POLICY BRIEF

Prevention and management of frailty in the EU
A health policy priority

December 2019 Update
Keywords:
Frailty; Ageing; Policy-making; Prevention; National Health Programmes; Europe.

Aim of the policy brief
To support policymakers at national and local levels to tackle the grand-challenge of frailty amongst older people in Europe.

Contents
The policy brief provides a synthesis of the work developed by ADVANTAGE JA during 2017-2019. It includes a summary of the current evidence on three important areas related to the Frailty phenomenon, i.e. the definition of frailty; the existing prevention and management strategies; and the policy options for increasing awareness and preparation of the care workforce to address this challenge.

This evidence base represents the solid ground on which stakeholders have critically discussed for nearly three years with the partners of the first European Joint Action on Frailty, ADVANTAGE, before reaching a final consensus on a common Frailty Prevention Approach (FPA).

As the FPA document is the result of a EU Joint Action, the findings presented not only include a set of concrete policy recommendations for promoting Healthy Ageing across Europe (presented at the end of this policy brief), but it also incorporate the commitment of the participating MSs to take actions aligned with the recommendations during the next four years.

Target groups
Policymakers at any governmental level, professionals and other stakeholders with interests in formulating or influencing policy in the field of frailty and ageing.
Executive Summary

The Joint Action (JA) ADVANTAGE, co-funded with the Third European Health Programme of the European Union, is a collective effort involving 22 Member States (MS) and 34 organizations with the aim to develop a comprehensive strategic framework for the prevention and management of frailty at European level.

ADVANTAGE JA partners worked together to summarize the current evidence of the different components of frailty and its prevention and management, both at a personal and population level and increase knowledge in the field of frailty to build a common understanding on frailty to be used by participating MSs.

Evidence was gathered from four sources of information: peer-reviewed articles, grey documents, good practices identified at European level and EU funded projects. The main results are presented in specific State of the Art Reports (SoARs). The key messages reflected in the State of the Art documents are grounded in scientific knowledge, are assertive and avoid controversial statements whenever further research is needed or results are unclear. Furthermore, they acknowledge the heterogeneity of the MSs health and social care systems and diverse societies in a scenario of demographic change and economic constraints across the EU.

The evidence stemming from the SoARs is summarized and discussed in three main areas: 1) defining frailty; 2) preventing and managing frailty and 3) increasing awareness and preparing the workforce.

After that, MSs were contacted to collect information about the ongoing approaches related to frailty (strategies, policies, programmes, actions...) through a survey that was adapted to the different stakeholders. All MSs have already began to implement policies, initiatives and activities that address frailty, but this has been done in a heterogeneous way. All MSs could strive to achieve a more homogeneous progress by identifying actions on the less well matured areas, considering the SoAR as the goal. Each MW was invited to develop a roadmap for action for the next four years considering their own circumstances. All this work represents the ground on which stakeholders have critically discussed for nearly three years before reaching a final consensus on a common Frailty Prevention Approach (FPA). The FPA includes a set of concrete policy recommendations for promoting Healthy Ageing across Europe organized in ten domains or areas that should be addressed to make a comprehensive approach on frailty.

Implementing the key recommendations in this policy brief will help MS to overcome the current challenges for the sustainability of EU societies and make progress together in preventing and managing frailty. These recommendations should be considered as guiding principles, to be implemented through measures, which are designed locally to reflect and address the heterogeneity of each national and regional context.

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1 The specific reports are available at the JA website [www.advantageja.eu](http://www.advantageja.eu)
1. Defining frailty

**What is frailty?**

**What are the dimensions of the phenomenon?**

**How can frailty be identified?**

Frailty is a geriatric syndrome, which is increasing worldwide as consequence of the widespread population ageing trend (1). It increases the risks for ageing individuals of adverse effects, such as infections, hospitalisation, morbidity, and even death (2).

Frailty is not an inevitable consequence of ageing, it may be prevented and treated to foster a longer and healthier life. Interest on frailty is today gaining momentum, since it can be considered a promising therapeutic target for innovative clinical interventions and care policies (3). Multi-morbidity, disability and frailty are distinct clinical entities that are causally related, often associated and may overlap (4). All three occur frequently and have important clinical consequences. What really affects the quality of life is function and not disease, and the best predictor of function is frailty (5).

