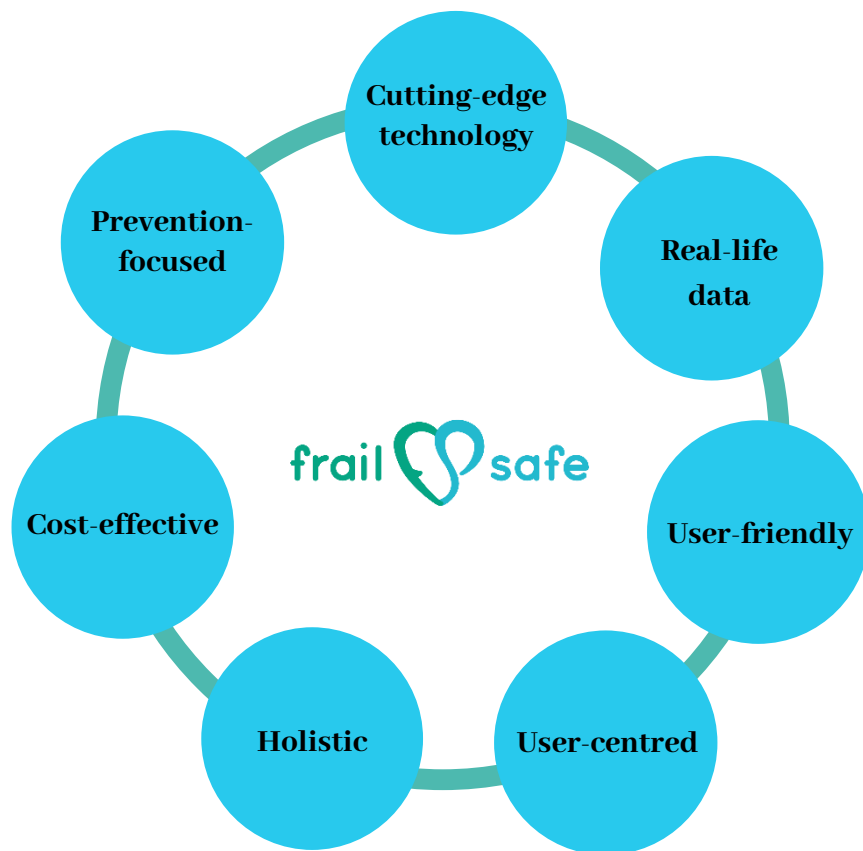


# What Makes EU FrailSafe Innovative?



**Cutting-edge technology:** In combination with more traditional methods to assess frailty, EU FrailSafe uses cutting-edge technology, ranging from novel wearable and ambient sensors, to state-of-the-art cloud platforms, deep-learning algorithms, fabric electrodes, game framework systems, and Internet of Things architecture.

**Real-life data:** The EU FrailSafe System collects prolonged real-life data in a natural environment, from a set of heterogeneous devices and sensors. From these, the data is transmitted to the system's cloud-based architecture where raw and analysed data can be viewed and/or further analysed in a user-friendly interface.

**User-friendly:** FrailSafe is non-invasive and can be easily included in older people's everyday routines. The monitoring of the diverse aspects of frailty is performed in a way that the older person can perform their usual daily activities, without any limitations, while their health data are recorded and assessed. User-friendliness as a criterion was part of EU FrailSafe's ambition right from the start, where older persons from the three clinical sites (Nancy, Nicosia and Patras) have been iteratively involved to define the user-requirements and give feedback throughout the project lifetime on its key developments. Informal and professional caregivers and medical staff were also directly involved in both – development and testing/evaluation – as end users.

**User-centred:** Next to a collective analysis of data to enhance the understanding of frailty as such, the EU FrailSafe System analyses individual user data to inform frailty detection and its management based on the person's abilities and needs. This is for example reflected in personalised recommendations for interventions, as well as the adoption of serious games difficulty levels.

**Holistic:** The EU FrailSafe System collects, analyses and monitors data on a wide range of parameters – cognitive, medical, nutritional, physical, psychological and social. The different sensors and devices applied in the EU FrailSafe solution are highly interoperable, which means that data collected by heterogeneous technologies is combined in an easy-to-use online dashboard without facing any troubles through different data formats or data communication protocols.

**Cost-effective:** The EU FrailSafe System is a cost-effective tool to collect real-life data that can then be analysed, provides management recommendations, encourages self-management, as well as facilitates comprehensive integrated care plans. The modular solutions could be fully or partially integrated by national healthcare systems in order to prevent ageing-related social costs. Furthermore, this monitoring has the potential to predict adverse outcomes and thereby support their prevention, which lowers the high costs of a healthcare system caused through such adverse events.

**Prevention-focused:** The solution aspires to contribute to earlier and more accurate frailty detection and the prediction of adverse outcomes, allowing preventive measures to be applied in time, which is highly clinically relevant. As the system allows older people to monitor their own health, it increases their autonomy, which in turn serves as intrinsic motivation to apply the system. The possibility of the person's physician to be directly informed is also provided. The preservation of an older person's functional autonomy supports active and healthy ageing and therefore also independent living.

