

Support package

[Building an urban age-friendly innovation ecosystem]

Municipality of Badalona

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Executive summary

This document contains all the information as requested within the URBACT Good Practice call.

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1. The problem and proposed solutions

Today's cities are generally not designed with older people's needs in mind and this poses a number of unique problems for urban dwellers that appear set to only increase in the years ahead.

Within that context, the city of Badalona has set up a holistic strategy towards transforming the city into an innovative age-friendly ecosystem including all the relevant stakeholders.

The good practice in Badalona is formed by a set of interrelated solutions that conform a holistic approach towards active and healthy ageing which include:

- **Badalona Towards a Healthy City:** a city project that fosters and promotes healthy habits within citizenship and that helps to prevent disease with a clear participatory vision and networking view.
- **R&D Chair between Badalona Serveis Assistencials (BSA) and the Open University of Catalonia UOC:** with the objective to foster the research and innovation actions based on the use of ICT in the fields of health and social care.
- **Badalona Reference Site on Active and Healthy Ageing:** where 24 actors covering the Quadruple Helix of Innovation within the city of Badalona have obtained the recognition of the European Commission and operate in a coordinated manner towards the common goal of building an age-friendly city.
- **Badalona Health Observatory:** merging environmental, demographic, social and clinical data towards identifying patterns and determinants of healthy living within the urban context.

2. Timeframe, dates, important milestones

Milestone	Year	Short description
Merging health and social care provision	2000	The City Council of Badalona and Badalona Serveis Assistencials (BSA) decide to merge both provisions into a single one centring the model on the patient
Reference Site recognition for Catalonia region	2012	BSA helps the region of Catalonia to achieve the Reference Site status
Badalona Towards a Healthy City	2015	The City Council allocates 800,000 €/year to develop the project
Municipal Action Plan	2015	Ranging from 2015 to 2019 includes the strategy towards achieving an elderly-friendly city
Chair BSA-UOC	2016	Presentation of the Chair en R&D Activities among BSA and the Open University of Catalonia
Reference Site recognition for Badalona	2016	Badalona gets the recognition from the European Commission
Badalona Health Observatory	2016	The Health Observatory opens its doors to the citizenship
Continuity of Care Maturity Model	2017	BSA is recognised by HIMSS Analytics as the most advanced organization in continuity of care all over the world

3. The link to the specific strategy

The main strategy supporting the good practice at a policy level is the Municipal Action Plan, which was voted among the population of the city through a participatory process where the inhabitants were able to allocate a total of 14 millions within the different areas. The information regarding that process can be found in here:

<http://badalona.cat/portaWeb/getfile?dID=90199&rendition=web>

The action plan has three main axes with 15 objectives to achieve. In bold the relevant ones for the Good Practice:

- 1) Social rights
 - a. A leading city in inclusion and in the reduction of inequalities**
 - i. Local youth plan
 - ii. Social action plan**
 - iii. Programme on active and healthy ageing**
 - iv. Care to childhood in risk and support to families
 - v. Programme on healthy environment and health protection**
 - vi. Action against poverty and support to vulnerability situations**
 - vii. Badalona Towards a Healthy City**
 - viii. Local plan of drug prevention
 - ix. Mental Health Board**
 - x. Promotion of the autonomy of elderly people**
 - b. An educational city where culture is a key driver to the development of the citizens**
 - c. A city that recognises the sexual, cultural, religious and functional diversity**
 - d. A city that grants equality between man and woman**
 - e. The public space of the city as a democratic environment of shared relationships, friendly and accessible**
 - f. A city that grants the access to housing**
 - g. A secure city**
 - h. A city that promotes sport as a tool of social cohesion**
- 2) Leadership and city opportunities
- 3) Co-governance

4. The main outputs

The range of innovations deployed is broad and cover all of the EIP on AHA pillars using an integrated care approach. Here below two examples of good practices currently implemented:

BSA Comunica. The users of this application are citizens or patients from BSA. With no age restriction those patients are grouped according to their interests related to the different categories the application is serving. Those categories have a social-related and a health-related perspective mainly. The first group of categories have the objective to fight social exclusion and social isolation by providing information related to different social activities classified according to neighborhood. The second ones have the objective to empower patients with different pathologies to better manage their disease. Further to that, there will be a generic category meant for the population in general providing healthy habits advises (including nutrition, exercise, etc.).

Evidence: In this application we will rate the experience with technology if we are able to notice that the communication between BSA and its assigned population has improved due to the usage of the application. Further to that, we'll try to assess if we have been able to rise down the level of social exclusion and social isolation and the health-outcomes by the usage of the application. The evaluation is currently being performed through the MAST model adapted to the AAL context.

Scalability: The application has already being exported to Perche region in France and it's already being promoted by the Catalanian government.

Care coordination experience between an intermediate care hospital and an emergency service. The Unit provides from care services to geriatric patients and redistribute the hospital admissions to the acute care hospital. Through the coordination the complications are minimized and the quality of care is improved.