Frailty is a dynamic functional state. Its onset and progression amongst older adults can be reduced and even reversed, provided that early intervention and correct management strategies are set in place (6). The ADVANTAGE JA consortium reviewed the different definitions available in the literature, concluding that a meaningful and comprehensive definition of frailty should incorporate at least the following five elements (7):

1. **Heterogeneity of its manifestations:** A proper definition of frailty should recognize that it can manifest in diverse forms and characteristics.

2. **Complexity of its characteristics:** Different properties should be considered when defining frailty: it is a complex state affecting multiple body systems. Frailty is associated to specific individual trajectories of ageing and related accumulation of health deficits over time.

3. **Its specific pathogenesis:** frailty develops as consequence of multiple causes in which several body systems seem to play a major role (especially the nervous, endocrine, immunological and musculoskeletal). It is driven by both individual and environmental factors.

4. **Its implication in terms of individual vulnerability:** frailty can be triggered by specific situations, which are defined as “stressors”.

5. **Its association with adverse outcomes:** frailty is associated with a higher propensity for comorbidities and complications, such as disability, morbidity, hospitalisation, institutionalisation, and death.

Overall considered, ADVANTAGE JA recognised that the best definition for frailty is currently the one provided by the World Health Organization (WHO), which incorporates the first four attributes above described that are uncontroversial:
Frailty is a progressive age-related decline in physiological systems that results in decreased reserves of intrinsic capacity, which confers extreme vulnerability to stressors and increases the risk of a range of adverse health outcomes (8).

Estimates regarding prevalence and incidence of frailty tend to vary widely across settings, age ranges, follow-up duration, and depending on frailty assessment instrument and definition used (9, 10, 11). Most of the data are available in only five of the EU Member States: France, Germany, Italy, the Netherlands and Spain. Most community-based population samples yield prevalence rates below 30%, although results range from 2% to 60% (12). The meta-analysis of European community-based studies confirmed a prevalence of 12%, with a pooled estimate about four times higher in hospital/nursing home settings (9). The highest prevalence is seen among hospitalised populations and residents in nursing homes in Eastern Europe, where about 75% of residents are classified as frail. Although its dynamic nature, there is a remarkable paucity of data about frailty development and progression over time (6, 11).

Frailty has a clear impact on welfare and societies in terms of costs. Recent studies carried out in Germany, France and Spain suggest that the incremental annual costs of frailty ranges from 1,500 to 5,000 €/person depending on the frailty status (pre-frail or frail) and the setting of care (community or hospital) (13, 14, 15). Costs are generated by the higher morbidity and mortality rates associated with the frailty condition, which leads to an increased health and social care utilisation in terms of hospitalisation and use of long term care. Frailty is clearly a stronger predictor of health care costs than age and comorbidity per se.

The overall heterogeneity of data on the frequency and progression of frailty in the population further stresses the need for a common and standardized approach to define frailty (16). Its manifestations can cover the physical, the cognitive and the psychosocial domains. Using comparable and validated instruments for identifying frailty could help to overcome this gap. In this respect, ADVANTAGE JA has identified 22 different tools, out of which 17 have been scientifically validated (17). Some of these screening instruments are short, fast (less than 10 minutes to administer), and simple while others may rely on more sophisticated and time-consuming measurements. Comprehensive Geriatric Assessment remains the gold standard for the management of older people with frailty (18).

2. Preventing and managing frailty

Are there specific care models for frailty prevention?

Which interventions are effective to tackle frailty amongst individuals?

To prevent disability in older age and support healthy ageing in the JA participating MSs, the first step is to identify the population group at the highest risk and that could benefit most from an intervention aimed at delaying or reversing disability and dependence. The ADVANTAGE JA reviewed the characteristics and current state of implementation of models of integrated care specifically designed to prevent and tackle frailty in the community, as well as the existing strategies for the management of frailty at individual level.
With respect to the care models, evidence retrieved by ADVANTAGE JA supports the case for a more holistic and salutogenic response to frailty, blending a chronic care approach with education, enablement and rehabilitation to optimise function, particularly at times of a sudden deterioration in health, or when moving between home, hospital or care home (19). A care model suitable for providing this type of response is characterized by the following key components (20):

- Establishment of a single entry point in the community, generally in primary care setting;
- Use of simple frailty specific screening tools in all care settings;
- Availability of comprehensive assessment and individualised care plans, addressing also the caregivers of the frail individual;
- Tailored interventions by an interdisciplinary team – both in hospitals and community;
- Case management and coordination of intervention across the continuum of providers;
- Effective management of transitions between care teams and settings;
- Shared electronic information tools and technology enabled care solutions;
- Clear policies and procedures for service eligibility and care processes.

