

Hestia – Smart Medical Assistance System

Hestia brings technological resources within nursing homes, personal homes or protected apartment in order to improve the life comfort of vulnerable people and the working conditions of their medical staff.

Realization

HES-SO HEIA-FR
Prof. Pascal Bruegger
pascal.bruegger@hefr.ch

Loïc Guibert
loic.guibert@hefr.ch

Keywords

- Healthcare Assistance
- Digital Health Solutions
- Data Security & Privacy Protection
- Swiss Healthcare System
- Mobile Applications

Our skills

Designing and implementing user-friendly, multilingual, multiplatform mobile applications to enhance follow-ups of individuals at risks, and a platform to streamline the workflow of healthcare professionals.

Valorization

Ensuring the safety and security of all individuals by establishing a comprehensive and efficient assistance ecosystem to improve the continuity of medical care.

Partnership

- Dina SA (ex-CISEL Informatique SA)
- HFR (Hôpital Fribourgeois)
- HEdS – FR

Funding

Nouvelle Politique Régionale (NPR), Fribourg Canton

Schedule

2022-2025



Building upon the foundations laid by the RMS project, this initiative represents a significant step forward in the digitization of traditional medical monitoring. Our secure platform facilitates the exchange of medical data through mobile and web applications, enabling real-time and on-site transmission of vital parameters data to healthcare professionals. By harnessing multiple sensors and smartwatches collecting heart rate, blood pressure, body composition, saturation, and 30-seconds ECG signals, this project empowers personalized care strategies for rehabilitation, prevention, and health promotion, seamlessly integrated within individuals' living environments.

The security and confidentiality of data are paramount and managed in collaboration with Dina SA, utilizing Swiss data centers. The project adopts a "privacy-first" approach, implementing multiple technologies and principles to ensure the utmost security for the highly sensitive medical data. Users will thus benefit from a robust, reliable, and secure service. The Fribourg Hospital (HFR) and the Haute Ecole de santé Fribourg (HEdS) will contribute their expertise as central healthcare provider and nursing school within the cantonal economic framework.

The collaborative project Hestia has been closed in early 2025. It started in October 2022 and has been finished after deploying and testing an advanced prototype of the medical information exchange platform, to be tested by HFR for medical monitoring (in the general practices service) as well as another hospital and private medical practice. Very positive feedback has been received by the users and by the doctors in term of usability and reliability.