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advantAGE
MANAGING FRAILTY

ADVANTAGE JA

Joint Action on Prevention and Management of frailty 2017-2019

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Coordinator
ADVANTAGE

Co-funded by the Health Programme of the European Union

advantAGE MANAGING FRAILTY

A Joint Action with **22 Member States and 43 organizations** involved.

It is co-funded by the EU Commission and the Member States.

- DURATION:

1st January 2017 - 31st December 2019 (3 years)

- COORDINATOR:

Servicio Madrileno De Salud (SERMAS-HUG), Spain

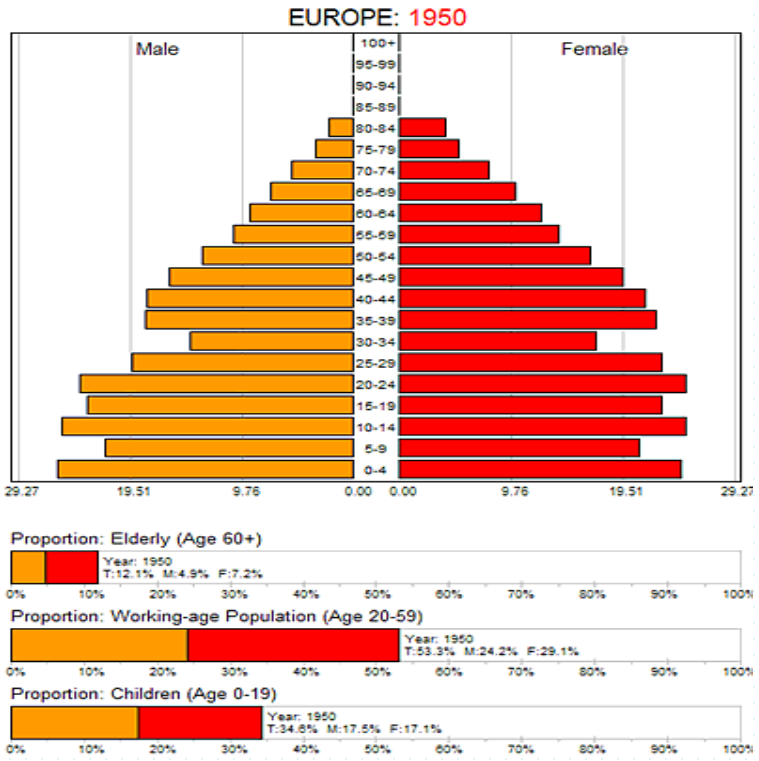
- BUDGET:

The estimated eligible costs of the action are EUR 5,738,934.60

(The grant reimburses 60% of the action's eligible costs)

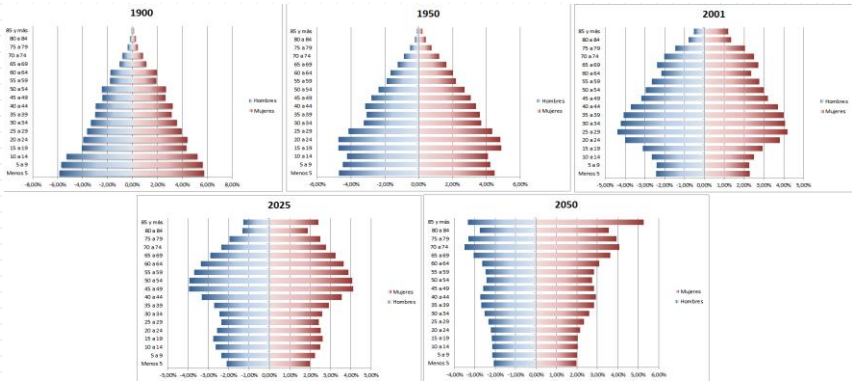
Demographic change – challenges to society & economy