With respect to the interventions at the individual level to prevent and manage frailty, available evidence suggests the effectiveness of comprehensive assessments of users’ needs and multidimensional interventions tailored to their modifiable physical, psychological, cognitive and social factors. More specifically, ADVANTAGE JA suggests (21):

1. Inadequate nutritional intake is an important modifiable risk factor for frailty, therefore risk for malnutrition and healthy diet and lifestyle promotion should be carefully considered.

2. Exercise can improve physical performance and reduce frailty: exercise in frail older people is indeed effective and relatively safe and may reverse frailty while sedentary lifestyle is a risk factor. There is evidence of effectiveness for multicomponent exercise.

3. Comprehensive Geriatric Assessment can support the creation of multidimensional interventions personalised to the capacities and needs of the individuals, considering its home environment and community. Personalisation of care is a fundamental approach to the treatment of chronic diseases in the presence of frailty.

4. Manage drug prescribing effectively and reduce inappropriate polypharmacy. While evaluating the pharmaceutical plans of older people, aspects such as multimorbidity, safety, efficacy and acceptability of medicines, the patient’s wellbeing, social circumstances and goals should be included.

5. Opportunities for changing the way the services should be promoted, especially considering the potentialities of new tele-healthcare and falls prevention interventions in frail older persons. Information and Communication Technologies (ICT) offer a variety of opportunities in terms of clinical outcomes improvement. Several technological tools can be chosen for ensuring e.g. safety and reduce risks, such as falls. The acceptance and use of these technologies, however, remains problematic for elderly people, and should be monitored accordingly.
3. Increasing awareness & Preparing the workforce

How can awareness of the frailty challenge be increased?
How can the care workforce be prepared to address the challenge of frailty?

The dramatic demographic changes call for a radical change in education, organisation, and delivery of health care (22). There is a growing necessity to promote a better understanding of the multifaceted needs of older people to raise public awareness on the importance of social inclusion and integration. Further research is needed not only to better understand the nature of frailty, but also to improve screening and diagnostic tools and test the effectiveness of interventions. Successfully increasing awareness on these issues will require a series of actions at policy level, which will be undertaken only if the links between academic centres, primary care settings, communities, older people and carer advocacy groups are strengthened. Awareness could be increased for instance by developing policies and protocols on ageing and health, by re-defining performance targets and by monitoring professional practice and performance in this area.

Implementing effective interventions for frailty in care settings can only be achieved if the workforce is adequately trained and has sufficient capacity to face up to frailty as a key challenge. In this respect, the WHO in 2013 delivered a report containing specific recommendations for the MSs on how to reshape health workforce skills development (23). The WHO outlined the need for a “critical mass of specialist geriatric expertise or the availability of geriatricians” to see and treat complex cases and to develop the curricula and teaching needed to cover this vision. The most prominent Scientific Societies in the field of Geriatric Medicine and Gerontology, and public National Health Services, such as in the UK countries, have also issued similar recommendations pointing in the same direction. These recommendations address all health and social care professionals involved in supporting older people, with the aim of building new skills in the prevention and treatment of common geriatric syndromes and in preserving and restoring individual functional capacity.

The development of skills in the area of frailty prevention and management requires dynamic and competency-based curricula and inter- as well as multi-professional education, in vibrant sustainable and supportive learning environments for both undergraduate and postgraduate education (22). In many local contexts, indeed, the current curricula offered in the undergraduate training programmes does not match the skills and competences required in practice. Roles of care professionals are continuously reshaped, the scope of practice extended and new professionals are being created and integrated into the care organisations. To address this challenge three broad areas of competencies have been identified as key areas for professionals’ capacity building: geriatrics, interprofessional practice and inter-organizational collaboration (24). Indeed, nurses, social workers and allied health professionals today play an important role by using their skills in key tasks such as assessment, treatment management, self-management support, and follow-up care. Modern health workers need to be (re)trained for becoming care coordinators and to acquire the ability to oversee comprehensive and multidisciplinary care plans. Ultimately, the ability to work in multidisciplinary teams is a key success factor, if older people are to be placed at the core of individualised care planning and well coordinated care pathways.
Currently, there is no evidence on the effectiveness and sustainability of educational programmes specific for frailty prevention and management, despite a few interesting European initiatives. However, good practices for continuous education and training of health professionals on frailty have been identified across MS by ADVANTAGE JA. Most of these programmes have a multidisciplinary approach. Few MSs reports having a national education strategy or specific competency framework in the field of frailty. It is difficult to make a critical evaluation of the widely varying under- and postgraduate good practice models. In the future, more investment and a systemic approach in this area are required if a real impact is to be made.

