# The Italian reference sites of the European innovation partnership on active and healthy ageing: Progetto Mattone Internazionale as an enabling factor

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# Abstract

**Background.** Ageing population implies an increasing demand for health care services and resources, unsustainable according to current previsions. The European Commission is tackling this challenge throughout initiatives such as the European Innovation Partnership on Active and Healthy Ageing (EIP-AHA), where all the efforts are aligned to the common goal of adding two active and healthy years to the life of European Union (EU) citizens.

*Method*. We presented the collaborative efforts of Italian Reference Site Collaborative Network 2012-2015.

**Results**. Italian regions joined forces through the "Progetto Mattone Internazionale" of the Ministry of Health developing several national and international collaborations. Activities from all five Italian reference sites are presented with different good practices and scale-up approaches for improving health in ageing population.

**Discussion**. The simultaneous development of these activities allowed the strengthening of the coordination of Italian stakeholders in the European arena fostering collaboration and supporting the streamlining of the Italian regions still outside these projects.

# BACKGROUND

The spending review carried out in the European health care and welfare systems has made the latter unfit to adequately address the challenges of an ageing population. The state of health of older adults and their personal autonomy will increasingly affect public budgets. Physical and social environments are key determinants to whether people can remain healthy and autonomous as they age, engage and stay active and contribute to their communities through volunteer or

#### Key words

- ageing
- health
- European collaboration
- EIP-AHA reference sites

paid work, transfer of experience and knowledge, family support [1, 2].

In almost every country, the proportion of people over 60 years old is growing faster than any other age groups, resulting in longer life expectancy and decline in fertility rates. Compared to other European countries, Italy continues to be one with the highest proportion of elderly people, representing about 20% of the resident population. It is estimated that by 2051 this group will constitute 33% of the population. Ageing is definitely becoming an issue in the political agenda, both at international and national levels, requiring urgent strategies and actions. The World Health Organization (WHO) has adopted the term "active ageing" with the vision that growing old is a positive experience. Longer life must be accompanied by continuing opportunities for health, participation in society and autonomy aimed overall to improve the quality of life of the elderly [3]. Good practices in this field show that appropriate strategies for active ageing are established by integrated policies (employment, social security, housing, social care, etc.) approaching senior life needs in their complexity [4].

In 2010, the European Commission launched, as part of the Innovation Union, the pilot project of a European Innovation Partnership on Active and Healthy Ageing (EIP-AHA) [5]. Interpreted as a key to address major societal challenges and to achieve smart, sustainable and inclusive economy by 2020, the EIP-AHA brings together public and private stakeholders, through thematic and synergic action groups with the aim of increasing the number of healthy life years of European citizens by two [6]. The EIP-AHA has three main purposes:

• improve health and quality of life of older adults;

• improve the efficiency and sustainability of health systems;

• strengthen the competitiveness of European industry by investing in innovative products and services in the field of health and ageing.

The partnership brings together approximately 1000 partners from all EU Member States, and other countries outside the EU, working in six Action Groups that have contributed to transform ageing from a burden into an opportunity for the EU, by a multifaceted approach and an inclusive strategy [7-14].

An additional group is on Synergies, and carries out multidisciplinary approaches to overcome the gaps between the different action groups, and strengthen the triple win of the EIP-AHA [15]. The synergies are in line with the Action Groups' new Renovated Action Plans (2016-2018) to ensure that their objectives are coherent and fully connected. Outcomes and impact of synergies rely on the Monitoring and Assessment Framework of the EIP-AHA (MAFEIP) [16]. Eight proposals for synergies have been approved by the synergy task force: five cross-cutting synergies consider overarching domains (appropriate polypharmacy, citizen empowerment, teaching and coaching on AHA, deployment of synergies to EU regions, responsible research and innovation), and three cross-cutting synergies focus on current Action Group activities (falls, frailty, integrated care and chronic respiratory diseases).

## THE FRAMEWORK OF THE EIP-AHA, THE REFERENCE SITES AND THE REFERENCE SITE COLLABORATIVE NETWORK The reference sites of the EIP-AHA

The reference sites (RS) are ecosystems of stakeholders, connected with the territory, to offer innovative solutions on how to improve the services offered in the field of active and healthy ageing, and implement the European good practices at local and regional level, validated and shared within the action groups of the EIP-AHA. Regional and local authorities collaborate with municipalities, hospitals, health service providers, non-profit and industrial organizations, SMEs, research and innovation organization. In 2012, the European Commission published a first call for expression of interest, whereby 32 regions were recognized as RS. In July 2013, they received their recognition certificates.

