

# VALORISATION

This dissertation describes studies that aimed (1) to increase the knowledge about the associations among different frailty domains, or 'frailty patterns' in older people, which may contribute to the development of individually tailored interventions; (2) to assess the added value of the perspective of general practitioners and informal caregivers by means of a short first screener for the identification of people at risk for multidimensional frailty; and (3) to identify factors that contribute to daily functioning and wellbeing despite frailty in order to work towards a strengths-based approach. Although the value of our work for clinical practice has been described in each study, this chapter focuses on the positioning of our findings in a broader, societal framework. This chapter therefore discusses (1) the societal relevance; (2) the innovativeness of our findings; (3) target groups to whom our findings are relevant; (4) how our findings can be translated into specific products or activities; and (5) how valorisation actually can be realised, or in other words, how the products can be implemented.

## 1. Societal relevance

Within the ageing population, policymakers are focusing more and more on stimulating 'ageing in place'. This is not only the wish older people have, it also is important to reduce the high costs of institutionalisation. However, chronic and acute conditions associated with ageing, such as multidimensional frailty, threaten the ability to age in place. It is well-known that frailty increases the risk of disability, hospitalisation and institutionalisation, amongst other consequences. Thus, early detection of frailty and prevention of frailty and its adverse outcomes are important.

Therefore, regarding detection methods, we explored if a one-item proxy measure could serve as a short, first screener for identifying people at risk for multidimensional frailty (**Chapter 3**). We found, however, that the outcome on a self-reported frailty measure and the perspectives (in)formal proxies differ. This might indicate that (in)formal caregivers lack knowledge about multidimensional frailty as perceived by older persons. Nonetheless, as our work highlights the importance of assessing frailty as a multidimensional construct (**Chapter 2**), it is likely that this increases their awareness. Eventually, this might result in multidimensional frailty to be recognised in an earlier stage.

In addition, findings from **Chapters 2 and 4–6** are relevant for developing interventions. First, we identified interrelationships between the different multidimensional frailty domains (**Chapter 2**). Knowledge about such 'frailty patterns'

may contribute to tailoring interventions to individuals. For example, cognitive and psychological frailty were found to be rather strongly associated, indicating a need to develop interventions focused on these domains of functioning.

Indeed, although most of the existing intervention strategies focus on the 'general' frail older population, it seems important to tailor interventions to subgroups or specific individuals, depending on the domains in which problems are encountered. It is likely that matching interventions to a person's specific needs will result in more effective intervention strategies.

Second, we identified factors that contribute to daily functioning (**Chapters 4–5**) and wellbeing (**Chapter 6**) despite frailty. By identifying and focusing on factors that contribute to positive outcomes in old age, negative stereotypes might be countered. In addition, this provides new insights for the development of interventions which may better match the needs, goals and preferences older people have themselves as they prefer a focus on improving their wellbeing rather than on intervening on diseases.

To conclude, findings of this dissertation are relevant for early recognition of multidimensional frailty, and give directions for the development of new intervention strategies. This is of societal relevance because frailty is highly prevalent in old age and increases the risk of adverse outcomes.

## **2. Innovativeness**

Until now, most research on frailty has focused merely on deficits and losses. The innovativeness of our work lies in the fact that we aimed to identify strengths (frail) older people have and focused on things people still can do or strengths they possess. Moreover, we aimed to work towards a strengths-based approach in two ways.

First, our main focus was on identifying protective factors against disability or dependency in activities of daily living (ADL) rather than on identifying risk factors for developing ADL disability or dependency. Although it might not always be possible to diminish the level of frailty, it might be possible to reduce adverse consequences and to sustain or even to improve daily functioning by strengthening strong points (i.e. such protective factors).

Second, we aimed to contribute towards an approach in which the focus could be on improving wellbeing, rather than diminishing the risk of adverse outcomes, despite being frail. Although previous studies argued that frailty reduces the quality of life (QoL), in most of those studies, at least 50% of the participants had a good-to-excellent QoL. Therefore, we argued that it is important and relevant to investigate which factors contribute to higher levels of QoL despite being frail. This is likely to contribute to knowledge about older people's strengths and abilities.

### 3. Target groups

Findings from this dissertation are relevant not only for older people but also for their informal caregivers, healthcare professionals and policymakers with an interest in enabling older people to age in place and/or focusing on positive health. First, this dissertation shows that it is important to conceptualise frailty from a multidimensional perspective (**Chapter 2**). Therewith, our work increases the awareness that different domains of functioning (i.e. cognitive, environmental, physical, psychological, social) are important to take into account in light of ageing in place. Knowing what frailty is about, and that it is highly prevalent in old age, might increase the likelihood that older people will communicate about difficulties in different domains of functioning and/or will seek help when they experience such difficulties.

In addition, by increasing the awareness of informal caregivers and healthcare professionals about the need to consider the different domains of functioning, this might result in the detection of frailty in earlier stages. Moreover, it is likely that interventions will become more tailor-made and therewith, probably, more effective. This is beneficial for older people as well as their (in)formal caregivers.

Moreover, it is important that the multidimensional nature of frailty is taken into account by policymakers. Based on our findings, policymakers should, for example, promote interdisciplinary collaboration by setting up multidisciplinary care teams or establishing regional healthcare networks. It is likely that the inclusion of different perspectives (i.e. of different healthcare professionals) will lead to a more holistic view of the older person.

Second, this dissertation shows that (in)formal caregivers have a different perspective on the level of frailty than older people themselves. An increased awareness of these different perspectives (**Chapter 2**) could serve as a basis for a conversation between the different actors and mutual understanding.