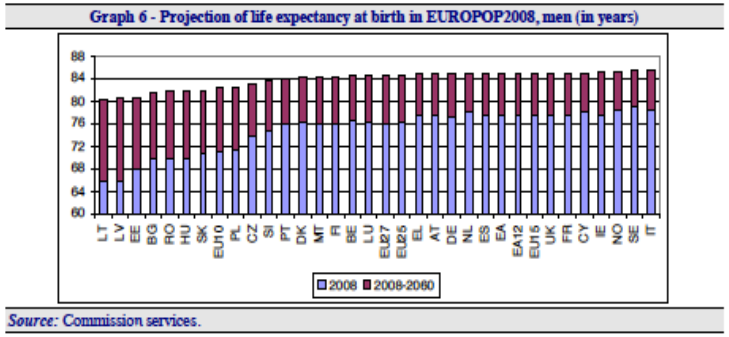
Ageing society

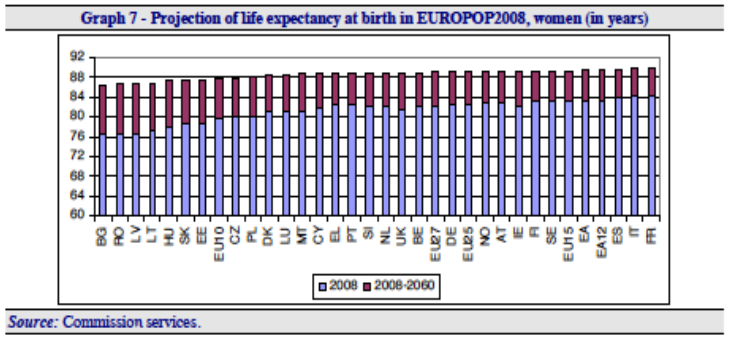


- Health workforce shortage
- Chronic conditions
- Financial unsustainability
- HLY vs LE
- Health inequalities

DEMOGRAPHIC TRANSITION



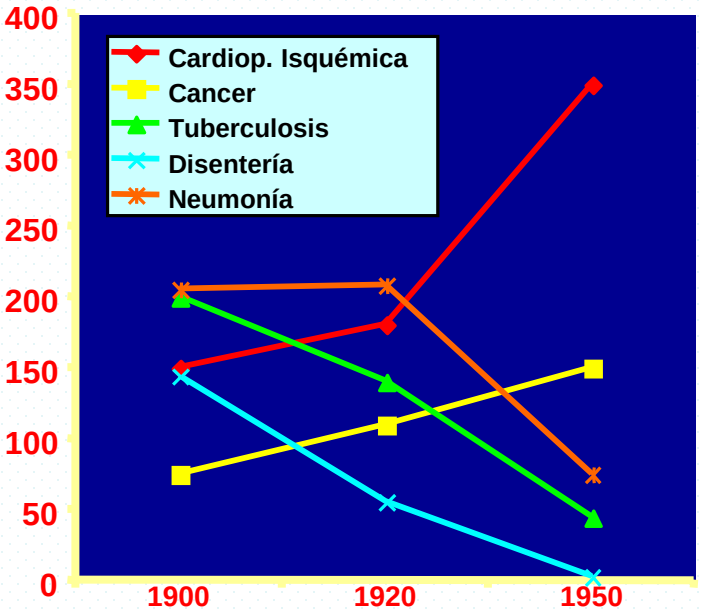


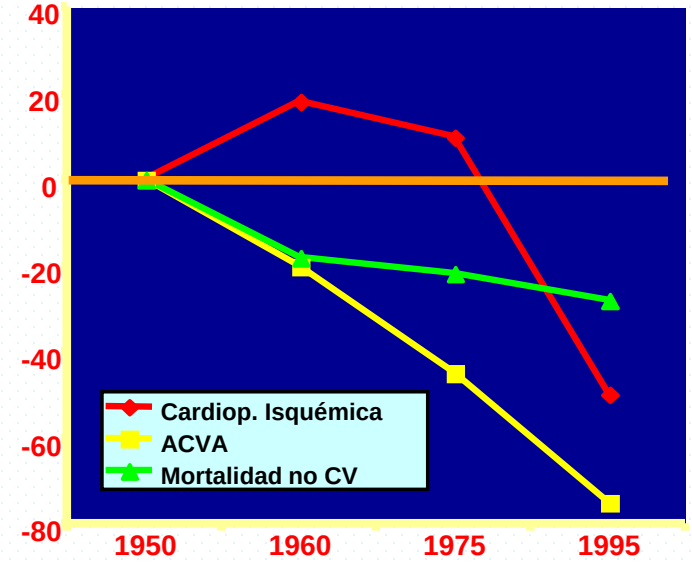


When the facts change, I change my mind. What do you do, sir?