The 32 RS awarded in 2012 were the instrument by which the EIP-AHA shared locally policies and solutions implemented through the action groups.

The criteria for identifying the RS were the ability to produce solutions and implement innovation in the field of ageing, as examples of good practice for other regions. The territorial ecosystem quality of the reference site must be validated by the presentation of indicators aligned with the methodologies supported by the EIP-AHA for monitoring and evaluating. They are divided into three groups: "quality of life", "sustainability of health systems" and "economic growth and employment". One of the main activities is to scale-up approaches and innovative products, submitting their good practices in the repository, and supporting other regions in adopting good practices and participation in action groups [17-21].

#### The reference site collaborative network

The reference site collaborative network (RSCN) brings together all the RS of the EIP-AHA in Europe, in a permanent forum aiming at promoting cooperation between regions, also fostering the connections with other networks such as European Regions Research and Innovation Network (ERRIN), European Regional and Local Health Authorities (EUREGHA), Community of Regions for Assisted Living (CORAL). RSCN plays a very important role in sharing experiences and developing common policies and strategies for health promotion and improvement of innovative approach to care. Through the RSCN, the reference sites look at the identification of the gaps between regional health systems, and compare their own performance results with other regions. Finally, the RSCN is an excellent tool for the development of consortia for research and innovation calls for proposals of the European Commission. In 2016 a new call allowed the identification of new reference sites. as well as the confirmation of the first 32. A total of 72 RS have been appointed so far, and an effort is ongoing, to strengthen their connection with the Action Groups to improve the transfer of the good practices.

#### The reference sites in the Italian context

Italian RS are heterogeneous in the different loco-

regional contexts, and the main objectives related to different policies and health care plans depend upon issues that include the maturity level of their research and innovation chain. Gaps in technology transfer, horizontal capacity of the administrations, and language barriers hinder the flow and adoption of innovations to the health and social systems. The European Commission appointed five Italian RS of the EIP-AHA in 2013: Campania, Emilia-Romagna, Liguria, Piemonte and Friuli Venezia Giulia.

#### Campania

Campania RS was established in July 2013 within the Research and Development Unit of Federico II University Hospital, which has been involved in developing and carrying out the requirements needed to integrate its routine with the EIP-AHA activities, including the coordination of the A3 Nutrition group. The legal, human resources, training, communication area, ICT and accounting services of the Federico II University Hospital have been actively collaborating with R&D to carry out preliminary evaluations of feasibility, and organize dissemination events, in the effort of generating small-scale successful actions, which could be scaled up across European regions.

Campania RS supports the participation of local clusters, by planning and coordinating their activities within the EIP-AHA framework and it supports regional partners in their commitments, liaising with loco-regional stakeholders, i.e. universities, health care providers, social services, local communities and municipalities that have been working in the context of several EIP-AHA Action groups.

Campania RS coordinates the A3 Nutrition Group of EIP-AHA with the support of the Department of Clinical Medicine and Surgery. This group developed an integrated view on a common nutritional approach to frailty: NutriLive, whose strategy focuses on a step-wise approach to malnutrition in the elderly, linking assessment to adequate interventions (primary/secondary/tertiary), and implementing innovative tools for effective prevention, detection, and treatment measures [22].

The identification of ICT standards by EIP-AHA partners needs to take into account multiple data sources, heterogeneity of data, interoperability of innovative tools [23]. The use of routine data flows from pharmacies – to analyse determinants of poor adherence to therapy through innovative ICT tools – has been at the core of the activities of Federico II University Centre for Pharmacoeconomy and Pharmacotherapy (CIRFF), involving the A1 EIP-AHA Action Group. The "Personalised ICT Supported Service for Independent Living and Active Ageing" (PERSSILAA) has allowed Campania Region to implement an innovative approach to prevent frailty in community dwelling older adults across the physical, nutritional and cognitive domains.