Addressing frailty amongst ageing populations must be a comprehensive holistic endeavour employing a multilevel strategy to coordinate the efforts of all stakeholders (25). The urgency of such a strategy is clear, given that frailty prevalence will exponentially increase in the coming years as the European population continues ageing, but also as the negative consequences of frailty affects family caregivers, professionals, public and private service providers and society as a whole. Since frailty is very much associated with disability, monitoring its evolution seems a reasonable way to proceed.

The positive impact of addressing frailty has been already outlined by several initiatives, pointing out how investment in preventing and managing frailty, for example through integrated care strategies, leads in the mid- and long-term to a more efficient and sustainable care system and more resilient overall (26). For instance, preliminary analysis of the outcomes of the Scottish reforms to reshape care and support for older people with multiple and complex needs, suggests that person-centred and integrated health and social care, in partnership with housing, community, voluntary and independent sectors, is associated with significant cost avoidance from reduction in the projected age related rate of hospital and long term institutional care utilisation for people aged 65 (27).

Even though European MSs vary largely in many aspects, e.g. in terms of welfare system structure, national economy, and family and social networks, EU policy makers face similar challenges in implementing new initiatives, programmes and/or reforms. This is why, the ADVANTAGE JA has worked extensively over the last three years to distil and translate the current evidence knowledge into a comprehensive Frailty Prevention Approach (FPA) framework. The FPA aims to be the core guidance for policy decision makers, technical advisors, managers, health and care professionals, academics, and all stakeholders involved in the development of national or regional frameworks to address ageing.

It should not be considered as just a guideline, though. It incorporates the commitment of the MSs participating to the ADVANTAGE JA to take actions aligned with a number of solid recommendations during the next four years. These Road Maps of actions, based on the present situation of the MSs and the resources at their disposal, show in a practical way how the prevention and management of frailty can be enhanced in different socio-economic and cultural contexts.
The FPA has been set out as ten domains, and each domain is backed by a rationale and includes a set of recommendations for investments in the activities presented below.

DOMA IN 1: Raising awareness, engaging stakeholders and empowering older people

The WHO definition of frailty should be adopted and the possibility to create a specific code for frailty in the International Classification of Diseases (ICD) classification of the WHO should be considered. Recommendations for policy under this domain include:

- Promoting awareness campaign to increase knowledge about ageing, ageism and frailty, using WHO concepts of healthy ageing and frailty;
- Involving key stakeholders from relevant sectors and evolve towards an inter-sectoral working group on healthy ageing and frailty, including older people and caregivers.

DOMA IN 2: Commitment to action on frailty

Tackling frailty requires that MSs design a comprehensive strategy, considering that policies in multiple domains need to be revised and adjusted to meet this challenge. The FPA recommends the following actions:

- Developing both National and Regional Strategies on Healthy Ageing;
- Aligning other strategies or plans (e.g. chronic diseases, dementia...) with the vision of healthy ageing and action on frailty;
- Creating a department of Healthy Ageing or a program for Older People that addresses frailty at National and Regional level.

DOMA IN 3: Promotion of healthy ageing and frailty prevention

Promotion of healthy ageing and frailty promotion are two intertwined actions, which can be pursued by implementing population-based approaches to:

- Promote healthy ageing and preventing frailty, focused mainly in the reduction of alcohol and tobacco consumption, uptake of physical activity, adequate nutrition and control of chronic diseases;
- Promote Age Friendly Cities and Communities (AFC);
- Develop National/Regional guidelines to promote healthy ageing through a frailty prevention approach;
- Develop a national plan to promote healthy ageing through a frailty prevention approach.
DOMAIN 4: Early diagnosis of frailty

ADVANTAGE JA identified several validated tools to screen and diagnose frailty which should be implemented in the care pathways, contextualised at local level according to practice priorities and characteristics. In this respect, the FPA suggest the:

- Development of opportunistic screening initiatives for early detection of frailty;
- Inclusion of frailty assessment within a national/regional health survey or study;
- Adoption of risk stratification strategies based on a sound epidemiological picture of frailty;
- Development of frailty observatories or registries.

