

ABSTRACT

Despite extensive empirical research in family caregiving there remains a lack of knowledge about the most effective way/s of supporting family carers of frail older people living at home. The use of Information and Communication Technology (ICT) is increasingly being seen as one possible way forward given the rapid growth in the use of modern technology in today's society. To date, there is a dearth of research conducted in the area of home-based telematic interventions which primarily focuses on the needs and experiences of family carers of frail older people and at the same time explores new and innovative ways of working for professionals to support families.

The overall aim of this thesis was to design an ICT based support service that maintains or increases the autonomy, independence and quality of life of frail older people living at home and their family carers. The thesis is built on two empirical studies, an EU- based study named EU-ACTION (Assisting Carers using Telematics Interventions to meet Older persons' Needs) and a Swedish study named Swedish-ACTION and a literature review study. Specific aims were as follows: to explore the perceived benefits and barriers to supporting family carers of frail older people via ICT; to explore the usability of an ICT based support service such as ACTION; to describe and discuss key ethical issues in the area of ICT and family care support of frail older people; to carry out a cost analysis of a home-based support service for family carers of frail older people delivered via the use of ICT, and finally to provide a contextual overview of the 'state of the art' with regard to ICT as a support for frail older people living at home and their family carers.

The project's design process consisted of a six phase user centred, multi-method iterative approach where the family carers and practitioners were involved in all the design phases. The first version of the ACTION service was based on family carers' needs by collaborating closely with them in user groups, via the use of interviews and questionnaires and by reference to relevant empirical literature in the field. New versions of the service were then tested and further developed based on users' evaluations. The service was subsequently validated and tested by 39 families in their own homes across five partner countries in Europe. Following refinements and further development work, the service was then tested by 34 families in their own homes in West Sweden.

The ACTION-service consists of a range of multimedia educational caring programmes, video phone facilities for on-line communication with other