John Maynard Keynes

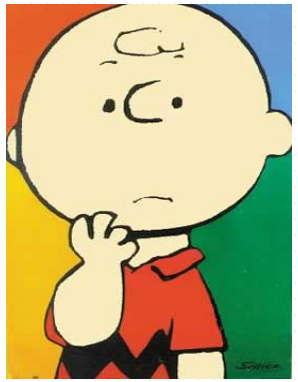
EPIDEMIOLOGIC TRANSITION





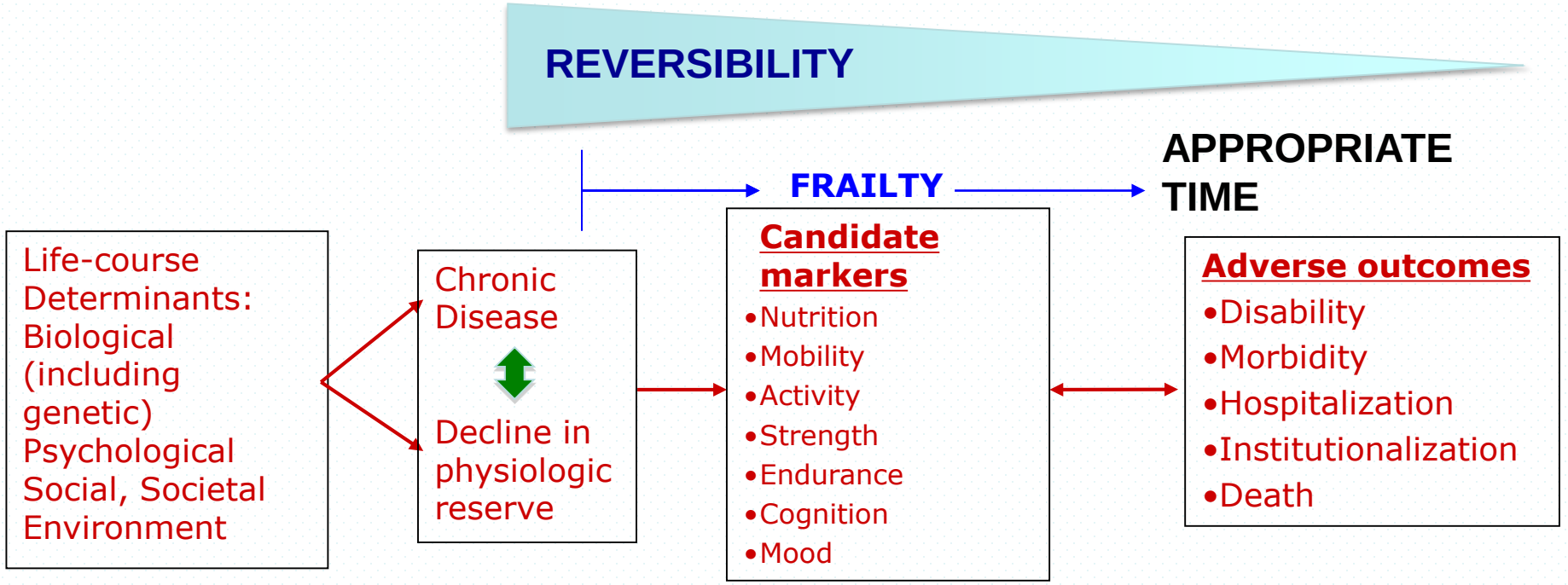
I have been vaccinated against polio and mumps. I have been vaccinated against chicken pox, whooping cough and measles. Then I fell down the stairs.

Charlie Brown - Charles M. Schulz



BE AWARE ABOUT THE TRUE FOCUS:

IT IS FUNCTION!!!



Frailty as a dynamic functional state

CARE FOCUSED ON

Preventing frailty | **Preventing Disability Treating Frailty** | **Preventing Disabilty Treating Functional Decline** | **Preventing Dependency Treating Disability** | **Managing Dependency**

Potential reversibility of functional decline

	Robust	Frail	Functional Limitation	Disability	Dependency
Definition					
Interventions to improve quality and outcomes - and prevent or delay further functional decline	**What** **How** **Where** ?	**What** **How** **Where** ?	**What** **How** **Where** ?	**What** **How** **Where** ?	**What** **How** **Where** ?

