Background and Challenges

Aging Population

- The aging population has increased steadily over the past few years; monitoring at home is gaining increasing interest for safety, comfort, and costs reduction.
- New challenges arising from an aging population, and increasing awareness of the patient for the prevention of disease, lead to the development of appropriate technologies and ways to store this information. The establishment of standards for monitoring and multifaceted electronic health record (EHR) is part of the open issues.

Description and Main Innovation

Objectives

Propose a centralized EHR, with data of the various dimensions of health: general practitioner assessment, digital auscultation, home-based monitoring, and self-assessment.

Field Study

Unidade de Saúde Familiar Nova Via – Vila Nova de Gaia

Achievements

- Digital auscultation technology acceptance and usability tests on the field. Physiological signal processing and decision support systems. Auscultation integrated in the EHR. Health Kiosk pilot.
- 3 journal papers, 15 conference papers.
- Expected results have great scientific impact since this will allow the definition of technical solutions for monitoring patients remotely, ensuring equity in health care, and promoting a multifaceted view of health (prevention, maintenance and treatment), and the integration of all this information in an unique EHR.