The RS involves the University of Salerno, which implemented an integrated model of care to manage chronic heart diseases using an ICT-supported system developed in the "Beyond Silos project". The PERSSI-LAA education tool kit was designed according to trainthe-trainer principle, whereby an experienced trainer shows a less-experienced trainer how to assess frailty, and provide training to the various stakeholders targeting its nutritional, cognitive and functional domains. The built environment strongly influences the way we age. In order to foster the involvement of local stakeholders in the D4 Action Group on age friendly environments, Campania RS has supported the creation of a network of municipalities, CoSMiC-Net (Campania small Municipalities Collaborative Network), with the aim of developing effective local policies and stimulating the involvement of all stakeholders, including community groups of older people. CoSMiC-Net is part of Age Friendly Environment (AFE)-InnovNet, a local and regional authorities, involving other social actors throughout the EU, who want to collaborate to find innovative solutions to support healthy ageing and develop age-friendly environments [24]. The outcomes of the AFE-INNOVNET Thematic Network provided the ground to establish the European Covenant on Demographic Change, that aims to gather all local, regional and national authorities, and other stakeholders, committing to cooperate and implement evidencebased solutions to support active and healthy ageing as a comprehensive answer to Europe demographic challenge.

#### Emilia-Romagna

From 1990 to 2010 life expectancy in Emilia-Romagna increased by about 6 years for men and 5 years for women. At the same time, healthy life expectancy grew even more rapidly, particularly among women. Strong actions aimed at increasing good health conditions promote ageing sustainability and can feed the positive trend observed for the life expectancy in good health [25]. The Emilia-Romagna Region promotes strategies for active and healthy ageing, working on prevention in its broadest sense, with the aim to contribute to the achievement of the EU2020 target of a two-year increase in life expectancy for EU citizens. In this context, Emilia-Romagna adopted the following strategies: • creation of a regional predictive model for early detection of pre-frail and frail conditions related to health and social factors;

• development of a model of proactive care for people with frailty and multi-morbidity using hospital-territory based protocols and involving caregivers;

• promotion of healthcare and health interventions based on intermediate structures, such as the "Casa della Salute" (House of Health), providing primary care services close to the individual's dwelling place, based on a pro-active community based care model (initiative medicine);

• promotion of programs for the care and followup of citizens with diseases related to frailty and multi-morbidity;

• implementation of prevention programs through lifestyles involving young people: "Okkio alla salute" (8-9 years old range) and "Health Behaviour in School-aged Children" (11-17 years old range) screenings;

• implementation of National Surveillance programmes focusing on lifestyles involving adult and elderly populations: "PASSI" (18-69 years old range), "PASSI d'Argento" (over 65 years).

From July, 2013 the Regional Healthcare and Social Agency (Agenzia Sanitaria e Sociale Regionale, ASSR) - through the Research Governance Unit - has become a RS of the EIP-AHA. It is composed of a wider regional coordination team involving the Department of Health and Social Policies, the Department of production trade and tourism and ASTER (Agenzia per lo Sviluppo Tecnologico dell'Emilia-Romagna - Agency for Technological Development of Emilia-Romagna Region), a consortium between the Emilia-Romagna Region, Universities, public research organizations such the National Research Council (Consiglio Nazionale delle Ricerche, CNR), the National Agency for Novel Technologies, Energy and Sustainable Development (Agenzia Nazionale per le Nuove Tecnologie, l'Energia e lo Sviluppo Economico Sostenibile), the National Institute of Nuclear Physics (Istituto Nazionale di Fisica Nucleare, INFN) and the regional system of Chambers of Commerce, built to promote innovation in the production system, through collaboration between research and industry.

The Emilia-Romagna RS promotes good practices at regional level in the field of active and healthy ageing. Within the EIP-AHA context, Emilia-Romagna is specifically committed on different actions brought about by five working groups: A1, A2, A3, B3 and C2.

The launch of Horizon 2020 represents a further opportunity on EIP-AHA issues for researchers active in the regional healthcare and social system. The ASSR (Research Governance Area) identifies and analyses the Horizon 2020 calls for proposals and shares them with the EIP-AHA Action Groups and other relevant regional actors. The Representative Office of the Emilia-Romagna Region in Brussels and the European networks in which the region participates (EIP-AHA, EUREGHA, ERRIN and EUnetHTA) help identify calls and significant partners.

This pathway led Regional Health Authorities and Universities to present several project proposals, and in other cases had a direct participation of ASSR and the Department of Health and Social Policies, as a partner and coordinator. Starting May 2015, the Emilia-Romagna RS has been coordinating the SUNFRAIL project which is a Reference Sites Network for Prevention and Care of Frailty and Chronic Conditions in community dwelling persons of EU Countries. The European project, with a duration of 30 months, receives funding from the EU Health Programme 2014-2020 and brings together 11 partners from 6 EU Member States. The project aims at improving the identification, prevention and management of frailty and care of multimorbidity in community dwelling persons (over 65) of loco-regional settings of EU countries (http://www.sunfrail.eu/project-overview/).

