

Cost-Effective Health Services for Interactive Continuous Monitoring of Vital Signs Parameters: The E-Vital Concept

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The objective of the e-Vital project is the validation of the market concerning the provision of a novel remote telemedicine service aimed at large sensitive parts of the European population, the "at-risk" citizens, who are usually patients with a stable medical condition that allow a near normal life but may suddenly deteriorate and put life at risk. This service will increase their quality of life and their feeling of safety concerning their health. The project focuses on the implementation and exploitation of a modular and ambulatory secure telemedicine platform, which is using easily wearable vital signs monitoring devices, causing minimal discomfort to patients, and which transfer in real time and on-line critical vital parameters to doctors and/or medical experts/consultants, regardless of their location, while getting feedback to increase their feeling of comfort or in case of alarm. In the latter case, rescue is organised the speediest possible. It also helps physicians to determine a better care strategy, collecting data previously only available in Intensive Care Units. The interactive continuous monitoring promises cost effective health services, more active involvement of patients in their own care, and a new sense of realism in making a diagnosis. The main goal of the e-Vital project is the provision of remote telemedicine services to patients who are not confined to a hospital, i.e. receiving home/ambulatory health care, for early warning in a seamless manner. This system will provide large healthcare corporations with the potential to offer remote monitoring services to post-surgery patients and patients with chronic diseases. Using e-Vital, the patients' health status can be evaluated objectively and decisions can be made in real-time to proactively manage critical health events. Since the system is designed to be easily ported to and implemented in different European countries, the tests and validation tasks will take place in a wide geographical area, namely: Spain, UK, Greece, and Italy. These countries constitute samples of different cultures and healthcare systems, and this will help to assess the validity of the chosen market approach.