JOINT ACTION ON FRAILTY ADVANTAGE

European Commission

4 ideas to consider

Frailty is a public health problem and societal challenge in Europe that can be prevented & will benefit from a European approach

The EC supports MS to work on a EU policy to prevent frailty

Work should be progress from:
- EIP on AHA AG Frailty
- Scientific evidence

Work will consider:
- MS individualities
- EC funded projects
- 2014 Council Conclusions
- 2014 SPC LTC report

Building a European approach to tackle frailty at national level

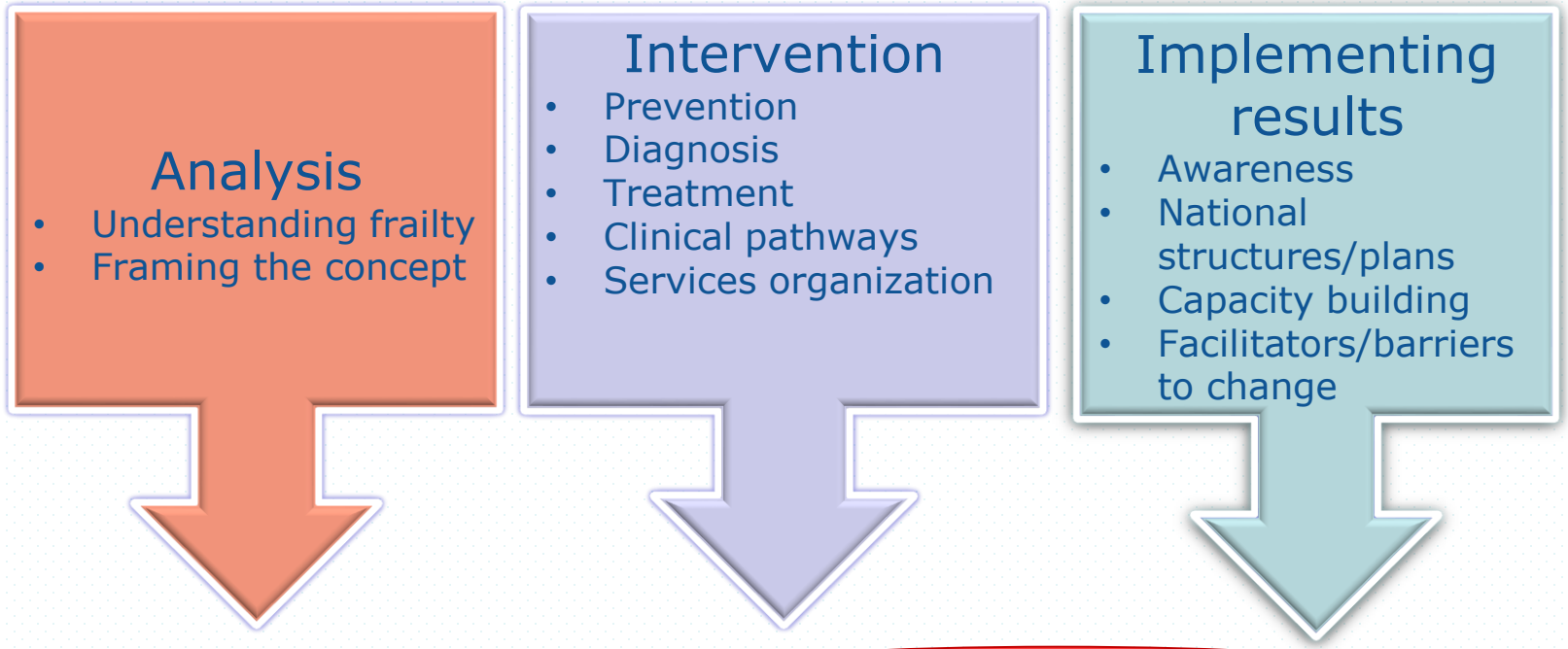
Health

JOINT ACTION ON FRAILTY

European Commission

ADVANTAGE

Working on frailty prevention by



Health

Objectives

ADVANTAGE JA aims at building a common understanding on frailty to be used in all the 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.