#### Liguria

Liguria is a region with one of the highest percentages of elderly people in the population (in 2015, 28.0% of citizens had more than 65 years). This causes many problems in terms of care and social costs, but points out a high potential in terms of knowledge, experience, and capacity to work, that could be exploited for the benefit of the community.

For these reasons, Liguria could be considered as a "natural living lab" for deploying and assessing active and healthy ageing solutions. Liguria Region, reference site in the EIP-AHA, together with regional institutions, associations and enterprises composing the "Ligurian Active Ageing Network" (LAAN), is currently working to develop initiatives for the prevention of functional decline and frailty. Liguria Region developed a wide range of policies addressed to this population target:

a) Active Ageing Project, to support NGOs cooperating with Social/Health Districts to implement prevention, socialization, permanent training;

b) Proximity services (Social Guardians) to observe and monitor frail elderly people and help them in the daily management; Regional Fund "for not self-sufficiency" and Honour Loans with no interest rates for 36 months for people (mostly elderly) who need to pay refurbishment works of the place of residence, in absence of which they would be forced to give up.

c) Adapted Physical Activity (APA) is a programme of exercise, not a rehabilitation activity. It is a sound programme for the prevention of the loss of functional autonomy that Liguria schedules to extend to the widest number of elderly inhabitants in the coming years. The overarching objective is to include the programme in the mainstream socio-health policies of the Region.

#### Piemonte

The Regional Health Authority of Piemonte (RHAP) is the official body managing health and social care in the Region since 1982. RHAP became RS for the EIP-AHA in 2013. Since then it began mapping and coordinating the several initiatives targeting older people on the regional territory. The RHAP started to connect interested stakeholders operating in the field and works in close cooperation with the local University, research institutes and healthcare staff training centres, to demonstrate a coverage of the relevant areas in the project. Over the last decade, Piemonte has brought about an organizational change directed to enhance primary care and implement integrated care pathways, also to prevent inappropriate care and excess hospitalisation. On the basis of a previous experience carried out by Turin University with an innovative programme, called "Family and community nurses advanced learning programme", the Reference Site Award was obtained.

Piemonte RS policy is now including into the development of this new model of care, not only a new job profile, but also all the innovative tools that can contribute to its success. In the framework of "Silver Constellation for Health", an operational setting of interlaced good practices on active and healthy ageing, important experiences contribute to the health policy, adding new professional and community skills.

New relations have been established among regional authorities and research and academic subjects: IRES (Institute for Social and Economic Research); Torino Polytechnics; industrial clusters and start-ups (2i3t; BiopMed; ICT Innovation Cluster) and with European representatives of other RS and health networks. The RHAP has been implementing care pathways for the management of chronic diseases. One of the main objectives of the Regional Health Authority is now to change management functional to the reorganization of healthcare services, particularly those dedicated to the elderly. Piemonte RS coordinators have taken part in the EIP-AHA B3 Action Group since 2012, (Workforce Development and Change Management) to share visions and objectives at EU level, also according to OSCE recommendations about healthcare systems renewal and modernization, to increase the efficiency in the framework of the general cost containment of healthcare expenditure and as a reaction to the challenge of demographic changes.

In the meantime, Piemonte submitted, as lead partner, a proposal in the Alpine Space call for a project to apply and in depth evaluate the best practice of Family and Community Nursing. This project was approved in December 2015.

Investments have been made in building up a network of professionals and experts working on AHA and innovation projects, including the EU ones and the creation of an e-platform and a peer regional e-community. The network is going to be strengthened by the new platform "Smart for Learn". Furthermore, the Regional System Competitiveness Directorate, in charge of innovation and research, has indicated in the smart specialization strategy the specific objectives in the field of AHA. With the Social Cohesion Regional Directorate a new cooperation has been established, which mainly refers to AHA.

Several EU projects have been financed in which the RHAP is either partner or leader. The MAGIC project focuses on transforming the delivery of health and social care services for patients who have experienced a stroke. MAGIC will run a European-wide PCP focused on the development of ICT based solutions that improve the well-being of our patients and optimise the opportunity for post stroke recovery.