Evidence: The ratio per stay has been reduced to 9,1 days reducing from the initial 10,68 days.

Scalability: The experience has been validated as an innovative one for the region of Catalonia and considered for full scale in the region

5. Results

BSA is currently an Integrated Care Organisation, which is comprised of different types of health and social care centres under the same governance and organisational structure, sharing the same cultural values and legal framework. Within such an environment, the coordination among care settings is crucial, the whole care model is organised putting the patient at the centre of the continuum of care, including vertical and horizontal integration. The internal assessment conducted by BSA shows that there has been a reduction in the average length of hospital stay, in the average number of bed days, and emergency visits. Furthermore, the clinical pathways developed have facilitated an improvement in the process outcomes, including compliance and adherence to the guidelines. All these impacts have improved the functional status and health outcomes of the patients and have led to a reduction in the operating cost of clinical services. All these measures have led to better quality of care with greater control and better results in the target population, showing BSA to be more efficient.

This approach has been supported by the strategic plans developed by BSA in the past years. These plans have emphasised the importance of stakeholders engagement and shared governance between the health and social care providers and the City Council as well as the community. Within this ecosystem, BSA has also included the private sector partnering with them through collaboration agreements, meant to bring new ideas into the market, first through a piloting phase and later on to market (once evidence has been generated). Three good examples of such strategies are the following ones:

- ITHACA project (BSA - Novartis - Indra): meant to monitor hypertensive patients at home and including an educational program for both patients and caregivers..
- Caring.me project (BSA - Arvato/Bertelsmann): meant to track patients impaired by depression through an Internet Cognitive Behavioural Therapy Intervention.
- AsmaProcure project (BSA - IN2): AsmaProcure mobile application is a result of the work of a multidisciplinary team of clinicians and technicians is to manage patients in acute stage and avoid as much as possible income ER visits and no longer required at the time of stability

These three cases are clearly aligned to foster progress towards the EIP on AHA goals. In addition, BSA and its partners have been active at EU level participating in several grants and tenders showing their capacity to collaborate with international partners, aggregating datasets and undertaking common qualitative surveys of outcomes for citizens, patients and their carers, thereby enhancing the evidence of economic, system and societal benefits of the adopted approach. In this regards, BSA has been using MAST methodology to assess the impact of the ICT based interventions designed in the EU projects.

Lastly, it is worth mentioning that BSA is the main public employer of Badalona, fostering innovative solutions in collaboration with the stakeholders enhancing new markets and job creation.

6. Potential for reuse

The partners involved in the ecosystem of Badalona are actively contributing to the European co-operation and consequently to the transferability through their participation in relevant EU strategies.

The experience of BSA in EU funded projects dates back from year 2003, when following the recommendations coming from the strategic plan, the organisation started its R&D specialisation strategy towards ICT solutions to improve the care provided to its target population. Following such an approach BSA started looking for networking opportunities both at national and international level. Since then, BSA has participated in plenty of EU projects from different funding programmes such as: AAL JP, FP7, CIP, DG SANCO Health Programme and lately in H2020. The roles in the different partnerships have mainly included the piloting leadership, evaluation modelling and evidence generation, care pathway design and co-design processes.

The names of the granted projects are: Aladdin (AAL JP), Home Sweet Home (CIP), ReAAL (CIP), BeyondSilos (CIP), MasterMind (CIP) and Do CHANGE (H2020). Further to those, BSA has contributed to other projects as a committed region or associated partner in: momentum (CIP), ACT (DG Sanco Health Programme), Insup-C (FP7), ACT@Scale (DG Sanco Health Programme) and SELFIE 2020 (H2020).

Two good examples that show that emerging learning and experiences are being shared with other regions at international level are:

- The case study from the SIMPHS3 conducted by the Joint Research Centre of the EC which can be found in the following link: <http://publications.jrc.ec.europa.eu/repository/handle/JRC94484>
- The ACT Cookbook which can be found in the following link: https://www.act-programme.eu/sites/all/themes/act/files/ACT_Cookbook_final.pdf

At a regional level, BSA is also participating in plenty of initiatives meant to transfer the knowledge and experiences gained to other regions and care settings. A couple of good examples are the two innovative experiences certified by the Observatory of Innovation in Healthcare Management which can be found in the links below:

- Utility of a Subacute Care Unit – Coordination between Hospital A&E Department and an Intermediate Care Hospital: <http://oigs.gencat.cat/pages/viewexperience.aspx?id=162>
- Comprehensive Home Hospitalization (HDI): collaboration between a geriatric hospital service and home rehabilitation service: <http://oigs.gencat.cat/pages/viewexperience.aspx?id=166>

Also, some of its professionals are actively part of strategies such as the PIAISS (<http://www.ijic.org/articles/10.5334/ijic.2205/>) and the Forum ITSSS (<http://www.forumitesss.com/en/>).