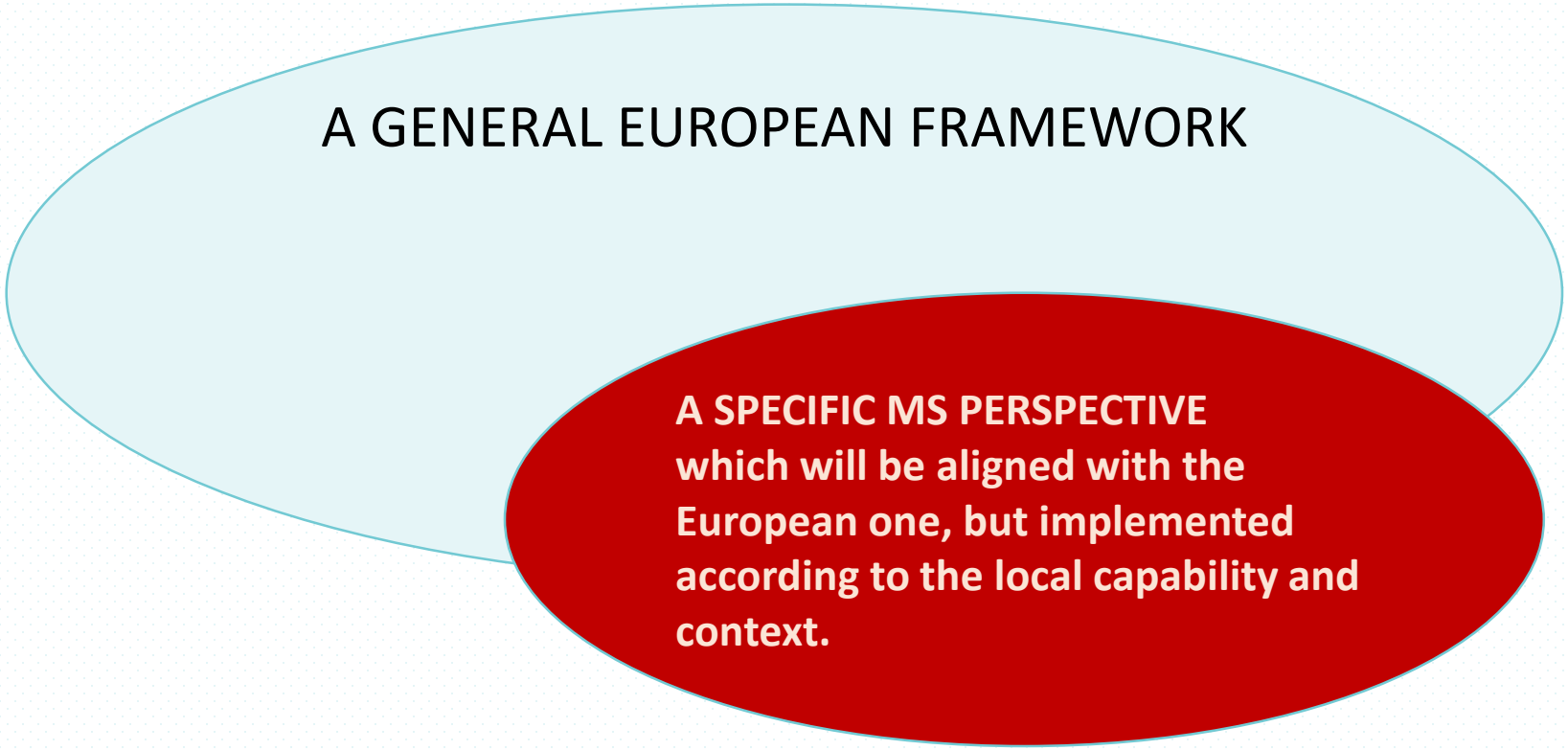
TARGET GROUPS

1. **Policy makers and stakeholders**, both from the public and private sectors.