The CO.N.S.E.N.SO project accepts the challenge by developing a care model that puts the elderly at the centre of health and social services. It builds on the pivotal role of the Family and Community Nurse (FCN).

The model aims to allow the elderly to live at home as long as possible: through periodical visits, the FCN will evaluate their risk factors, manage minor health and social needs and promote healthier lifestyles. The SUN-FRAIL project has the general objective of improving the identification, prevention and management of frailty and taking care of multi-morbidity in community dwelling persons (over 65) of EU. The Empowering Hospitals project is a multicentre project aimed at fostering health promotion interventions and environments suitable for prevention of diabetes or cardiovascular diseases.

The strategy is based on the Health Promoting Hospitals (HPH) framework with strong emphasis on evidence-based prevention.

#### Friuli Venezia Giulia

In the first call for RS, the Friuli Venezia Giulia (FVG) Region was represented by the Regional Institute for blind people "Rittmeyer", which has been awarded the status of "one star" RS. The ranking system from 1 to 4 stars follows a selfassessment and peer review process [26], reflecting the extent to which predetermined criteria had been met. These criteria included the contribution made by applicant RS to the different EIP-AHA Action Areas and on their overall strategy to tackling the demographic challenge in Europe according to a quadruple helix model to ensure all stakeholders have a common understanding of the organisational, technical and financial challenges to face. The goal is working collaboratively to define and implement innovative solutions and possibilities for economic growth.

The Rittmeyer Institute provides services for blind and visually impaired people of all ages in terms of education, rehabilitation, social and labour integration, recovery and development of skills. Among the results achieved, the following are worth mentioning: better quality of life for the elderly population with visual disabilities, increased home care services, monitoring by operators from different sectors of the welfare system, and the implementation of innovative services through specific technologies for blind and visually impaired people.

FVG has actively participated in the RS network and it has developed innovative social housing solutions, social and health care integration, community-based care, de-institutionalisation and social innovation processes, assisted living environments. This Region is very active in the initiatives promoted under the EIP-AHA as individual Region (within the Action Group D4 on agefriendly environment and AG B3 on integrated care) as well as through European networks such as CORAL and ERRIN.

FVG ranks as the second Italian region in terms of senior population: around 25% of people over 65 (the capital city Trieste is around 28%) and the ageing index is 204.75 (2015). This means that older people are a key priority in terms of regional policies and care services.

In the past, FVG promoted pilot initiatives thanks to its regional Innovation Law (26/2005 art.22) that funded public-private partnerships developing innovative solutions for social inclusion of the elderly and improvement of the quality of life at home. FVG officially established the permanent initiative "Regional Laboratory for the promotion of Home living and Accessibility", called "FVG as a L@b", identified as a regional cluster on the topic of ambient assisted living and included in the Italian national cluster initiative.

FVG adopted a Regional Law (22/2014) that supports home care, healthy lifestyles and socialization. The Law envisages supporting the leading role of the elderly, not just as beneficiaries of care services but also as key actors for growth and socio-economic development of the local communities. The smart specialization strategy of the FVG Region includes a "smart health" priority and "ambient assisted living" Its regional administration has invested in strengthening social and healthcare services at home; setting up integrated care services; promoting the continuity of care between hospital and territory; establishing the Fund to support self-sufficiency and independent living and the Fund for intensive home care (Regional Law 17/2008 art. 10). With regard to integrated care for chronic diseases and remote monitoring, Friuli Venezia Giulia – through the Local Health Authority of Trieste – is leading the Smart-Care project (ICT-PSP pilot A) that is deploying ICTsupported integrated care pathways at the regional level. Two hundred elderly people in chronic conditions have been enrolled, and the services foresee remote monitoring through vital and environmental devices at the patient's home, data collecting through a home-hub and IT platform, data management and help desk. The Smart-Care project involves 23 regions and has already developed synergies with B3 members and their initiatives.

# THE ITALIAN REFERENCE SITES IN THE EUROPEAN CONTEXT: THE PIVOTAL ROLE OF "PROGETTO MATTONE INTERNAZIONALE"

At a time of economic crisis, the availability of skilled human resources and of funding for networking activities requires a joint effort across regions to share knowledge and skills. The "Progetto Mattone Internazionale" (PMI) was financed by the Italian Ministry of Health (MoH) and aims at increasing the role of the regional health systems and policies in Europe by strengthening their competences in investigating opportunities offered by the European Union and other international organizations.

