OUTPUT FACT SHEET

Pilot actions (including investment, if applicable)

Version 3

Project index number and acronym	CE 1581 niCE-life
Output number and title	Output O.T3.4 Pilot testing of the GPS-based tracking tool in Treviso
Investment number and title (if applicable)	-
Responsible partner (PP name and number)	Institute for elderly care and shelter, PP7, ISRAA
Project website	https://www.interreg-central.eu/Content.Node/niCE-life.html
Delivery date	12.2021

Summary description of the pilot action (including investment, if applicable) explaining its experimental nature, demonstration character and transnational added value

The growing trends of ageing population and the related increase of elderly people suffering from cognitive decline pose a great challenge to our societies in terms of sustainability and quality of life of the over 65s. Through the implementation of a technological ecosystem based on gps tracking technology, in the Treviso trial the niCE-life team sought to understand the extent to which these technological innovations can impact on the quality of life and safety of senior citizens. Moreover, the experimentation aimed at understanding the benefits of this kind of technological solution in three different settings, the retirement home, the cohousing and the home of the elderly person.
The activity of the pilot site started in April 2021 and ended in December of the same year. During this period, the seniors involved wore a smart bracelet equipped with GPS tracking connected to a monitoring platform. Through the monitoring platform, it was possible to get a lot of information about the participant's health status such as sleep quality, heart rate, physical activity and at the same time to monitor their safety through position indication and fall detection. A total of 31 older people, their informal caregivers and the formal caregivers of ISRAA were involved.
The results of the pilot site were overall positive. The evaluation activity was carried out by specific questionnaires, which were subsequently analysed by the local team, and made it possible to measure the specific impact on the elderly and their caregivers. The data show an 11% reduction of the burden of the involved caregivers and a 13% improvement of the average values of the quality of life of the participants (for the dimension anxiety and depression).
The experimental/ demonstration character of pilot action consists primarily in the integration of technology in the services offered to people at risk or already suffering from dementia. These types of innovative services are not present on the territory and the present experimentation wants to underline their benefits so that other care providers can adopt the same approach.
The transnational added value of the technological ecosystem based on gps tracking technology is due to the shared development of the implementation model with the project partners. Particularly valuable was the cooperation with the partner "Brno University of Technology", which guided the experimentation thanks to its specific know-how in the field of digital innovation. Moreover, the flexibility of this technology, useful in different usage scenarios, is a second important transnational added value, as other organisations will be able to replicate the approach thanks to the deliverables developed by the niCE-life pilot site in Treviso.

NUTS region(s) concerned by the pilot action (relevant NUTS level)

The technological ecosystem based on gps tracking technology was implemented in the province of Treviso. The following NUTS levels were involved:

- ITD34 Province of Treviso
- ITD Veneto Region

Investment costs (EUR), if applicable

-

Expected impact and benefits of the pilot action for the concerned territory and target groups and leverage of additional funds (if applicable)

The impact of the experimentation in the province of Treviso, area of the pilot, was positive because it is a territory characterized by a strong presence of elderly population where dementias represent one of the major causes of disability in the population. The project showed that the inclusion of technology in care activities can bring a benefit for all the actors involved.
The following target groups benefited from the project activity:
- Seniors. Through the gps tracking solution they were able to enjoy a higher level of autonomy and safety;
- Informal caregivers. Thanks to the pilot site they were able to support their loved ones more easily, reducing the burden of care activities;
- Care Providers. They will be able to replicate the project approach in other contexts, benefiting from the lessons learned.
- Institutional Authorities. Governments, and in particular Regions, will benefit from the outcomes of the pilot site by incorporating the lessons learned into the social and health policies they will propose.
So far, the pilot action has not yet led to an uptake at policy or institutional level. Never the less, through the development of a local action plan, regions, municipalities and the health authority will be involved in order to deepen the prospects for sustainability by promoting the transformation from an experiment to a new service available to all citizens.
The pilot action will not leverage additional funds, but at the same time the funds made available by mission 6 "health" of the Recovery and Resilience Plan may allow other care providers to replicate the initiative in different geographical contexts.

