APP - Based Activity Diary for Elderly – Benefits through Interprofessional Development?!

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Disclosure of interest

The authors have no conflict of interest to declare.

Sponsor: ZHAW in-house “Energy Call”

The participant receives APP-instructions.
Study ERED
(Emergency Recognition through Energy Data)

Background
The inter-professional ERED study demonstrated the need to continuously & systematically record activities of daily living (I)ADL of elderly (70+years) living alone at home

Aim
(1) Which behaviours & (I)ADLs need to be recorded by the APP?
(2) How should the APP be designed to be user-friendly for the elderly?
Method

(1) Which behaviours & ADLs need to be recorded by the APP?

- Literature review on patterns of recognition of (I)ADLs by means of smart home technologies & their perceived predictive values.

(2) How should the APP be designed to be user-friendly for the elderly?

- App development, testing and adoption in the multi-professional team.
Results

(1) Which behaviours & (I)ADLs?
12 icons portraying IADLs were developed:  
- 8 icons related to (I)ADLs  
- 4 icons related to having guests, recreation activities, housework, and sleeping/resting

(2) How should the APP be designed for the elderly?
- appropriate size of icons for elderly  
- clear contrast btw icons & background  
- icon symbols must be self-explanatory  
- “Keep the APP simple!”

Screenshot of the APP-based activity diary.
Discussion

Clear benefit of nursing professionals working together with technical engineers:
Sharing different professional expertise allowed for the development of a user-friendly end product.

Overcome professional language barriers need time:
A joint effort to develop a mutual language for both, the nursing & engineers was needed. That was a lengthy process which required time, in-depth discussions to share the same.
Contact & References

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3 Naef R. A review of relevant health sciences research for the development of an Emergency Recognition through Energy Data (ERED) home monitoring system. Personal communication; 16.04.2015.