

# Frail older people

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## **Valorization**

## **VALORIZATION**

This dissertation describes studies that aimed: (1) to expand our knowledge about profiles of older persons with different levels of frailty in terms of functioning in multiple health domains; (2) to examine which resources influence the pathway from frailty to several adverse outcomes; and (3) to increase our knowledge of the psychometric properties of frequently used frailty instruments. This valorization chapter reflects on the relevance and innovativeness of the findings described in this dissertation. It also discusses the value of the findings for different stakeholders. Furthermore, activities for implementation and further dissemination are presented.

### **Relevance and innovativeness of the findings**

The worldwide ageing of the population leads to increasing numbers of frail older people. The past decades frailty has therefore been of increasing interest to researchers and policy makers. Despite all their attention, a clear conceptualization and definition of frailty is lacking. Also measurements of frailty are not uniform. So far, we are not able to adequately identify frail older people. Nevertheless, researchers keep exploring different conceptualizations and measures, aiming at a better identification of frail people, i.e. those at risk for adverse outcomes. Most studies in this field have been conducted to evaluate one or two frailty instruments and often just one outcome measure was used. Also, sample sizes as well as follow-up periods were often limited. The strength of this dissertation is that a large cohort of older people was included, with a follow-up period of two years, simultaneously testing four frailty instruments with different underlying conceptualizations, and the inclusion of three important outcome measures. Using such a large dataset is fairly rare and the results from this dissertation can therefore be considered highly valuable for researchers, healthcare professionals, policy makers, older people, and in health education. The results demonstrate that even with well-known instruments we are hardly able to identify the people at risk for adverse outcomes. Often people are incorrectly classified as frail. The application of such measures may lead to unnecessary treatment for older people who are actually just fine. This is not only an unnecessary burden for older persons themselves but also puts a burden on the healthcare system. Moreover, those who are actually in need of help often do not receive it.

In general, despite decades of research, we should accept that frailty is very complex and we are still unable to define and measure it adequately. Some alternative methods and approaches are suggested in the discussion of this thesis to try to correctly identify

frail older people, such as using a more refined classification instead of a one-size-fits-all approach or a community approach. These options should be explored. However, until one of the alternative methods demonstrates significantly better results than we have found so far, we should not continue with frailty screening as we are doing to date. This will have consequences for various stakeholders which will be discussed below.

## **Relevance for different stakeholders**

There are several stakeholders for whom the results of this dissertation are relevant.

### **Researchers**

Results of the conducted studies in this dissertation demonstrate that the predictive ability of the four investigated frailty instruments is poor. Combining instruments does not lead to a better predictive ability. Also, six investigated resources were unable to moderate the pathway from frailty to adverse outcomes. In general, the results were in line with previous studies. The way researchers handle frailty seems to be insufficient for an accurate identification of people at risk for adverse outcomes. Small changes in conceptualizations or measurement instruments will probably not significantly increase the correct classification of frail people. The focus of research should therefore shift to new, scarcely examined approaches as suggested in the discussion section of this dissertation.

### **Healthcare professionals**

Based on the results of the conducted studies, healthcare professionals should be aware that the predictive ability of the four investigated frailty instruments is limited. Relying solely on a frailty questionnaire to decide if an older person needs help, seems therefore rather unwise. Additionally, other studies showed that intervention programs have not demonstrated convincing positive effects so far. Healthcare professionals are therefore advised to critically consider the value and thus the use of frailty instruments for screening purposes.

### **Policy makers**

The increasing number of older people, and more specific frail older people, put a burden on the healthcare system. Since the classification of the truly frail people is

poor, care is often given to the wrong people. This leads to an unnecessary increase in healthcare costs. Additionally, the Dutch government supports research on older people including frail ones. For example, the Dutch Ministry of Health, Welfare and Sport initiated the National Care for the Elderly Program between 2008 and 2016. Over 200 projects aiming at improving care for older people, mainly with complex health problems, were funded. The total investment was 89,000,000 euro. Some of those projects aimed at finding better screening methods, assessments and treatments for frail older people. The positive results from those studies were quite limited. In light of those results, the results from this dissertation and from many other studies on frailty (screening), policy makers should seriously consider if they want to further invest in frailty research, frailty screening, or treatment in daily practice, in the way they have been doing so far. An option could be to fund research projects that focus on approaches that are rather distinct from the ones that are used to date.

### **Lecturers and students in healthcare education**

Frailty is a very complex concept. Lecturers in healthcare education should provide students with information displaying this complexity. Awareness should be created among students about the limited predictive ability of frailty instruments. Simply filling out a questionnaire does not automatically lead to providing good care for a patient. Moreover, based on outcomes from other studies, students should be made aware of the fact that evidence for the effectiveness of intervention programs is lacking. Since new instruments are becoming available frequently, students should also be taught that they must always be searching for the best available measurement instrument; especially concerning frailty but also in general. Additionally, they need to learn that it is important to apply an instrument as precisely as possible since deviations might lead to different results.

### **(Frail) older people**

Older (frail) people themselves do not seem to benefit from frailty screening, considering the high rates of misclassification. Nevertheless, most older people do want to know if they are at risk for adverse outcomes, and if so they want help from healthcare professionals. They are also willing to participate in research aimed at improving the identification of frail older people, which has been shown by the high response rates (90%) in this dissertation's studies. We should value their contributions and keep involving older people in our search to a better understanding of frailty and its related measures.

## **Activities for implementation and further dissemination**

All articles included in this dissertation have been published in peer-reviewed international journals. The results have also been presented and discussed at national and international scientific and other conferences (see list of publications) and have thus been made available to researchers and healthcare professionals. Additionally, results from some of the published studies are integrated in a textbook for students (in higher professional education). For the future it is important that the results and recommendations of this dissertation are brought to the attention of other researchers, healthcare professionals and policy makers. Guidelines for healthcare professionals and educational programs should be adjusted in light of our findings. By means of national and international publications and presentations we will aim to further increase awareness among stakeholders about the limitations of (large-scale) frailty screening.