Veneto Region, through the ULSS 10 Veneto Orientale – the regional health unit – coordinated all the operational activities. Tuscany Region was also involved through the Meyer Hospital. Regional contacts have been appointed (1 per region, tot. 20), as focal points when EU planning requires MS to use the resources in a coherent and reasoned way. The project foresees the implementation of educational and information activities addressed to Ministry organizations, Italian regions, local social-health authorities, hospitals as well as other stakeholders involved in health topics, to promote the dissemination of EU policies and opportunities to access EU financed programs in the framework of health, research and innovation.

With respect to the EIP-AHA, PMI has played a role in providing opportunities for networking and sharing good practices. Furthermore, the regions identified reference persons for internationalization, who are keyfigures in ensuring the connection between specific commitments and regional priorities/activities and the establishment of Italian RS. PMI supported the interactions between Italian partners of the EIP-AHA. Due to its interregional and national dimension, this initiative represents a horizontal good practice that spans the dimensions of ageing pursued by Italian applicants with their commitments, considering various aspects: frailty, cognitive decline, functional decline, dependency, nutrition, physical exercise, health and social care renewal. In this perspective, the good practices presented by Italian regions might be considered a read-out of how PMI worked to disseminate and foster Italian participation in the EIP-AHA initiatives, thus contributing to stimulate the coherence with EU planning. Furthermore, PMI provides a platform that supports networking activities (www.promisalute.it) Throughout its platform, PMI

has been at the core of a system of partnerships and networks, promoted international research activities in the public health field, responded to the way of working at the basis of the EU planning, fostered the capacity building process, promoted the experimentation and implementation of new organizational models, involved the different actors of the National Healthcare System, while increasing their role within the institutional levels, allowed the dissemination of several methodologies concerning projects, the development of proposals for supra-regional interest and the dissemination of results. In summary, it represented an innovative governance method for supra-regional interest, aimed at accessing the European direct and indirect funds.

The impact analysis of the whole activities showed the positive influence on the internationalization of the National Healthcare System (SSN) policies. It also highlighted that their consolidation was necessary, notably through an institutionalization process, within a permanent structure. Therefore, the project is now having a new governance and promotion through a new initiative called Pro.MIS (Programma Mattone Internazionale Salute). Starting from lesson learned from PMI, the following figure identifies the tasks that characterize the new model to ensure proper planning, the continuity and the response to the common needs (*Table 1*).

# RESULTS ACHIEVED SO FAR BY THE ITALIAN NETWORK OF EIP-AHA REFERENCE SITES

All Italian regions have seen a progressive and significant increase of their > 65 population, that has not been followed by an adequate deployment of services, and hence has determined an increase of the disability rate.

The use of telemedicine in the Italian context has been addressed in many reference documents, thus showing the relevance it plays now in the public health system. Although still fragmented, a number of experiences have been implemented by Italian regions, and the bottlenecks hindering their scale up have been identified in the lack of tariffs, and in their absence in the essential levels of services ("LEA"). The set-up of the framework for the reimbursement and economic evaluation of telemedicine services in Italy started with the 2014 National Guidelines, that provided the methodological framework, and is now a shared priority.

Fragmentation of national involvement into strategic projects, such as those of the Horizon 2020 Health Programme, the Joint Actions and the Interreg, is a frequent feature that characterizes many consortia competing for EU funds.

The EIP-AHA provided for the first time an environment where partners could share experiences and agree on priorities that allowed the most relevant European stakeholders to join forces in a common approach to frailty. "Reference Sites Network for Prevention and Care of Frailty and Chronic Conditions in community dwelling persons of EU Countries" (SUNFRAIL) project is an example of how the EIP-AHA provided the opportunity to EU Regions of streamlining their efforts, grounding on a common background their initiatives in managing frailty. Another example is the primary nutri-

