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The State of the Art in Frailty by ADVANTAGE JA

Ancona, Italy 5th July 2018

Inés García-Sánchez, Deputy-Coordinator ADVANTAGE JA

ADVANTAGE JA State of the Art in Frailty

I will speak about…..

- ADVANTAGE JA
- How we did the State of the Art Report
- Purpouse
- Results
- Added value
- Where can you get it ?
- Next steps

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2017 a 2019

Co-financed by
EEMM &
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Coordinated by Spain

Objectives

ADVANTAGE JA aims at building a common understanding on frailty to be used in Member States, by policy makers and other stakeholders, …

….

….which should be the base for a common management both at individual and population level of older people who are frail or at risk of developing frailty throughout the European Union.

1. To promote important sustainable changes in the organization and implementation of care in the Health and Social Systems.
2. To prepare a common European framework on screening, early diagnosis, prevention, assessment and management of frailty.
3. To develop a common strategy on frailty prevention and management, including raising awareness and advocacy among stakeholders, especially policy and decision makers.

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IMPLEMENTATION PROCESS

Phase I (2017) - **State of the Art** - background information collection, analysis and rational discussion and drafting of preliminary documents.

Phase II (2018) - developing and testing the draft version of the common European model to approach frailty (frailty prevention approach **– FPA document).**

Phase III (2019) - drafting final documents, debating these with participant MSs, and drafting the final framework, the FPA document and **policy recommendations.**

State of the art in Frailty

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 and what is unknown in terms of frailty prevention and management.

It is an updated theoretical basis to inform our subsequent work.

Why a SoAR ??

2 purposes/ 2 different target groups

1. **The Consortium members** themselves so as to have a common framework and agreed concepts on which to base the rationale for future actions and deliverables within the JA.

2. **The stakeholders in general and policy makers in particular from participant MSs** so that their own decisions may be informed by the evidence on frailty that has been researched and discussed by the Consortium and crystallized in the SoAR to base their recommendations for action.

Methodology

1. Identification & analysis of evidence from 4 sources of evidence:
    1. peer-reviewed articles
    2. grey documents
    3. good practices identified at European level
    4. EU funded projects

2. Discussion by WP4-WP8 partners
3. Drafting of documents
4. Critical reading by Expert Panel (EP)
5. Discussion workshop WP4-WP8 & WP1 & EP
6. Final drafting of document

Source 1: Peer reviewed articles

Areas of knowledge reviewed	Papers identified	Papers analysed
Definition	494	74
Relation with chronic diseases	2,282	25
Prevalence and incidence	2,948	63
Individual screening and diagnosis	6,611	52
Prevention	391,910	31
Clinical management	67,462	27
Nutrition	39,885	28
Physical activity	620,043	25
Drugs	28,796	25
ICTs	124,634	33
Population screening	1,186	3
Surveillance	751	0
Monitoring	451	0
Trajectories and transitions	862	3
Health care models	1,065	43
Education/Training	1,914	0
Research	610	71
Total	1.291.904	503

ICTs: Information and communication technologies.

Structure of SoAR

- 1 overall State of the Art in frailty report
- 5 topic specific reports (corresponding to content specific WPs)
- The SoAR is arranged in five sections:

introduction, methodology, results, key messages, and annexes.

- Results are presented as answers to relevant questions
- Annexes : Glossary, screening & diagnosis instruments; Algorith for frailty management at individual level

First outcome: State of the art

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State of the art report on the prevention and management of frailty

Ángel Rodríguez-Laso, María Ángeles Caballero Mora, Inés García Sánchez, Leocadio Rodríguez Mañas, Roberto Bernabei, Branko Gabrovec, Anne Hendry, Aaron Liew, Rónán O'Caoimh, Regina Roller-Wirnsberger, Eleftheria Antoniadou, Ana María Carriazo, Lucia Galluzzo, Josep Redón, Tomasz Targowski, on behalf of all ADVANTAGE Joint Action partners.

