



01 CALL FOR NEEDS

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CHERRIES Murcia launched a call for needs focused on **eHealth as a regional culture on finding ICT-based solutions for healthcare related challenges and needs.**

The call addressed 3 main target groups: Healthcare professionals of Sistema Murciano de Salud (SMS); patients' associations; research groups of universities. The involvement of SMS healthcare professionals was mandatory.

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The call received 8 applications: three were presented by healthcare professionals together with Patients' Associations and three with researchers from universities.

The following needs emerged as the most pressing ones:

- Improvement of administrative tools for clinicians.
- Improvement of the access to healthcare services for patients.
- Improvement of the coordination among different healthcare professionals.
- Management of the workload derived from the COVID-19 pandemic.

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In Murcia, the **Early detection of progression in Multiple Sclerosis (PROGRESS)** has been identified as the best proposal. The objective was to develop an innovative technological solution using the Internet of Things (IoT) and the application of sensors to patients within a clinical trial to monitor this progression and inform the healthcare professional of the progression of the disease.

02 CALL FOR SOLUTIONS

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CHERRIES Murcia launched the following call for solutions: **Develop and validate a system for the collection, analysis and monitoring of the movements of patients with Multiple Sclerosis (MS) during most of their daily activity using the Internet of things (IoT), to achieve the early detection of the progression in MS by applying sensors through smart wristbands to 30 patients during 5 months, beyond the current face to face consultations with neurologist and nurses.**

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Assessed by a committee of 12 experts, 6 eligible applications were received from European SMEs – five Spanish companies and one Portuguese.

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MS Care – Multiple Sclerosis Care (MS Progress) was the awarded solution proposed by Pulso Ediciones. The Spanish company had previous experience with IoT in the healthcare sector and with Multiple Sclerosis.

MSPROGRESS 
Multiple Sclerosis



03 THE CO-CREATION PROCESS

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Pulso Ediciones worked with the following co-creation team: EMACC (Association for Multiple Sclerosis of Cartagena), the Biomedical Engineering group from the Polytechnic University of Cartagena, the Neurology Service of Cartagena Hospital, SMS, Murcia Regional Government, EUBIC CEEIM and Ticbiomed.

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After an initial training about co-creation in the healthcare sector, the team established a co-creation plan defining roles, agreements, timeline, deliverables, milestones, work methodology, monitoring framework, risk management, ethics and IPR. They established a collaborative platform, run regular meetings (online and face-to-face), formal and informal exchanges, onsite visits, training with patients, focus groups. Despite this, the pilot was interrupted due to technical issues during the testing phase of the IoT solution in real-life setting environment.

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A culture of co-creation was established; the commitment of the team has lasted the whole process and the members worked collegially towards the same objective to deliver a sound innovative solution. Despite the technical difficulties met by the pilot testing in real environment, the application of CHERRIES model and the co-creation activities themselves between public and private actors showed positive results for the participating actors and their organizations.

04 CHALLENGES AND OPPORTUNITIES

CHALLENGES

- **Promote stakeholders' engagement at the different stages of the process** according to their expertise and maintain them involved along the process;
- **Find a common language and rhythm** for the success of the co-creation process considering the diversity of actors and their own daily schedule;
- **Keep the communication fluid** within the team in real-time and with the patients, especially if difficulties arise.

OPPORTUNITIES

- **Foster the dialogue between different essential actors** to the development of innovation in the healthcare sector and **ensure more acceptability and sustainability of the innovation**;
- Obtain **social and economic benefits for all parties** in terms of implementation of innovative processes;
- **Contribute to a change of practices, and creation of a culture of co-creation.**

05 KEY LEARNINGS

- Demanding processes that require **continuous mutual understanding and commitment** for long-term positive results;
- **Assignment of a facilitator organization** to ensure the implementation and follow-up of the whole process from the call for needs to the final results of the co-creation;
- **Organization of initial training** in co-creation methodology;
- **Investment in innovation and promotion of demand-driven** healthcare services;
- **Combination of societal unmet needs with regional R&I priorities;**
- **Benefits of working in co-creation** from the beginning of the innovation process to ensure the deployment of valid solutions and their future acceptance and use;
- **Engagement and Involvement** of stakeholders in the definition, conception and establishment of innovative solutions in healthcare.

06 KEY RECOMMENDATIONS TO OTHER EU TERRITORIES WILLING TO ADOPT CHERRIES METHODOLOGY

- Promote dissemination channels and activities **to reach the widest audience and public engagement from the call for needs stage;**
- **Promote participation of the users/patients from the beginning of the process** (call for needs) and at all stages to ensure more acceptability at the end of the solution development and foster the exchanges among the patients of the study;
- Ensure the **inclusion of RRI principles as a transversal thread in the future innovation processes in healthcare.**



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CO-CREATION TEAM



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