and positive changes in performance-based fitness outcomes occurred in the long-term. Cardiovascular functioning improved significantly from baseline to 18 months.
- Due to its success, the GALM has been implemented in all the provinces of the Netherlands (815 projects). Furthermore, five projects have been started in Belgium and based on the principles of GALM the Canberra Active Living Model (CALM) was successfully implemented in Australia.
- Annually about 310.000 patients are screened and about 4.000 patients are treated preventively for Methicillin-resistant *Staphylococcus aureus* (MRSA) with EurSafety Health-net protocol.
- The Euregional Transparency & Quality Certificate (ETQC) facilitates cross-border patient care, making the patient safety and quality of healthcare transparent on both sides of the border.
- 1.475 elderly people (75+) living at home and registered in the participating general practitioner practices are participating in the Embrace programme.

For further information:

<http://www.eursafety.eu/>

<http://www.galm.nl>



Healthy Ageing Network
Northern Netherlands
Region of Knowledge and Development



THE NETHERLANDS

Site: Province of Noord-Brabant: Coöperatie Slimmer Leven 2020
★★★ U.A. Innovation network for Active and Healthy Ageing



The cooperative Slimmer Leven 2020, based in the Brainport Region of Eindhoven, groups over 70 public and private members that joined forces to seek for breakthroughs in the healthcare services delivered to their community.

The **Care Site** is an online platform, made available free of charge by the City of Helmond, where people who want to organize informal care, either for themselves or for a (significant) other, can easily setup a private website and become the site owner. Anybody that might be able to help, or offers to help, is then invited via email and gets access to the private site. The City of Helmond involved in the initiative all the (semi) professional and volunteer organizations in the field of healthcare and active ageing and provided them with trainings for caregivers.

The **“Zorgcirkels” (Circles of Care)**, an initiative carried out by 20 care providers in the Brainport Region, aims to provide a higher quality of care and extra security during the night and weekends for people in need of (unplanned) care. The providers share a health call center and night teams that are alerted through remote surveillance devices (e.g. sensors, door switches, mat alarms, and GPS transmitters) in case of need of assistance.

The **“Slimmer met Zorg” (Smarter with Care)** programme aims to reduce the costs for some

300,000 health insurance policyholders and maintain or even boost the expected health of the population. The initiative is built upon two key foundations - new business model and collaboration schemes across seven care themes and 22 care projects that are co-defined and implemented by patients and primary, secondary and home care providers.

Some examples of the impact of these good practices:

- The Care site is free of charge to all 89,000 inhabitants with internet connection of the City of Helmond. In the 1.5 years since the initiative was launched, 465 private sites were launched, with around 1,850 members.
- Thanks to the services delivered through the Care site, citizens can remain in control of their informal care process and care givers can mobilize support much easier than before.
- The Circles of care service is presently delivered to 4000 people. There are estimated savings for night staff care for approximately €3 million euro on annual basis (by the end of 2013 about 50% of this effect will have been realized).
- The estimated outcome of the Smarter with care programme is to reduce the expected rise in costs by 2% per year, meaning €15 million annually for five years.

For further information:

<http://www.slimmerleven2020.org/en>



THE NETHERLANDS

Site: Region Twente: Municipality of Enschede



The Region Twente builds on the integrated neighbourhood approach to combine social innovation with supportive technology for healthy ageing. They recently started an initiative focused on *social innovation*, moving from fragmented reactive disease management to preventive personalized services offered through local community services, supported by a proactive team of caregivers and health professionals

The objectives are to implement effective *screening* through web-based services and to provide improved *support* and *treatment* to the target population (citizens aged 65+) via individually tailored services.

The good practice will in the first year encompass 1-3 neighbourhoods in Enschede, and it is estimated to reach 350 people in 2013 and 1.000 in 2014.





UNITED KINGDOM

Site: The Ageing Well in Wales Programme



The **Welsh Government Strategy for Older People in Wales 2003-23** promotes and develops older people's health and well-being, their capacity to continue to work and learn and provides high quality services and support. It addresses the social, economic and environmental factors that influence health (the wider determinants of health) including income, housing, and life-long learning as well as health improvement and healthcare.



Age Cymru LIFT Programme

The Strategy adopts a holistic approach to older people's health and well-being, through a series of initiatives such as those on *fall prevention* (the Multiagency Falls Collaborative), *chronic conditions* (Chronic Conditions Management Programme), *patients' education* (Education Programme for Patients course), as well as supporting the development of Welsh communities into "*age-friendly*" communities.

The local government programmes are available to all the citizens who are aged 50+ (1.1 million people) although some services are only local.

The Welsh Government developed and supported implementation of the strategy with €11.6 million over the last 10 years, while the Chronic Conditions Management Programme was supported with €17.5 million over three-year period. An additional investment of over plus €12 million was destined to telecare.