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Available at www.advantage.eu

Results are presented as answers to 13 relevant questions

Recommendations about screening & diagnosis instruments

Annex 2. Tools for the screening of frailty recommended by ADVANTAGE JA

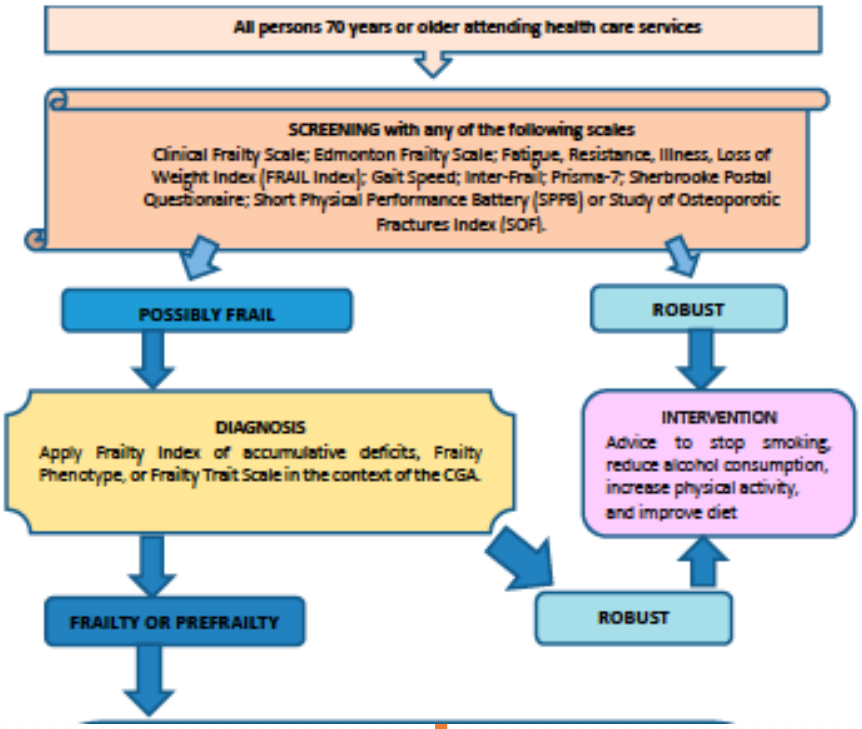
Tool name	Original reference	Tool description	Time needed to perform	Number of items	Special equipment needed
Clinical Frailty Scale	Roockwood et al. Can Med Assoc J 2005	Single descriptor of a person's state of frailty (fitness)	5 min	NA	No
Edmonton Frail Scale	Rolfson et al, Age Ageing. 2006	Timed up and Go Test, Clock draw test, 7 Questions exploring frailty domains	<5 min	9	No
Fatigue, Resistance, Ambulance, Illness, Loss of weight (FRAIL Index)	Morley et al. J Am Med Dir Assoc. 2008	5 items: fatigue, resistance, ambulation, illnesses, loss of weight	< 10 min	5	No
Inter-Frail	Bari et al. J Am Geriatr Soc 2014	1 disability and 10 frailty items (yes-or-no questions)	10 min	11	No
Prisma-7	Raiche et al. Arch Gerontol Geriatr 2007	Self-reported. 7 questions on demographics and performance	5 min	7	No
Sherbrooke Postal Questionnaire	Hebert et al. Age Ageing 1996	Self-reported questionnaire. 6 items: living alone, polypharmacy, mobility, eyesight, hearing, memory.	< 5 min	6	No
Short Physical Performance Battery (SPPB)	Guralnik et al. J Gerontol 1994	3 dimensions: balance, gait and weakness.	<10 min	12	No
Study of Osteoporotic Fractures Index (SOF)	Ensrud et al. Arch Intern Med. 2008	3 items: weight loss, reduced energy level and inability to rise from a chair.	< 5 min	3	No