### Table 1

Programma Mattone Internazionale Salute ProMIS tasks

| Activities   | Description   |
|--|---|
| Priorities and programming analysis                    | Benchmarking of national, regional and local priorities; drafting of the operational multiannual programme for the internationalization and the executive annual programme  |
| Regional network coordination                          | Sharing priorities; programming of activities; monitoring   |
| Cross-cutting activities in liaise with other policies | Analysis of common interests for European projects in the health sector; promotion of joint interventions /policies   |
| Information and communications activities              | Website/App; newsletter; database of financed projects; infoday; workshop; events organized by the Regions according to their priorities; activities aimed at facilitating the involvement of European experts and professionals      |
| Support to the participation in the European processes | Link between Permanent national/regional Representations based in Brussels, and with the European and international institutions; consultations; coordinated participation in networks, workshops and European initiatives in general |
| Support to financing opportunities                     | Workshops on project management activities, in collaboration with regional experts and <i>ad hoc</i> tutors   |
| Monitoring and evaluation                              | Definition of indicators; systematic registration of performances; reporting  |

tional approach for Active and Healthy Ageing developed by the Nutrition group of the EIP-AHA, which was acknowledged by the working group on lifestyles of the Italian Ministry of Health when outlining a comprehensive approach to adequate nutrition. A consensus methodology was used to collect and integrate the available evidences from the literature and from the Italian experiences at the regional level, to raise the interest of other experts and relevant stakeholders to outline and scale-up joint strategies for a primary nutritional approach to cancer prevention [27].

The guidance provided by DG Sante within the context of the EIP-AHA was pivotal to frame the international strategy of the project "Manageing Frailty. A comprehensive approach to promote a disability-free advanced age in Europe: the ADVANTAGE initiative", a Health Programme Joint Action (HP-JA). The general objective of ADVANTAGE is to build a common understanding on frailty to be used in all the MS, which should be the basis for a common management, both at individual and population levels, of older people who are frail or at risk for developing frailty across the EU.

The Italian participation in the EIP-AHA was supported by PMI throughout the process, and extended outside the Partnership, involving relevant stakeholders that ensured the alignment with the Italian MoH's priorities.

European Territorial Cooperation (ETC), better known as Interreg, is one of the two goals of the EU Cohesion Policy and promotes a harmonious economic and social development of the European Union. Specifically, Interreg MED promotes sustainable growth in the Mediterranean area by fostering innovative concepts and practices through an integrated and territorially based cooperation approach. The "Med Innovation Alliance for Active and Healthy Ageing" (MIAGI) project aims at setting up a Social Innovation cluster for Active and Healthy Ageing (*Table 2*).

# SCALING-UP AND IMPACT EVALUATION OF EIP-AHA ACTIVITIES

The EIP-AHA provided the context to scale-up approaches and innovative products, as well as to align priorities and instruments across the locoregional, national and international levels.

Although no formal evaluation has been carried out yet, the PROEIPAHA Coordination and Support Action fostering the delivering of the EIP-AHA, designed a reference framework for the evaluation of the innovative practices, that is grounded on the European repository. This model has been generated with the aim of providing an effective approach to the assessment of good examples of innovation in active and healthy ageing throughout Europe. It is widely recognized by the EU that the repository developed within the EIP-AHA should act as a catalyst to promote the scalingup of these multitude of practices across regions and countries. The practices evaluation approach has been elaborated by a working group specifically set up by the PROEIPAHA project and validated by the European Commission. The model envisages a stratification of the practices classified on the basis of some viability dimensions:

• *promising practice*: these are practices that are not yet fully mature but have shown interesting first results. These practices typically have some measurable impact that have been seen only while a pilot project was running, there is apparent evidence mainly based on qualitative "success stories". Regarding maturity of the practice, there is at least a proof of concept is available and it works in a test setting and the potential end-users are positive about the concept. Moreover, the innovative practice has been developed on a local/regional/national level and transferability has not been considered in a systematic way;

• *notable practice*: these practices show contrasted impact, for example shortly beyond the pilot project pe-

#### Table 2

Data on senior population from all involved Regions with EIP-AHA reference sites

| Region                | Population<br>(thousands)<br><i>(Istat 2015)</i> | Population<br>> 65 years<br>(Istat 2015) | Life expectancy at<br>birth<br><i>(Istat 2015)</i> | Life expectancy<br>at 65<br><i>(Istat 2015)</i> | % of older adults in<br>home care/resident<br>older adults<br><i>(Istat 2012)</i> |
|-----------------------|--|--|--|---|---|
| Campania              | 5.861  | 17.6%                                    | Male = 78.1<br>Female = 83                         | Male = 17.4<br>Female = 20.7                    | 1.1%  |
| Emilia-Romagna        | 4.448  | 23.6%                                    | Male = 80.8<br>Female = 85.1                       | Male = 18.9<br>Female = 22.3                    | 1.4%  |
| Piemonte              | 4.404  | 24.7%                                    | Male = 79.9<br>Female = 84.6                       | Male = 18.5<br>Female = 22.0                    | 0.8%  |
| Friuli Venezia Giulia | 1.221  | 25.4%                                    | Male = 79.9<br>Female = 85.0                       | Male = 18.3<br>Female = 22.2                    | 2.3%  |
| Liguria               | 1.571  | 28.2%                                    | Male = 80.0<br>Female = 84.7                       | Male = 18.4<br>Female = 22.0                    | 1.1%  |

