

Improving home care with telecare and predictive systems

<u>Organisation(s):</u>	Regional Government of Andalucía - Department for Equality, Conciliation and Social Policies	
<u>Country:</u>	Spain	
<u>Contact:</u>	policy@esn-eu.org	
<u>Theme:</u> <i>Choose at least one option</i>	<input checked="" type="checkbox"/> Ageing & Care <input type="checkbox"/> Asylum & Migration <input type="checkbox"/> Young People <input type="checkbox"/> Support for Children & Families <input type="checkbox"/> Community Care <input type="checkbox"/> Integrated Care & Support <input type="checkbox"/> Co-Production <input type="checkbox"/> Disability <input type="checkbox"/> Housing & Homelessness <input checked="" type="checkbox"/> Artificial Intelligence <input checked="" type="checkbox"/> Digitalisation <input type="checkbox"/> Quality Care	<input type="checkbox"/> Labour Market Inclusion <input type="checkbox"/> Social Inclusion <input checked="" type="checkbox"/> Technology <input type="checkbox"/> Workforce and Leadership <input type="checkbox"/> Social Benefits <input type="checkbox"/> EU Funding <input type="checkbox"/> Social Service's Resilience <input type="checkbox"/> Mental Health <input type="checkbox"/> Person-Centred Care <input type="checkbox"/> Research & Use of Evidence <input type="checkbox"/> Management & Planning <input type="checkbox"/> Other, please specify:
<u>Principles of the European Pillar of Social Rights:</u> <i>Check the 20 principles here.</i>	<input type="checkbox"/> 1. Education, training, life-long learning <input type="checkbox"/> 2. Gender equality <input type="checkbox"/> 3. Equal opportunities <input type="checkbox"/> 4. Active support to employment <input type="checkbox"/> 5. Secure and adaptable employment <input type="checkbox"/> 6. Fair Wages <input type="checkbox"/> 7. Transparent employment conditions <input type="checkbox"/> 8. Social dialogue <input type="checkbox"/> 9. Work-life balance <input type="checkbox"/> 10. Healthy, safe work environment	<input type="checkbox"/> 11. Childcare and child support <input type="checkbox"/> 12. Social protection <input type="checkbox"/> 13. Unemployment benefits <input type="checkbox"/> 14. Minimum income <input type="checkbox"/> 15. Old age income and pensions <input type="checkbox"/> 16. Health care <input type="checkbox"/> 17. Inclusion of people with disabilities <input checked="" type="checkbox"/> 18. Long-term care <input type="checkbox"/> 19. Housing and assistance to the homeless <input type="checkbox"/> 20. Access to essential services
<u>Current status of the practice:</u>	<input type="checkbox"/> Concept and Design Phase <input type="checkbox"/> Testing or pilot phase <input type="checkbox"/> Temporary practice that has terminated <input checked="" type="checkbox"/> Temporary practice that is ongoing and has a termination date <input type="checkbox"/> Established and ongoing practice <input type="checkbox"/> Scaling Up and Transformation Phase <input type="checkbox"/> Other (please specify)	
<u>Summary:</u> <i>Please summarise the practice in maximum 3 sentences. This</i>	The Andalusian Telecare Service (SAT) addresses the needs of 125,000 people with long-term needs. The project aims to enhance their care through a new system that combines comprehensive software and predictive technology. The system uses artificial intelligence and sensors to provide personalised support, including audiovisual communication, digital content access, reminders, chat, and behavioural monitoring.	

