

E. CHABANNE, J.C. FERNANDEZ, N. PESENTI, V. RIALLE, N. VIDAL. *An in-situ experiment of devices aimed to remediate wandering due to Alzheimer's disease. Gerontechnology 2010;9(2): 270; doi:10.4017/gt.2010.09.02.201.00*

Purpose In the general situation of an ageing population and increasing insane pathologies, the CG74 has chosen to experiment with patient tracking devices, in order to protect persons affected by Alzheimer's and similar diseases. These devices are intended to preserve, or partially restore, a patient's freedom of action, while guaranteeing their security. They aim also to provide security for caregivers and to endow families and health professionals with an innovative tool. It is an initiative carried out by the public institution, Conseil Général de Haute Savoie (CG74), which is competent in gerontology questions. **Method** This initiative is implemented by multiple departments of the CG74 (Gerontology, IT, remote alarm system, scientific advisor) with the cooperation of other operational organizations such as fire fighters, police, medical emergency service, along with the research units of the academic hospital of Grenoble, France, which bring their methodological, ethical, social and system competencies. This experiment is part of a national project called ESTIMA, sponsored by the 'Fondation Caisse d'Epargne pour la solidarité' and France Alzheimer, in order to compare their analysis with the ones of other experts. The experiment involves persons living in specialized houses (called EHPAD) as well as persons living at home (flat or individual house). About 50 persons all together. Two groups of individuals have been identified which correspond to different profiles: those for whom it is preferable to stay at home (including yard and garden), and those are able and allowed to move within a larger yet, precisely defined, area. The CG74 has wished to include in this experiment its own Remote Alarm Center which has already managed 6000 users in the past 20 years over the whole Haute Savoie department (700,000 inhabitants over 4400 km²). This device enables the users to voluntarily activate a phone call in case of emergency. This Remote Alarm Centre and the emergency units work in the same place and their actions are united. **Results & Discussion** These two situations involve two different technical devices: RFID (Radio Frequency Identification) for the first group, and GPS (Global Positioning System) for the second one. A pre-investigation has enabled us to observe the weakness of the solutions available on the market with regard to the prerequisites. Devices partially corresponding to these prerequisites have been identified, and the choice has been made to associate an integrator having different capacities (electronics, hardware and software, networking, and telecommunications) in order to build up a device as close as possible to the prerequisites established by a driving committee gathering all necessary competences to see this experiment through. This poster explains how this experiment has been built up, describes its organization issues, the operational devices and the technical solutions implemented.

Keywords: wandering, dementia care, patient tracking system, RFID, GPS

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