Managing frailty: exploring the effectiveness of integrated primary care interventions by distinguishing subpopulations of frail older people

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Willemijn Looman, Isabelle Fabbricotti, Jeanet Blom, Daniëlle Jansen, Jennifer Lutomski, Silke Metzelthin, Robbert Huijsman

1: Institute of Health Policy & Management, Erasmus University Rotterdam, the Netherlands;
2: Dept of Public Health and Primary Care, Leiden University Medical Center, Leiden, the Netherlands;
3: Department of general practice and elderly care medicine, The Netherlands;
4: Radboud Institute for Health Sciences, Radboud University Medical Center, Nijmegen, the Netherlands;
5: Anu Research Centre, University College Cork, Cork, Ireland;
6: Department of Health Services Research, and CAPHRI School for Public Health and Primary Care, Maastricht University, Maastricht, the Netherlands

Introduction: Integrated care has increasingly been promoted as an effective way to organize primary care for community-dwelling frail older people. In the context of the National Care for the Elderly Programme in the Netherlands, a number of integrated primary care interventions were evaluated. These interventions have common components such as screening, assessment, care plan and an integrated, multidisciplinary follow-up. However, the evaluations of these interventions have not shown convincing effects in terms of health outcomes, functional abilities or quality of life. A possible explanation could be that frail older people have been perceived as a homogeneous group by both care professionals involved in the interventions and researchers conducting the evaluation research. Frailty is characterized by its complexity; different components of frailty could influence and reinforce each other. Therefore, it is essential to develop profiles of frail older people. By specifying frailty, interventions could be better designed and implemented to meet specific needs of frail older people and to prevent negative outcomes. The aim of this ongoing research is twofold: 1) to distinguish subpopulations of frail older people and 2) to explore to what extent the effectiveness of integrated care interventions differs between the subpopulations of frail older people.

Methods: For this research The Older Person and Informal Caregiver Survey Minimum Data Set (TOPICS-MDS) will be used, containing data of 30,000 older people [1]. First, to distinguish the subpopulations of frail older people, latent class analysis will be applied. Second, the identified subpopulations will be taken into account as a moderator variable in an Individual Patient Data meta-analysis of eight integrated primary care interventions. The eight studies...
used controlled designs with before and after measurements of 8000 frail older people. The outcome variables will be: health outcomes, functional abilities and quality of life.

**Discussion:** By distinguishing subpopulations of frail older people, we will enhance the understanding of frailty and its complexity for care professionals and researchers. Our results will indicate whether integrated primary care interventions are (more) effective for certain subpopulations of frail older people. Thereby, our study may provide valuable insights into the future design, implementation and evaluation of integrated care interventions for frail older people.

**References:**

1- Lutomski JE, Baars MAE, Schalk BWM, Boter H, Buurman BM et al. The Development of the Older Persons and Informal Caregivers Survey Minimum Data Set (TOPICS-MDS): A Large-Scale Data Sharing Initiative. PloS ONE 2013 8(12); e81673. doi:10.1371/journal.pone.0081673

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