Introduction

Demographic ageing is one of the most serious challenges that Europe is currently facing. Older people are at greatest risk of becoming frail and developing disability. This poses crucial challenges to the well-being of individuals and to the health care systems.

However, frailty is not an inevitable consequence of ageing and, thus, may be prevented and treated to foster a longer and healthier life. To do so, it is crucial to develop evidence-based support that makes frailty entering the top of the public health agenda in Europe.

The concern for such situation motivated the European Commission, the Parliament and many of the Member States (MSs) to co-fund, through the Third European Health Programme of the European Union (EU) 2014-2020, the first Joint Action (JA) on the prevention of frailty, ADVANTAGE, which brings together 33 partners from 22 MSs for 3 years.

The ADVANTAGE JA’s State of the Art report (SoAR) is the first concrete step towards a common approach to tackle frailty at the European level. It offers an overview of evidence on what really works in terms of frailty prevention and management, based on four main sources: peer-reviewed articles, grey documents, good practices identified at European level and EU funded projects. SoAR results are presented as answers to 13 key questions.

Frailty definition and frequency

1. What is the definition of frailty adopted by ADVANTAGE JA?

ADVANTAGE JA embraces the WHO definition: 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 adverse health outcomes (WHO, 2015).

2. What is the relationship between frailty and multi-morbidity?

Multi-morbidity, disability and frailty are distinct clinical entities that are causally related. They are often associated and may overlap. There is a need to distinguish between them because frailty is more strongly predictive of adverse outcomes compared to multimorbidity. Frailty is a better predictor of good functioning than the presence of diseases.
How common is frailty in the ADVANTAGE JA Member States?

Frailty is rather common: Roughly across Europe, one person out of ten aged 65 years or older is frail.

How many new cases should we expect in the future?

Limited information is available on how many new cases we could expect in the ADVANTAGE JA MSs. However, as frailty is highly associated with age, we should expect an increase in the number of new cases (incidence) of frailty as the European population gets older.

Can a frail person improve his/her situation (become less frail) spontaneously?

Frailty is a potentially reversible condition that can regress spontaneously to a robust (non-frail) state, especially if in its early stages. However little is known about how frequently this happens without proper intervention. More advanced frailty states are less likely to be reversible. Factors such as physical activity and exercise can support reversing the frailty status.

Addressing frailty

How can frailty be screened?

ADVANTAGE JA supports the recommendation of opportunistic screening of individuals aged over 70 years receiving health care at any level of the system. ADVANTAGE JA proposes the use of screening tools that fulfill four characteristics: (1) quick to administer (taking no more than 10 minutes to complete), (2) not requiring special equipment, (3) validated, (3) being actually designed for screening purposes. These four characteristics are met by the following instruments: Clinical Frailty Scale (CFS); Edmonton Frail Scale (EFS); Fatigue, Resistance, Ambulation Illness, Loss of Weight Index (FRAIL Index); Inter-Frail; Prisma-7; Sherbrooke Postal Questionnaire; Short Physical Performance Battery (SPPB) or Study of Osteoporotic Fractures Index (SOF).
7 How can frailty be diagnosed?

Frailty in older adults without disability should be determined using a validated scale. ADVANTAGE JA proposes as frailty diagnostic instruments the Frailty Index of accumulative deficits, the Frailty Phenotype of the Cardiovascular Health Study (CHS), or the Frailty Trait Scale as frailty diagnostic instruments.

8 How can frailty be managed?

Healthy lifestyle (being physically active, following Mediterranean diet, avoiding overweight and tobacco and reducing alcohol consumption).

Organizational challenges

9 Do we need programs to screen for frailty at population level?

Ongoing and completed EU funded projects and initiatives show feasibility and acceptance of screening approaches for frailty in primary care and in the community in ADVANTAGE JA MSs. They are based on a two-step approach, consisting of the use of a short screening instrument to identify possible frail individuals followed by a more comprehensive evaluation to confirm the diagnosis. More research is needed to pilot throughout Europe such two-step approach, to evaluate the existing programmes, and to build evidence base for future screening programs.

10 Is there a need to monitor frailty in Europe?

As frailty is highly prevalent in Europe and is very much associated with disability, monitoring its evolution seems to be relevant. No country in Europe has yet adopted a systematic process for the surveillance or monitoring of this condition. This might be facilitated by including a specific code for frailty in the next revision of the International Classification of Diseases.
11 What components should health and care systems adopt to manage frailty?

ADVANTAGE JA identified and supports the following components:

- Defining an individualised assessment and related care plans. Focusing on case management.
- Coordination of home and community services across the continuum of care, supported by case manager and family physician partnership.
- Tailoring multiple physical, cognitive, social and functional interventions by an interdisciplinary team (both in hospitals and community).
- Effective management of care transitions.
- Using electronic information tools and technology enabled care solutions.
- Adopting clear policies and procedures for eligibility and care processes.

12 Is the health and social care workforce ready to meet the challenges of frailty?

Health professionals are often unprepared to deliver the holistic, anticipative and based-on-function type of care that old people require. Initiatives addressing continuous health professional education on ageing, frailty and disability should be further promoted.

13 What are the future areas of research on frailty?

Further research is needed to understand better the nature of frailty, to improve screening and diagnostic tools, and to test the effectiveness of dedicated interventions. Research should encompass basic research; epidemiological studies on prevalence, incidence and frailty trajectories; validation of screening and diagnostic procedures; clinical trials on specific interventions on frailty; trials of information and communication technologies (ICTs), combinations of community and social care interventions and intermediate care services between hospital and community; and training of the workforce.
ADVANTAGE JOINT ACTION
Managing Frailty. A comprehensive approach to promote disability-free advanced age in Europe: the ADVANTAGE initiative

SUMMARY
Partners worked together to summarize the current State of the Art on the definition, frequency, management and research needs of frailty, both at a personal and population level. The main findings are that frailty is a strong predictor of relevant adverse outcomes; Frailty is very frequent and can be reversed; Frailty must be identify through appropriate screening and diagnostic procedures; Treatment includes physical exercise, adequate nutrition and review of the medications taken; Health care systems should adopt monitoring procedures, test population screening programs and adapt their health and social care provision to deliver well-defined, individualized, technologically supported and co-ordinated multi-professional interventions across the continuum of care, through a well-trained workforce; Research on the nature of frailty and its management is warranted.

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