DOMAIN 5: Appropriate management of frailty

Personalisation of care should be supported as a fundamental approach to the treatment of chronic diseases in the presence of frailty. Appropriate management of frailty could be ensured by:

- Using proper CGA assessments, adapted to each setting, as the main tool to assess frail older people followed by an individualised care plan;
- Developing national or regional clinical guidelines to manage frailty in a comprehensive way;
- Developing guidelines to address specific interventions required to improve the management of frailty, such as on intervention for an appropriate polypharmacy management, increase physical activity, nutrition programs, falls prevention and immunization in the frail population.

DOMAIN 6: Establish and continually improve an integrated model of care to completely address frailty

Policy makers should seek to transform existing health and social care system to deliver sustainable access to evidence based integrated services. Only such services can ensure continuity and coordination of care across all health and social care providers and are focused on maintaining independence. To achieve this ambition the FPA recommends to develop:

- National/Regional recommendations to improve the model of integrated care for older people as described in the FPA;
- National/Regional programme to ensure effective intermediate care and management of care transitions between teams and settings;
- Programmes for assessment and improvement of health and social services for older people, identifying the need for scaling-up programmes with positive results and piloting new programmes based on the FPA recommendations.

DOMAIN 7: Education and training

Each MSs should develop a plan to invest in the health workforce capacity and capability in the area of frailty prevention and management, in line with the WHO recommendation from 2015. Multidisciplinary training curricula and educational programmes should be developed and delivered jointly between academic centres, hospitals, primary care settings and communities. Education and training programmes in the field of frailty prevention and management should be evaluated in a transparent way for multidimensional efficacy and should be accredited following the criteria of European Accreditation Council for Continuing Medical Education).
In this respect, it is important for MSs Institutions to include the FPA recommendations about core capabilities in undergraduate, postgraduate and continuing professional development curricula across health and social care disciplines.

**DOMAIN 8: Research**

Health and care policy makers, funders and providers need high-quality evidence to inform decisions and comparable data to plan, design and finance interventions and models of care to meet the changing needs of the population. Recommendations for the policy makers include the following actions:

- Facilitating the creation of multidisciplinary research networks;
- Promoting the cooperation with international research groups;
- Ensuring that research calls on frailty cover the follow up of national cohorts, testing of interventions to avoid and manage frailty, and creation of biobanks to study biomarkers of frailty;
- Promoting changes in the Regulatory Agency rules both at EU and national level to adapt procedures to the needs and characteristics of frail older people, particularly in terms of validation of drugs, devices and procedures in this population;
- Strengthening coherence between the different ministries with Ministry of Health investments and other partners like industry to ensure funds to research calls on healthy ageing and frailty.

**DOMAIN 9: Implementation support (finance and information and ICTs)**

To ensure the promotion of healthy ageing through the FPA, financial investment is mandatory to support the implementation of specific commitments. This investment should guarantee:

- The allocation of economic resources to enhance the implementation of the national/regional strategy on frailty prevention;
- The development of shared electronic information to enable integrated care;
- The further use of cutting-edge ICT solutions to prevent or managing frailty;
- The increase of use of ICT solutions to facilitate continuous education of health and social professionals.

**DOMAIN 10: Monitor quality and evaluate cost-effectiveness**

Current metrics used in the field of ageing are limited and improving MSs' capability to measure phenomenon in this area is essential to better understand and act on healthy ageing and frailty. The FPA recommends the:

- Inclusion of performance indicators on frailty within health targets;
- Use of quality indicators by those who deliver care for older people to drive improved health and wellbeing outcomes;
- Assessment and continuous improvement of health and social services for older people.
References


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ADVANTAGE JOINT ACTION

Managing Frailty. A comprehensive approach to promote disability-free advanced age in Europe: the ADVANTAGE initiative

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