Annex 3. Tools for the diagnosis of frailty recommended by ADVANTAGE JA

Tool	Original reference	Tool description	Time	Number of items	Special equipment needed
Frailty Index of accumulative deficits	Mitnitsky et al. Sci World J. 2001	Number of health deficits present / Number of health deficits measured	20-30 min	>30	No
Frailty phenotype	Fried at al. Gerontol A Biol Sci Med Sci 2001	5 items: weight loss, low physical activity, exhaustion, slowness, weakness	< 10 min	5	Yes (dynamo-meter)
Frailty Trait Scale (FTS)	García-García et al. J Am Med Dir Assoc. 2014	Seven dimensions: energy balance and nutrition, activity, nervous system, vascular system, weakness, endurance, slowness	20 min	12	Yes (albumin, dynamo-meter)

Management of frail older people

Figure 1. Algorithm for the management of frailty at individual level



MANAGEMENT CONSISTING OF :

- Comprehensive Geriatric Assessment to develop a personalised care plan and carry out a personalized multi-dimensional interventions
- Take into account the frailty or pre-frailty stage to tailor the correct treatment of concomitant diseases.
- Provide structured multicomponent exercise programs (consisting of endurance, flexibility, balance, and resistance training) performed with low to moderate intensity, in 30 to 45 minutes sessions, three times a week. Followed or substituted by exercise programs of strength training: minimum of 8 weeks and medium to high exercise load (from 8 to 12 repetitions, from 30% - 60-70% of maximum intensity).
- Assess and optimise nutrition (Mini Nutritional Assessment)
- Apply tools to minimize risk from inappropriate drugs and polypharmacy (Beers criteria, STOPP-START or Laroche criteria).
- Advise patients with a body mass index greater than 35 kg/m2 to achieve a moderate weight loss of 0,5-1 kg per week or 8-10% of initial body weight after 6 months, with a final target of a body mass index between 30-35; always combined with physical activity and/or physical exercise.
- Considerer Vitamin D supplementation in frail patients who are at high risk for falls and fracture level and with a 25-OH vitamin D level < 30 ng/ml, with doses of 20 to 25 µg/day (800 a 1000 IU/day) of vitamin.
- ICT solutions should also be considered and advised to enable self-management and promote independence.

GLOSSARY OF TERMS-DEFINITIONS

Annex 4: Glossary

Active ageing: the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age.

Assessment: the action of making judgement about something. It refers in this context to screening and diagnosis of frailty.

Comprehensive geriatric assessment: a multidimensional assessment of an older person that includes medical, physical, cognitive, social and spiritual components; may also include the use of standardized assessment instruments and an interdisciplinary team to support the process.

Chronic condition: a disease, disorder, injury or trauma that is persistent or has long-lasting effects.

Disability: any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner, or within the range, considered to be normal for a human being. The term disability reflects the consequences of impairment in terms of functional performance and activity by the individual.

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Functional ability: the ability to perform activities of daily living, including bathing, dressing, and other independent living skills, such as shopping and housework. Many functional assessment tools are available to quantify functional ability.

Frailty: is a geriatric syndrome which can be regarded as a progressive age-related deterioration in physiological systems that results in extreme vulnerability to stressors and increases the risk of a range of adverse outcomes including care dependence and death.

Geriatric syndrome: the multifaceted dynamics between underlying physiological change, chronic disease, and multi morbidity can also result in health states in older age that are not captured at all by traditional disease classifications and that are therefore often missing in disease-based assessments of health. These are commonly known as geriatric syndromes, although there is still some debate as to what disorders these include.

Good practice: is a practice that has been proven to work well and produce good results, and is therefore recommended as a model. It is a successful experience, which has been tested and validated, in the broad sense, which has been repeated and deserves to be shared so that a greater number of people can adopt it.

SoAR main messages (i)

ADVANTAGE JA embraces the WHO 2015 definition:

Identifies Frailty as distinctive entity from Chronic Diseases & from discapacity

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.