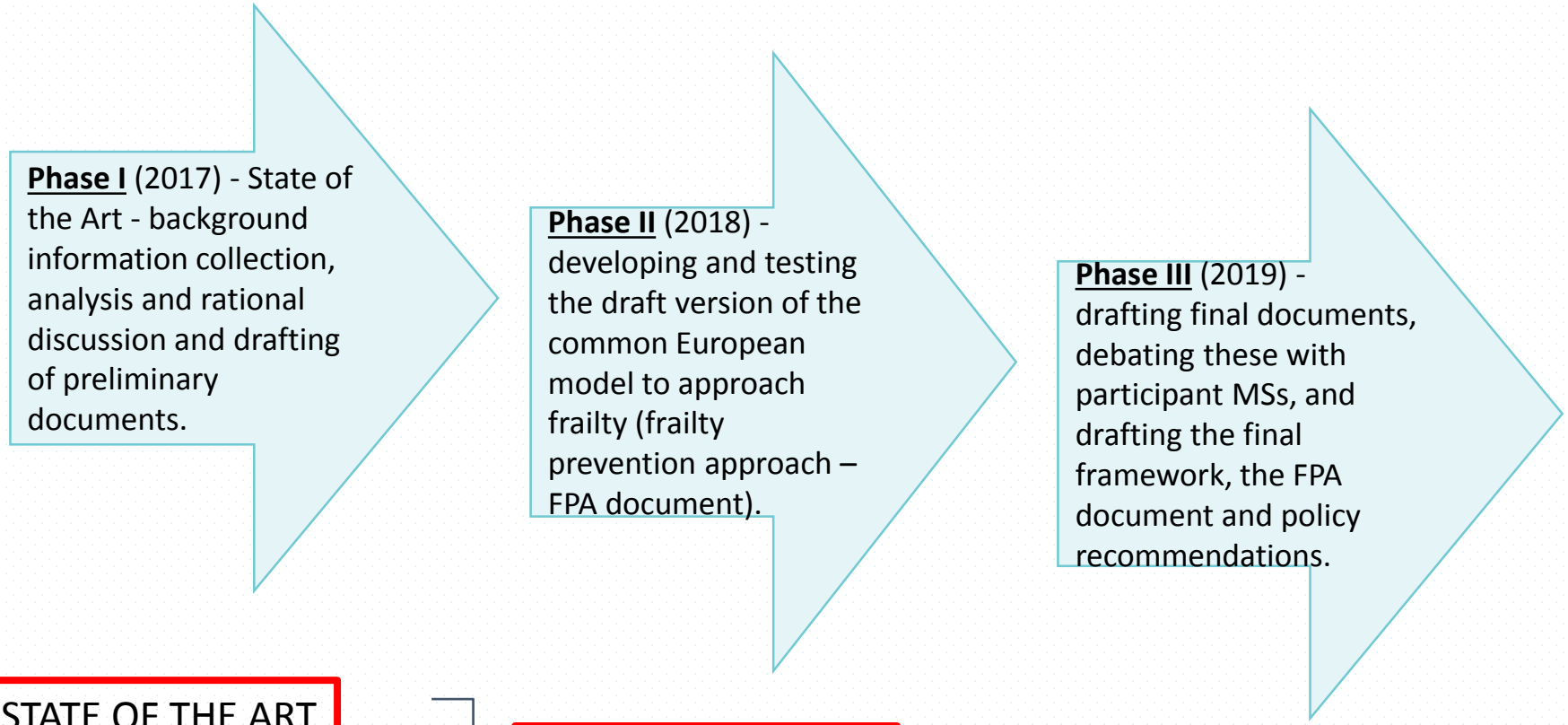
2. **Health and Social care professionals**

3. **Frail older people** and their carers, **those at risk of frailty, and the EU population at large**.

EXPECTED OUTCOMES /RESULTS



IMPLEMENTATION PHASES



First outcome: State of the art

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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.

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

This report is part of Joint Action '724099 / ADVANTAGE' which has received funding from the European Union's Health Programme (2014-2020).

Available at www.advantage.eu

With the aim of answering relevant questions for policy

Written following a consensus method stemming from the report of each WP

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.

After a thorough research in the specialised literature

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

WITH THE PARTICIPATION OF AN EXTERNAL EXPERT COMMITTEE

EAB and SC meeting

Mahon, Spain, September 2017

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.

