

# eHOME for an integrated care approach for drug-related problems in home-living older people

## Abstract

### Introduction

Home-living older peoples often use many medications and the majority routinely take more than five prescription drugs, and are therefore prone to drug-related problems DRPs. For the management of DRPs, integrated primary care by the homecare, general practice and pharmacy is desired. The Homecare Observation of Medication-related problems by homecare Employees HOME-instrument is paper-based and assists homecare workers in reporting potential DRPs. To facilitate integrated multi professional consultation in primary care a digital report of DRPs from the HOME-instrument and digital monitoring and consulting of DRPs between homecare and general practices and/or pharmacies is desired. The objective of this study was to develop and evaluate the usability of eHOME, a mobile version of the HOME-instrument consisting of a report, monitoring and consulting system for primary care and to evaluate the type of DRPs revealed by eHOME, integrated care activities and the impact of DRPs on discomfort and clinical deterioration in homecare patients.

### Theory/Methods

The development phase of the Medical Research Council Framework was followed in which an iterative human-centered design approach was applied. The approach involved a Delphi-round for context of use and user requirements analysis of eHOME, followed by two series of pilots for testing the usability and redesign. The study was performed in 18 homecare teams n18, general practices 7 and pharmacies n10 in several settings in the Netherlands.

Subsequently, a pilot study with one-year follow up was carried out in one primary care setting in the Netherlands consisting of 7 home care teams, 7 general practices and 6 pharmacies. Outcomes are: 1 types of DRPs in homecare patients, 2 integrated care activities and 3 classification of the clinical impact of DRPs on patients' discomfort and deterioration unlikely to cause discomfort/clinical deterioration, potential to cause moderate discomfort/clinical deterioration and potential to result in severe discomfort/clinical deterioration.

### Results

The human-centered design study resulted in eHOME including a report, monitoring and consulting system for the primary care. The results of the pilot study will be expected in May 2018.

### Conclusion

The eHOME-instrument was found as convenient, clear and easy to use. eHOME can also be used by informal caregivers and professionals caregivers in other settings.

### Suggestions for future research

Future research on the cost-effectiveness of eHOME in primary care on patient related outcomes e.g. patient satisfaction, quality of life and care related outcomes e.g. changes in care program, consultation moments with the general practitioner, admission to nursing homes and hospitals is needed.

### Location

Netherlands

### Year

2018

### Related Integrated Care keywords

- MULTI-DISCIPLINARY/ INTER-DISCIPLINARY TEAM WORKING
- DIGITAL HEALTH: ICT (INFORMATION AND COMMUNICATION TECHNOLOGY) SOLUTIONS, DEVICES, MONITORING
- DATA AND INFORMATION SHARING
- PERSON-CENTRED

### Pervasiveness

Small scale in a local jurisdiction

### Status

Completed

### Links

<https://www.ijic.org/articles/abstract/10.5334/ijic.s2351/>