Disability
Morbidity
Hospitalization
Institutionalization
Death

SoAR main messages (ii)

Frailty …

- Is a strong predictor of relevant adverse outcomes
- Is very frequent (10% of 65+)
- Can be reversed
- Must be identify through appropriate screening & diagnostic procedures
- Can be treated: includes physical exercise, adequate nutrition & review of the medications taken
- Is a dynamic functional state

Robust
Frail
Functional limitation
Disability
Dependency

SoAR main messages (iii)

- Health care systems should adopt:
  - Monitoring procedures
  - Test population screening programs
  - Adapt their health & social care provision to deliver well-defined, individualized, technologically supported and coordinated multi-professional interventions across the continuum of care
  - A well-trained workforce

- Further research is needed on the nature of frailty and its management

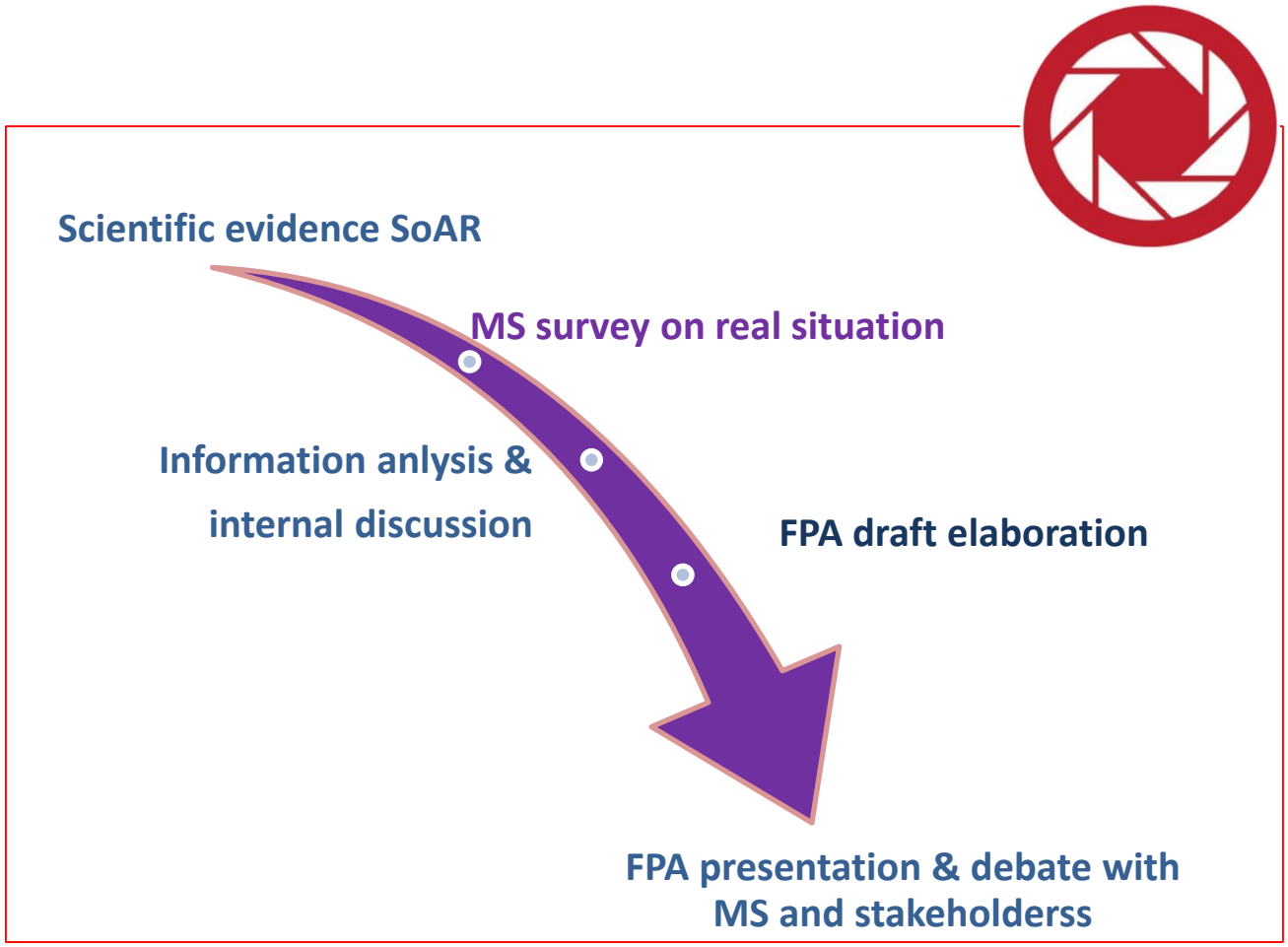
Added value of ADVANTAGE JA State of the Art on frailty