Sustainability of the pilot action results and transferability to other territories and stakeholders

The issue of sustainability of the initiative was central in the definition of the implementation plan of the pilot site in Treviso. For this reason, open questions were used in the evaluation activities in order to investigate the actions learned, but above all the interest of the participants and in particular of the informal caregivers to support a cost to benefit from a service with similar characteristics to those of the approach supported by the gps tracking technology. 36% of the participants stated that they would be willing to bear a cost to benefit in their daily life from a service similar to the one tested. At the same time, in order to ensure the sustainability of the initiative also for those population groups for whom the costs of participation are difficult to bear, the involvement of decision makers through specific local action plans and related activities is crucial.
The model of support for the elderly based on gps technology is characterised by an excellent transferability as it was tested in three different scenarios of use, cohousing, nursing home and home of the elderly. The use of this technological ecosystem can in fact be adapted to the different characteristics of the care system in the different European countries, since it can be accessed by both formal caregivers and family members who are engaged in care activities or simply concerned about the health status of elderly relatives.
Moreover, another decisive element for the transferability of the solution in different territories is the possibility to capitalize on the lessons learned from the Treviso pilot. The first of these lessons is that this kind of solution is definitely more effective with people affected by mild forms of cognitive decline, while with people affected by severe forms of the disease it is not so useful. Consequently, the scenarios in which the solution showed the greatest potential are homecare and cohousing. A second lesson learned concerns how to involve senior citizens in such services. In order to reach the most appropriate target group, closer cooperation between the actors responsible for care activities at local level, i.e. care homes, municipalities and health authorities, would be needed.

If applicable, contribution to/ compliance with:

- **relevant regulatory requirements**
- **sustainable development - environmental effects. In case of risk of negative effects, mitigation measures introduced**
- **horizontal principles such as equal opportunities and non-descrimination**

Given the characteristics of the Project's participants and the type of data derived from the trial, special attention was paid to compliance with the rules set out in the EU's General Data Protection Regulation (GDPR). In order to ensure compliance with the laws in force and protect the rights of the participants, ISRAA has involved its legal department, and in particular the organisation's Data Protection Officer (DPO). The project team developed specific documentation and implemented a Data protection impact assessment.
The project did not have an impact on the environment.

Finally, the project helped to combat discrimination against older people by disseminating information on the over-65s and dementia.

References to relevant deliverables (e.g. pilot action report, studies), investment factsheet and web-links
If applicable, additional documentation, pictures or images to be provided as annex

The **main relevant project deliverables**, which contributed to the output, are:

D.T3.5.1 Design of the pilot action in Treviso

D.T3.5.2 Engagement of test persons and consideration of legal aspects

D.T3.5.3 Report from briefing and training of test persons, home care givers and nurses

D.T3.5.4 Installation and testing of technical devices and applications

D.T3.5.5 Collection and analysis of feedback from test and support persons

D.T3.5.6 Summary report from the pilot action in Treviso

These deliverables **can be downloaded from the following project website**:
https://www.interreg-central.eu/Content.Node/niCE-life.html

Below are some pictures of the pilot:

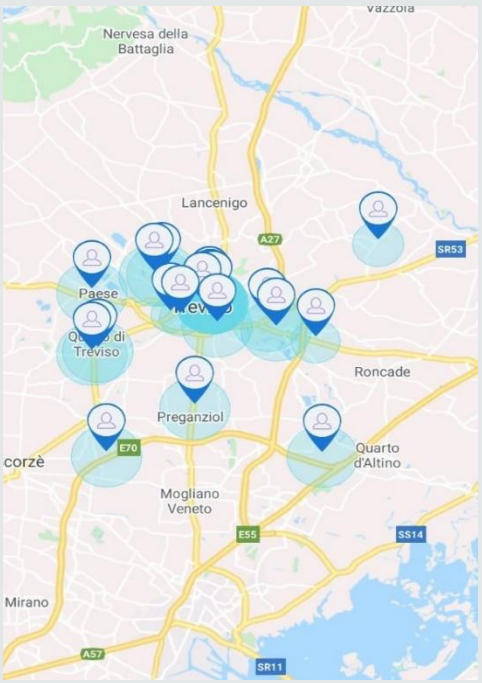

Figure 1: Test locations of GPS tracking tool (from the monitoring platform)

Figure 2: information from the monitoring platform