<p><i>will be the disclaimer of your project on our website.</i></p>	
<p><u>Context/ Social issues addressed</u> <i>Please explain the problem you attempt to solve with your practice.</i></p>	<p>To date, the SAT has been characterised by providing security for users and peace of mind for their relatives and/or carers, making it an essential service for people in a situation of dependency as it has facilitated connection with the outside world, providing company and alleviating situations of loneliness and isolation. It is a benchmark service at a national and international level that prevents people from having to go into residential homes as they feel safer and more autonomous in their own homes.</p>
<p><u>Objectives:</u> <i>Please provide a maximum of three objectives in bullet points.</i></p>	<p>1. To improve citizens' quality of life, especially dependent people and non-professional carers, promote greater autonomy and independence and favour permanence and integration in their family, community and social environment. This project will be based on using artificial intelligence and digital applications to facilitate the achievement of the objectives set.</p>
<p><u>Activities:</u> <i>Please describe the activities put in place to achieve the objectives (maximum 300 words).</i></p>	<p>The project consists of transforming care in the environment of dependent persons through the digitalisation of the Andalusian Telecare Service (SAT). Through a personalised care system that transcends the current preventive system, the project will implement integral software for the development of complementary advanced services in the SAT and a predictive system, with the double objective of predicting and anticipating the necessary actions in a more personalised and efficient way, and of facilitating new communication channels and the active participation of dependent people in the definition and development of the social services and care they require, promoting the autonomy and quality of life of the people in their community environment.</p> <p>Implementation of a personalised care system:</p> <p>Comprehensive software has been designed and developed to implement a personalised care system so that SAT users can download it to their mobile devices or tablets. It is an online community platform that supports user integration and aims to improve communication between professionals and people using the services significantly.</p> <p>The main functionalities of the comprehensive software are these:</p> <ul style="list-style-type: none"> - Videoconferencing. Establishment and maintenance of individual videoconferences (between the user and a professional of the Andalusian Telecare Service) and group videoconferences (between several users and professionals). An agenda for viewing videoconferences is incorporated, as well as support and accessibility tools for setting up the sessions (explanatory video, welcome speech, connectivity test, etc.). These videoconferences have the possibility of implementing simultaneous translation through interpreters, activating subtitles in real-time in the spoken language, customising the user experience (font size, dark mode, default subtitles, etc.) and of sharing the screen for viewing content. It also contemplates the possibility of creating sub-rooms that are very useful for training groups of users, carers or professionals. - Digital Content. It will allow access to documents and information of interest to both the user and the professional. Both profiles will visualise their digital content grid: the user will have certain content assigned, and others will be advised, searches can be carried out, and the carer or the professional can create and modify categories and content labels to facilitate their administration. In addition, it will be possible to create information pills, assign content to a user or a group of a certain profile and make content queries through the search engine.

- Reminders. An agenda will be available as a calendar where users and professionals can view appointments (for example, medical consultations, appointments for formalities, etc.) and interactions (individual or group videoconferences, surveys, etc.). Each reminder will have an associated type with an icon and a colour that will allow the visualisation of detailed information related to the title, description, start and end time, frequency, etc.
- Chat. Interface for chat communication between the user and the telecare staff. It enables communication to be initiated by both the user and the tele-assistance staff. In addition, it will allow segmentation by roles so that the most appropriate staff can be easily selected depending on the query to be made.
- Surveys. This module has a rules engine that allows the generation and execution of surveys understood as graphs (decision trees, flowcharts or algorithms). This functionality not only allows us to obtain the necessary information but also generates alerts and recommendations according to the defined paths. Thus, the user will fill in the surveys, the information will be evaluated, and different alerts can be generated and sent to the professional or caregiver so that they can implement the appropriate interventions depending on the alert and the characteristics of the user.
- Habits. Allows the identification of the user's behavioural habits.

Information provided by the sensors by zones of the home:

- In the kitchen, gas leaks, excessive water consumption or abnormal opening of doors could be detected, accidents could be prevented, or changes in daily routine could be detected.
- In the bathroom, if there is abnormally prolonged use of the shower, it may be indicative of falls or mobility problems.
- In the bedroom, detecting abnormal movement and temperature changes may indicate health or sleep problems.

Some examples of events that could be detected by such sensors:

- If a fall causes unconsciousness or the person is in bed due to illness, the sensors detect no movement in the home and no opening or closing of doors.
- If there is an altered electricity consumption (due to an excess or defect), it may mean that the person is not mobile or able to give a warning (due to a fall or illness) in their home. • If the home is broken into during a previously notified period of absence.
- Possible risks of heat stroke or cooling detected by sudden changes in the temperature of the dwelling.
- Detect certain habits/sleep patterns, food, electricity consumption, etc. in the home that could be improved using training/lectures/etc. on good habits and/or savings

Outcomes:

Please explain what the results were/are so far and how you evaluated this.

Quantitative data

- A total of 125,000 people recognised as dependent and current users of the Andalusian Telecare Service will benefit from this new Personalised Care System.
- More than 400 SAT professionals can provide this care, and this is supported by new technological innovations.
- The project involves a budget investment of more than 166 million euros.

Qualitative data

	<p>The impact of this new care system will be measured through satisfaction surveys and/or interviews with dependent persons, non-professional carers and family members.</p> <p>Consultation of indicators used to evaluate the project</p> <ul style="list-style-type: none"> • Number of dwellings monitored. • Number of devices in use. • Number of alarms received. • Number of usability surveys. • Number of satisfaction surveys by functionalities.
<p><u>Links to supporting documents:</u> <i>e.g. website or report of the practice</i></p>	<p>Junta de Andalucía – Portal oficial (juntadeandalucia.es)</p>
<p><u>Comments and tips</u> <i>i.e. for people willing to use your Practice</i></p>	