Some examples of the impact of the Strategy on the territory:

- About 70.000 older people are members of the 50+ fora of local councils
- Telecare services are supporting 20.000 people
- Sport participation for 50+ increased from 41% to 46% (timeframe: 2002-2009), including 70.000 more swims, 5.000 Nordic walks and 4.000 Low Impact Functional Training sessions
- For the citizens aged 65+ there was an increase of Healthy Life Years by 2-3 years (timeframe: 2001-2010)
- From the panel of 6.107 patients who finished the Education Programme, General Practitioners' visits had reduced by 7%, outpatient visits decreased by 10% and pharmacy visits increased by 18%.
- Chronic conditions management programme led to 18% reduction in total bed days, which resulted in about £1.7 million cost reduction.

For further information:

<http://www.olderpeoplewales.com/en/Ageingwell/The-programme.aspx>

Heneiddio yn Dda
yng Nghymru
Ageing Well
in Wales





UNITED KINGDOM

Site: Yorkshire and the Humber Digital Health Community



The **Yorkshire and the Humber Regional Telehealth Hub** offered a menu of clinical services within the region to support patients with long term conditions.

Its general objectives were:

- supporting patient care near home, avoiding unnecessary hospitalisations and outpatient visits
- achieving better outcomes through motivational care planning and improved engagement with patients
- promoting self-care and support via information prescriptions, supporting behaviour change
- delivering cost efficiencies and return on investment.

The clinical services were piloted in 2011/2012 and over 2000 patients used the telehealth services provided (*tele-monitoring, telemedicine* and *telecoaching*) but the potential outreach is much bigger. It is estimated that in the region there are approximately 11,000 new patients per year with at least one long term condition, who may benefit from short term telehealth input at the time of diagnosis, and about 50,000 patients could benefit from telehealth on a longer term basis, in particular patients with Chronic Obstructive Pulmonary Disease, Chronic Heart Failure and Diabetes.

Some examples of the impact of the pilot on the local population:

- **University of Hull:** 620 patients benefited from tele-monitoring services. This led to an estimated 182 hospital admissions avoided with positive feedback from patients. The two largest deployments, the Hull heart failure service and ERY mainstream telemonitoring, were estimated to yield cost savings for over £200,000.



- **Airedale Telemedicine:** 404 patients received telemedicine services, resulting in 124 hospital admissions and 94 unnecessary face to face appointments being avoided (£330,000 of gross savings). The patients involved in the pilot gave very positive feedback.
- **Barnsley Telecoaching:** 999 patients received telecoaching. This led to further 1353 other services being used. The results were very positive: improved patient satisfaction (with Health and Social Care services), 20% fewer hospital admissions, increased patient compliance, 30% reduction in length of stay in hospital. The average saving of £1,000 per patient per annum was also achieved.

For further information: http://www.airedale-digitalhealthcarecentre.nhs.uk/Telehealth_Hub/

Read a patient's story: <http://bit.ly/105Jlb7>



UNITED KINGDOM

Site: **Liverpool:** Mersey Care NHS Trust on behalf of More Independent (Mi) partnership



The **More Independent (Mi) programme**, launched in June 2013, intends to mark a break from fragmented and small scale services to integrated service. It aims to involve 50.000 people and help them live healthy and independently, by putting them in control of their health though assisted living technologies. The programme also aims to create and expand a dynamic customers-led market for existing and new companies.

Progressing towards Mi's goals has required partners, stakeholders and individuals to collaborate to overcome barriers and bottlenecks. It has and continues to involve working through service redesign, facilitating co-production, grappling with technologies and their inter-operability, and, crucially, winning over "hearts and minds".



For further information:

<http://www.moreindependent.co.uk/>



UNITED KINGDOM

Site: NHS24, Acting on behalf of the Scottish Government /

★ ★ ★ NHSScotland

“By 2020 everyone is able to live longer healthier lives at home, or in a homely setting”. This is the vision that the Scottish Government and Convention of Scottish Local Authorities (COSLA) set out in 2010 with their ten year plan for the Reshaping Care for Older People Programme (RCOP). Pointing in that direction, several initiatives have been developed to realise the aims to deliver the highest quality healthcare to citizens and ensure that older people enjoy a longer and better life.

The **National Telecare Development programme** was launched in 2006 to help people live at home safely and secure for longer. It embedded telecare as an integral part of community based services in Scotland and set out to ensure long term sustainability and efficiency for the health and care services. To support the initial stages of this telecare policy initiative, Scottish Government directly provided funding for more than £20.35million (€23.8) over a 5 year period (2006-2011).

SPARRA risk prediction tool is an innovation that is enabling better use of local data to design targeted interventions across the whole health and social care system. It performs risk stratification and implements anticipatory care. Before SPARRA was introduced there was no systematic method of identifying those at risk of future emergency admissions and the health and social services were unable to reliably target their interventions. It is now being applied in every GP practice and in all 32 Health and Care Partnerships in Scotland.

The **National Falls Programme** aims to reduce the personal and economic cost of falls in Scotland by supporting health and social care partnerships to implement local integrated, evidence-based falls and fragility fracture prevention and management pathways for older people. By promoting the concept of journey or pathway, the Programme has introduced a more systematic approach to identifying older people at risk of falls and implementing evidence based strategies for prevention. On longer term, these pathways have the potential to reduce attendances at the Emergency Department and emergency admission to hospital and reduce or delay admission to long term care facilities.