riod. There is documented evidence based on systematic qualitative and quantitative studies. Regarding maturity of the practice, there is evidence that the practice is economically viable and brings benefits to the target group, but further research and development is needed in order to achieve market impact and for the practice to become routine use. The innovative practice has been developed on local/regional/national level and transferability has been considered and structural, political and systematic recommendations have been presented. However, the innovative practice has not been transferred yet;

• good practice: these practices show long term and sustainable impact, for example, a long time after the pilot project ended and routine day-to-day operation began. Evidence is based on an agreed established monitoring system/process before and after implementation of the good practice. Regarding maturity of the practice, the practice is "on the market" and integrated in routine use. There is proven market impact, in terms of job creation, spin-off creation or other company growth. Moreover, the innovative practice has been transferred to other locations or regions or national scale.

The viability dimensions have been identified with a view to the stakeholders potentially interested to work with/to adapt/to take up innovative practices from the EIP-AHA repository. An end-user perspective has been taken into account for this formulation. The following six dimensions have been proposed:

1. time needed for the practice to be deployed (from the baseline to now);

2. investment per citizen/service user/patient (from the baseline to now);

3. evidence behind the practice;

4. maturity of the practice;

5.time of impact of the practice (from the baseline to now);

6. possible transferability of the practice.

A practice submitted through the Repository is qualified according to these dimensions by the proposer who is the sole responsible for the content. A pool of peer reviewers, belonging to the EIP-AHA community, with proven expertise is provided with the submitted practice for the assessment. The evaluation is performed according two possible process upon request of the proposer: • *verification process*: it consists of verifying that the information received is of sufficient quality to be published in the Repository. Some of the criteria of this verification process are: formal review criteria, completeness of information, clarity of exposition, availability of evidence, availability of documentation, contact information available;

• *peer review process*: it consists of a typical peer review. The reviewers will take into account primarily the following aspects: time of impact, evidence, level of maturity and transferability.

These criteria are applied to promising practice, notable practice or good practice with different thresholds to be reached for a positive assessment.

Another relevant impact provided by the EIP-AHA to RS concerns the alignment of priorities and support instruments between the locoregional, national and international levels. An example has been provided by the recent call of the Italian Ministry of Health for Networking Program in Healthcare Innovation, where a joint priority was agreed by 4 regions, focusing on one of the EUP on AHA priorities: multimorbidity and management of polypharmacy.

#### CONCLUSIONS

The European Commission, through the EIP-AHA aims to increase the average healthy lifespan in the EU by two years within 2020. Enabling older adults to lead healthy, active and independent lives and improving the sustainability and efficiency of social and healthcare systems are among its main pillars. Due to its wide range of good practices, the Italian network of the EIP-AHA reference sites is deeply committed in the field of active and healthy ageing and to develop research activities aimed at improving the capacity of the Regional Systems to adequately address preventive and curative care for the elderly involving different stakeholders from the public, academic and private sectors. The experience gained so far by all reference sites, going throughout a critical review of all best practices collected in several Italian regions, is now providing the possibility to look for international collaboration to

compare the effectiveness and scaling up of the most promising interventions for a healthy and active ageing of the European populations. In this framework, the good experience of "Progetto Mattone Internazionale", in supporting the Italian reference site network, should orient Italian reference sites to strengthen coordination action at national level and in particular: confirm the link between regional and national levels and crosscutting activities in liaise with other policies, circulate information learned from the participation in the European Action Groups, organize thematic cooperative learning workshops, drawing up common methodology guidelines on drafting strategic tools and set up technical national and interregional multi-sectoral and multiactors working groups. The Italian RS coordination is now working to support other Italian regions to present their commitments and share best practices in order to become new RS and to improve the network activities.

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There are no potential conflicts of interest or any financial or personal relationships with other people or organizations that could inappropriately bias conduct and findings of this study.

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