- Sound methodology
- Reaches consensus on different Consortium views
- Focuses on what is really known
- Messages given are aimed to advocate for evidence based policy driven decisions on frailty prevention & management
- Messages are asertive & avoid controversial statements whenever further research is needed or results are unclear

How does the SoAR look like ?

- Complete documents available at **www.advantage.eu**
- Layman report version
- Specific publications on peer reviewed journals
  - Hendry, A, et al. Integrated Care: A Collaborative ADVANTAGE for Frailty. International Journal of Integrated Care , 2018; 18(2): 1, 1–4. DOI: https://doi.org/10.5334/ijic.4156.
  - Rodriguez-Mañas, L et al. Key messages for a frailty prevention and management policy in Europe from the ADVANTAGE Joint Action Consortium (in press in Journal Nutrition Healthy Aging)
  - Davide L Vetrano, et al Frailty and Multimorbidity: A Systematic Review and Meta-analysis. *The Journals of Gerontology: Series A*, gly110, https://doi.org/10.1093/gerona/gly110
- Corresponds to deliverable in the GA

2018, working towards a new approach…

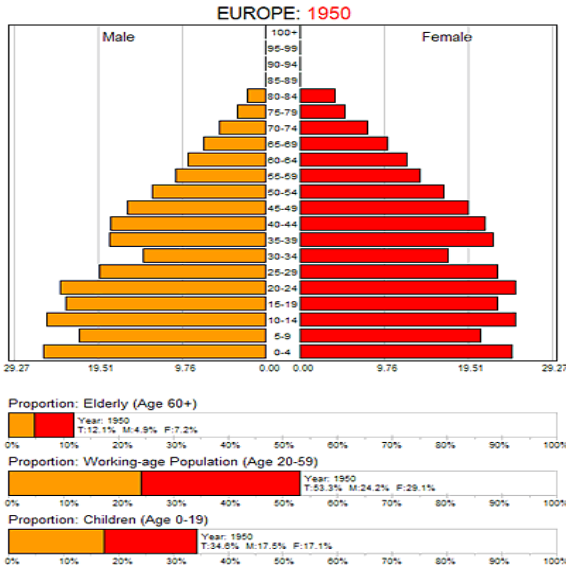


Forum ADVANTAGE JA
13 December 2018, Madrid

- Great opportunity to discuss:
  - The draft Frailty Prevention Approach (FPA).
  - How policy makers, organisations, managers and professionals can use the ADVANTAGE JA recommendations to address frailty prevention in the EU.
  - The role of the different stakeholders to support the implementation of the ADVANTAGE JA recommendations.
  - How ADVANTAGE JA needs to take into account the political, social, professional and citizen context to succeed in the endeavour.

!! See you there!!

Action based on evidence, but focused on people & working with people



Frailty allows us to reflect, plan and act on ageing moving beyond cronological age !

!!Thank you !!

Area of knowledge evidence researched and analyzed by work packages

WP	Area of knowledge covered by each WP
WP4	Frailty definition. Relationship of frailty with chronic diseases and multi-morbidity. Individual screening and diagnosis.
WP5	Epidemiology. Population screening, monitoring and surveillance.
WP6	Prevention. Clinical management and treatment (including nutrition, physical activity, drugs and ICTs).
WP7	Health and social care models for frailty management.
WP8	Education/training of the workforce. Research.