Recommendations about instruments

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

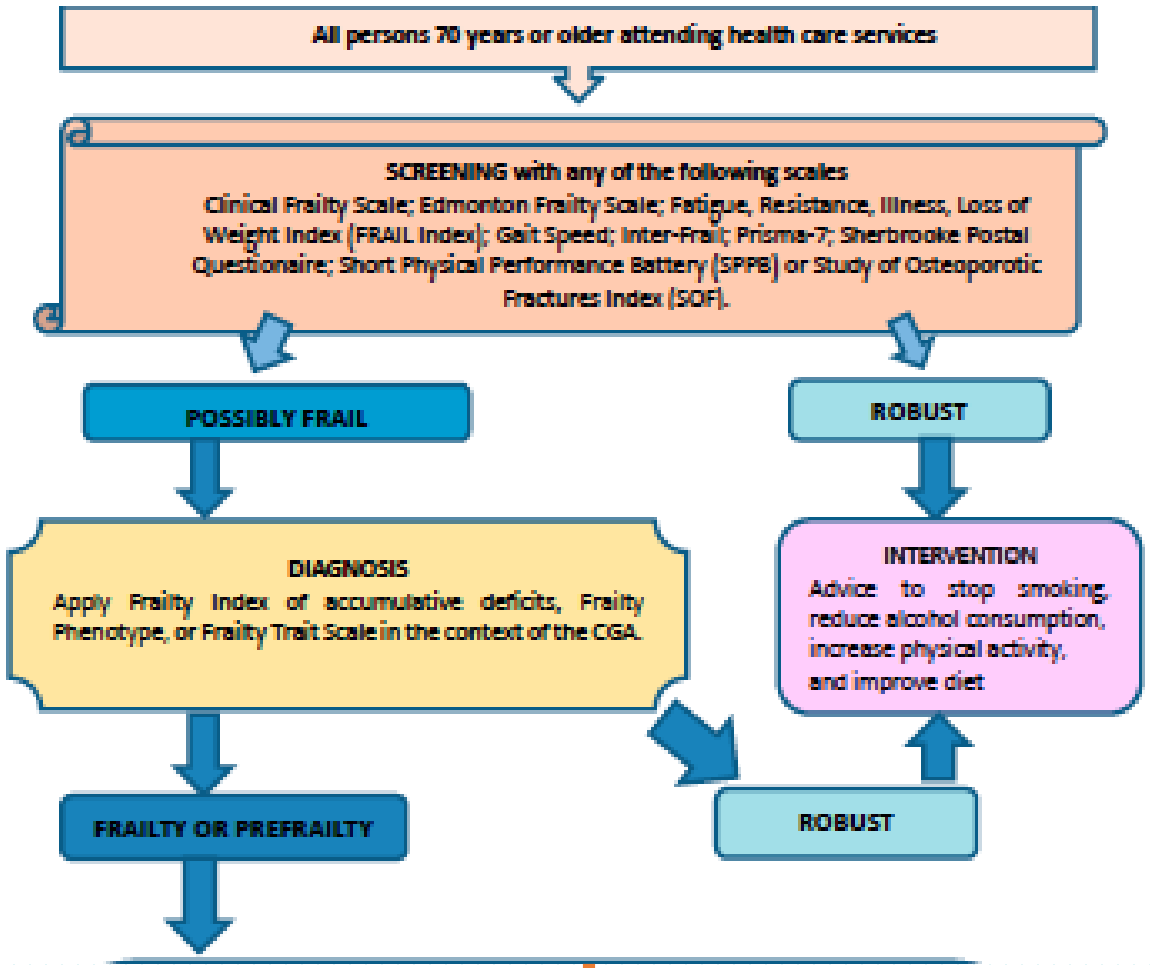
Tool name	Original reference	Tool description	Time needed to perform	Number of items	Special equipment needed
Clinical Frailty Scale	Roockwood et al. Can Med Assoc J 2005	Single descriptor of a person's state of frailty (fitness)	5 min	NA	No
Edmonton Frail Scale	Rolfson et al, Age Ageing. 2006	Timed 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 et 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