Third, this dissertation shows the importance of adopting a strengths-based approach in managing frailty and that it can be of value to focus on improving positive outcomes rather than only on diminishing the risk of adverse outcomes. We suggest possibilities for promoting and improving daily functioning and wellbeing by strengthening specific resources among frail older people. In addition, in line with such a strengths-based approach, it is recommended that questions such as 'What would improve your QoL?' should be part of the interaction between healthcare professionals and older people. This will not only contribute to working towards a strengths-based approach, but it also will work towards a demand-driven, rather than a supply-driven, approach. It is likely that this is beneficial for the wellbeing of the older people, as well as their informal caregivers.

Related hereto, our findings regarding the strengths-based approach might contribute to a reduction of negative stereotypes about ageing and instead contribute to a more

positive view of older people. For example, policymakers could use our findings to increase awareness of the strengths older people have, for instance, by emphasising in campaigns the contributions older people can make to society. Moreover, when older people are being proactively informed about things they can still do, they might change their own view of their ageing as well as they gain insight into their own potential. This might empower them to perform certain activities they would like to do but thought of as 'not appropriate' at their age.

#### **4. Products and activities**

This dissertation was part of the Detection, Support and Care for Older people: Prevention and Empowerment (D-SCOPE) project ([www.d-scope.be](http://www.d-scope.be)), on behalf of which several activities will be organised and products will be developed. Although the D-SCOPE project covers many aspects, the focus in this section is on activities and products that are related to the work presented in this dissertation.

With regard to the products, a 'frailty balance instrument', together with an Information Communication Technology (ICT) tool, will be developed starting in September 2018. In this instrument, strengths and resources are considered in addition to frailty. The aim of this instrument is to more easily detect people in need of care. For example, some older people with multidimensional frailty already receive appropriate care and support and/or have the right coping strategies to deal with their frailty, while others do not. In light of interventions, it seems most important to visit the latter group as they are 'out of balance', while the first group already has found ways to adapt to or cope with their frailty. It is expected that groups with different care needs can be detected more easily and faster with such a frailty balance instrument.

To develop this instrument, a longitudinal randomised controlled trial of 870 community-dwelling older people was conducted within the D-SCOPE project between March 2017 and April 2018. Their level of frailty, possible resources and strengths (based on **Chapters 4–6**, amongst other studies), and positive outcomes such as QoL were assessed. While **Chapter 6**, for example, had a more explorative character, this large-scale quantitative study makes it possible to empirically verify the factors that seemed important for higher levels of QoL despite being frail. Thus, we next will analyse which factors are most important to experience positive outcomes (such as QoL) despite being frail.

After the frailty balance instrument has been developed, an ICT tool will be developed to enhance the practical implementability. In this tool, the questionnaire can be completed and results can be obtained. Then, results can be used, for example, in personalised action plans. Furthermore, a guideline on how to use the instrument and interpret results will be developed.

Lastly, a short movie about the D-SCOPE project will be produced. Related to the findings of our work, it will include the importance of considering different domains of functioning while assessing frailty (**Chapter 2**), as well as the importance of assessing strengths and resources, or in other words, what older people still can do (e.g. **Chapter 6**).

Regarding activities, a 1-day conference will be held in November 2018. Results from the D-SCOPE project will be presented to the researchers, healthcare professionals, and volunteers and older people who participated in our study, among other people. The presentations will include our approach to multidimensional frailty and use of the frailty balance instrument. In addition, workshops about different frailty measurement instruments and how they complement each other will be given, and an expert meeting will be organised on how to link findings of the D-SCOPE project to policy and clinical practice.

Aside, findings of this dissertation have been disseminated in the past 3.5 years in several ways. First, findings were presented during national and international conferences. They also have been disseminated among healthcare professionals who participated in the D-SCOPE project. For example, meetings were organised, newsletters were sent to healthcare professionals and participants in the project, and information about the D-SCOPE project is available on the website ([www.d-scope.be](http://www.d-scope.be)). In addition, scientific articles that have been published (**Chapter 2, 4 and 6**) are freely available (open access); one of the articles (**Chapter 6**) will be translated into Dutch for publication to make our findings more accessible to healthcare professionals working in the Netherlands and Belgium.

## 5. Implementation

The frailty balance instrument and the accompanying ICT tool, as described in *Products and activities*, will be developed starting in September 2018. Thereafter, the actual implementation will take place. One of the partners within the D-SCOPE project, the Socialist Community Health Insurance ('Socialistische Mutualiteiten' in Dutch), will test and implement the use of the instrument in four municipalities in Belgium. The Socialist Community Health Insurance covers medical costs and disability allowances, provides home care services and lends equipment to community-dwelling people in need of care, amongst others.

The first training sessions and workshops will include, for example, an explanation of the meaning and use of the instrument and the ICT tool. Thereafter, the social workers of the Socialist Community Health Insurance will use the frailty balance instrument during the home visits they conduct in community-dwelling older people. Researchers involved in the D-SCOPE project will monitor this process and, if needed, will give extra training sessions tailored to the needs of the social workers. Moreover, focus groups

will be held to gain insight into their experiences, including questions on positive aspects and suggestions for improvement.

Thereafter, and based on the needs and barriers the social workers experience, we will develop practical guidelines to facilitate other healthcare professionals who want to make use of the D-SCOPE methodology. In the end, the partners involved in the D-SCOPE project will no longer be able to provide training sessions and/or workshops (as funding will end by December 2018). Nonetheless, the tools, including the frailty balance instrument and practical guidelines, will be made freely accessible upon request. The Vrije Universiteit Brussel, as the coordination centre of the project, will own all instruments. This also means that whenever healthcare organisations want to work with the tools or require further assistance, de Vrije Universiteit Brussel is the first point of call.