E-care@home: Initial Usability Considerations

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Results

To date, interviews and observations have been carried out in three counties. Work is ongoing to process and analyze this data and synthesize it with existing literature and have so far resulted in personas and user stories. Examples of user expectations that have been identified thus far are:

- simplified and personal communication between care providers and caretakers
- increased frequency of health data collection
- increased security through automatic alarms
- usable system interfaces.

Future work

The next phase includes controlled user tests of prototype technology in test beds and, pending results, potential longitudinal studies in real home environments.

Background

The E-care@home distributed research environment project (2015-2020) aims to develop a smart sensor and communication infrastructure with semantic interoperability capable of monitoring patients in their homes. There are three identified user groups: care providers, elderly patients with chronic obstructive pulmonary disease (COPD) and co-morbidity, and elderlies in better health at risk for falls.

Method

The project’s usability work focuses on user-centered design. Interviews, observations, and literature reviews have been used in a first phase to construct personas of prototypical users, goal-oriented user stories outlining how and why the different user groups want to use the E-care@home system, user expectations on the features of the system, as well as other system design constraints and opportunities.

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SEMANTIC INTEROPERABILITY

Target group segmentation

Interviews & observations

Personas

Scenarios

Use cases