Some examples of the impact on the territory:

- The Telecare Development Programme led to 44,000 people receiving a telecare service, bringing the total number of people in Scotland in receipt of a telecare service at any given time to approximately 160,000 people, most of which are in the 65+ category. The aim is to double this coverage by end March 2015.
- The overall programme resulted in an estimated gross value of efficiencies at £78.6m. This was associated with bed days saved reduction in sleepover/wakened night care and home check visits.
- By the end of the Telecare Development Programme, telecare moved from relatively unused service to a system embedded in all 32 partnership areas. Telecare is now a fully-functioning part of the health and social care landscape in Scotland, such that in many areas it is now standard practice to assess individuals identified as “at risk” for a telecare package (whether basic or enhanced) as part of their wider care and support package.
- The National Risk Prediction Tool currently covers over 3 million citizens; 100% of GP practices; 100% of area Health Boards. Its use results in less hospital admissions, reduced length of hospital stay and net savings of over 190 pounds per patient.
- In January 2010, nearly 25% (9) of all Community Health (and Care) Partnerships [CH(C)Ps] had implemented a Falls Prevention and Management pathway. Within 18 months, this number increased to 58% (22). Remaining CH(C)Ps (16) are already in the process of implementing a pathway as well.

For further information:

<http://www.nhs24.com/>

<http://www.sctt-wp.scot.nhs.uk/>



UNITED KINGDOM

Site: Department of Health, Social Services and Public Safety,



Northern Ireland

The Northern Ireland adopts a **citizen-centred health and social care for older people approach**, where the older people are put at the heart of the system. The objective is to value older citizens and improve the quality of their lives through improvement of their health conditions and support to their continued participation in social, economic, cultural, affairs of their communities. Key elements of this approach are the care system focused on citizens, whose health and social care needs are specifically assessed by the *NI Single Assessment Tool*, and the adoption of integrated care models that maximise stakeholders' involvement.

The Northern Ireland has also put in place **an integrated long term conditions management system for older citizens** dedicated specifically to the elderly with chronic diseases/long term conditions to improve their health status and quality of life.

The **Integrated Medicines Management (IMM)** service has redesigned clinical pharmacy service in Northern Ireland. The service ensures that, in accordance with their clinical needs, the elderly have access to timely, safe, quality assured medicines with appropriate advice and support to help them gain the best outcome from their treatments. The approach includes the greater utilisation of community pharmacists to deliver an *adherence programme* to targeted patient groups, their families and carers in primary care and a pharmacy redesign of secondary care services. The system is supported by advanced ICT-based solutions: a new integrated software for quicker and more efficient medical reconciliation with pharmacy and primary care/community professionals; intelligent alerts facilitating a rapid response to laboratory tests that need urgent action; an electronic clinical pharmacy intervention system for routine collection of significant social, medicines and clinical data.

Some examples of the impact of these actions on the territory:

- The IMM service is available to those admitted in hospital wards. It is estimated that, annually, 97,500 elderly (about 50% of those admitted) receive the service. So far 211 pharmacists and technicians have undertaken an integrated medicines management training programme.
- The results of assessment of medication appropriateness showed a significant improvement in the appropriateness of the use of medicines for patients who received the service in comparison to those who did not. In addition, older people valued the service for increasing their knowledge of their medications and their importance in terms of their ability to manage their own condition(s).
- The IMM resulted in reductions of the mean length of stays in hospital by 2 days and time to readmission was increased by twenty days. Communication to primary care was greatly improved.
- As a result of a first evaluation of the NI Single Assessment tool, all five Health Service Centres have made improvements, such as the modernisation of their management and operational processes and the establishment consultation for a with patients.
- From 2009 to 2012 Invest Northern Ireland, the regional business development Agency, has provided £18 million of assistance to life sciences companies to promote 850 new jobs, leveraging a total investment by companies of some £80 million.

For further information:

<http://www.dhsspsni.gov.uk/>

European Innovation Partnership
on Active and Healthy Ageing

Reference Sites


Excellent innovation for ageing
A European Guide

Useful sources

European Innovation Partnership on Active and
Healthy Ageing

<http://ec.europa.eu/active-healthy-ageing>

<https://webgate.ec.europa.eu/eipaha/>

 @ActiveHealthyAgeing

ICT for Ageing Well

<https://ec.europa.eu/digital-agenda/en/ageing-well-ict>

<http://www.aal-europe.eu/>

Health and Consumers

http://ec.europa.eu/dgs/health_consumer/index_en.htm

http://ec.europa.eu/health/ageing/innovation/index_en.htm

 @EU_Health

Digital Agenda for Europe

<https://ec.europa.eu/digital-agenda/>

https://www.facebook.com/?ref=tn_tnmn#!/DigitalAgenda

 @DigitalAgendaEU

@NeelieKroesEU