



Cancer Patients Better Life Experience (CAPABLE)

Developing a support system for improving the quality of life of cancer home patients by combining technologies for data and knowledge management with socio-psychological models and theories.



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[Webpage link](#)



1. Describe your project through three key words / key phrases that identify it.

Virtual coach for cancer patients, effective remote monitoring by doctors, quality of life improvement

2. In terms of impact, what are the most concrete results your project has or will achieve?

The Capable project, nearing its completion by January 31st, 2024, has demonstrated significant results according to preliminary data analysis. These results include notable patient appreciation and the early detection of adverse events, leading to an improvement in the quality of life as measured by the QLQC30 EORTC questionnaire. The project has successfully integrated symptom reporting with mental well-being interventions and validated the feasibility of its technical architecture, which adheres to standards for data communication and storage. Moreover, Capable has proven the viability of a FAIR (Findability, Accessibility, Interoperability, Reusability) data repository that efficiently handles data from diverse sources, showcasing its comprehensive approach to enhancing cancer patient care through technology.

Another important result of the project has been the development of a novel patient interface terminology, bridging the gap between terminology used by doctors that is difficult to understand for patients, and the terminologies proposed for patients up to now that are simpler but not exhaustive and sometime not enough precise.

3. Please describe your project overall impact at the European level

The Capable project aims to early detect and manage cancer-related issues, meet the needs of patients and their caregivers, and promote the engagement and compliance of patients to treatment. Funded by the European Union's Horizon 2020 program, Capable represents a key initiative in the transformation of health and care in Europe, demonstrating the potential for technology-driven patient support systems.

As a matter of fact, Capable implements some of the ESMO (European Society for Medical Oncology) clinical practice guidelines for the management of cancer treatment toxicity. Thus, patients and doctors receive evidence-based recommendations developed through medical expert consensus at European level. Eventually, the pilot clinical studies were held in Italy and in the Netherlands, demonstrating the feasibility of the system localisation to different healthcare systems and different cultures.

4. As an applicant, what advice would you have wanted in the Horizon project design process?

In the Horizon project design process, especially for teams primarily composed of engineers, clear guidance on addressing ethics, regulatory, and legal issues would be invaluable.