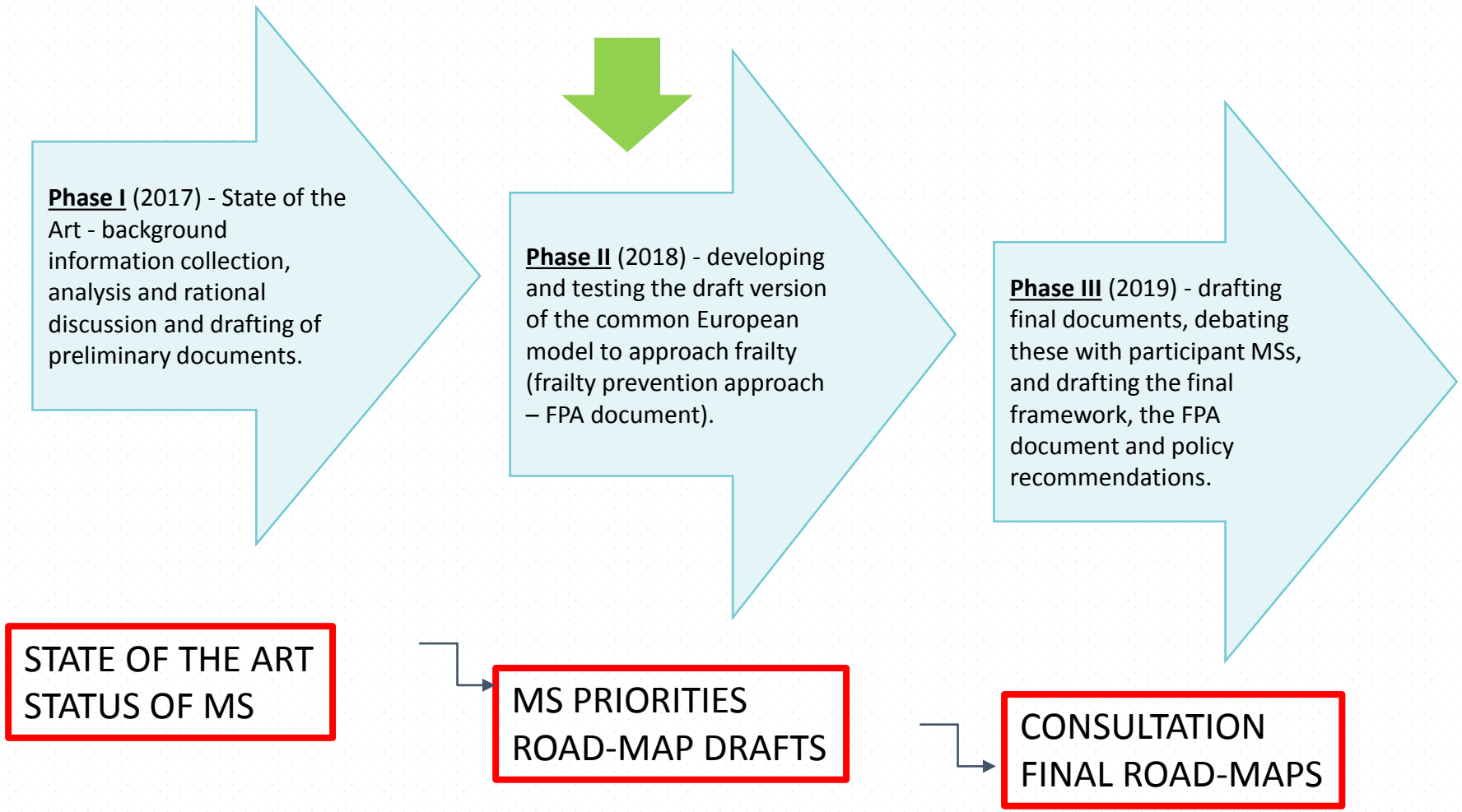
Figure 1. Algorithm for the management of frailty at individual level



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 optimize nutrition (Mini Nutritional Assessment)
- Apply tools to minimise 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.

IMPLEMENTATION PHASES



THE THIRD TRANSITION

BREAKING THE INERTIA

CURE

DISEASE

SURVIVAL

TO DO

LONG-TERM

REACT

EPISODES

CARE

FUNCTION

QUALITY OF LIFE

RISK TO BENEFIT RATIO

TIMELY INTERVENTIONS

PREVENT

INTEGRATED/CONTINUED

Rodriguez-Mañas et al., JAMDA 2017
Rodriguez-Mañas et al, ADVANTAGE proposal, 2016

fundación para la Investigación Biomédica Hospital Universitario de Getafe
SaludMadrid
Hospital Universitario de Getafe
Comunidad de Madrid

FACING THE CHALLENGE OF HEALTHY AGING

AVOIDING DISABILITY

IMPROVING SUSTAINABILITY

BY

FIGHTING AGAINST FRAILTY

advantAGE
MANAGING FRAILTY

THANK YOU !!!

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