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MANAGING FRAILTY

The ADVANTAGE Member States Survey

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Final Conference of ADVANTAGE Joint Action
27th November 2019, Brussels.



ADVANTAGE MS survey

Methodology

- The ADVANTAGE JA Survey of Member States Questionnaire, addressed to policy-makers and managers at national or regional level, was created and sent to all partners
- to collect information about the current approaches (strategies, policies, programmes, actions) that address frailty in the participating MS and their regions.



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ADVANTAGE JOINT ACTION SURVEY OF MEMBER STATES: QUESTIONNAIRE

NAME:

POSITION:

Introductory questions:

1. In a scale from 0 to 10, meaning 0 "not a challenge at all" and 10 an "absolute challenge", would you say that frailty constitutes a health and social care challenge in your country/region?

0	1	2	3	4	5	6	7	8	9	10
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☐ I do not know

2. In a scale from 0 to 10, meaning 0 "not a priority at all" and 10 an "absolute priority", would you say that frailty is a priority in the national/regional health and social care policies for older people in your country/region?

0	1	2	3	4	5	6	7	8	9	10
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☐ I do not know

If you have given a low score, please explain why frailty is not considered a priority in your country/region.

☐ I do not know

In your opinion, what are the barriers to addressing this priority?

☐ I do not know

Management of frailty at individual level (including prevention, individual screening, assessment, clinical management):

3. What definition of frailty, if there is one, is widely accepted and used in your country/region by:

- health professionals?

☐ I am not aware of any

ADVANTAGE MS survey

Methodology

Instructions on how to fill out the questionnaire:

- ❖ concrete answers and concise descriptions of the programmes/interventions
- ❖ link to relevant documents/ website for more details
- ❖ request to describe programmes/interventions that may not be specifically conceived to deal with frailty although they in fact address it
- ❖ Request to send contact details to re-address questionnaire if a given question would be better answered by someone else.

Definitions on key concepts/issues used in the questionnaire were included:

- ❖ Frailty
- ❖ Good practice
- ❖ Holistic and enabling approaches
- ❖ Management of frailty
- ❖ Monitoring
- ❖ Screening
- ❖ Surveillance

ADVANTAGE MS survey Methodology

Collected information were:

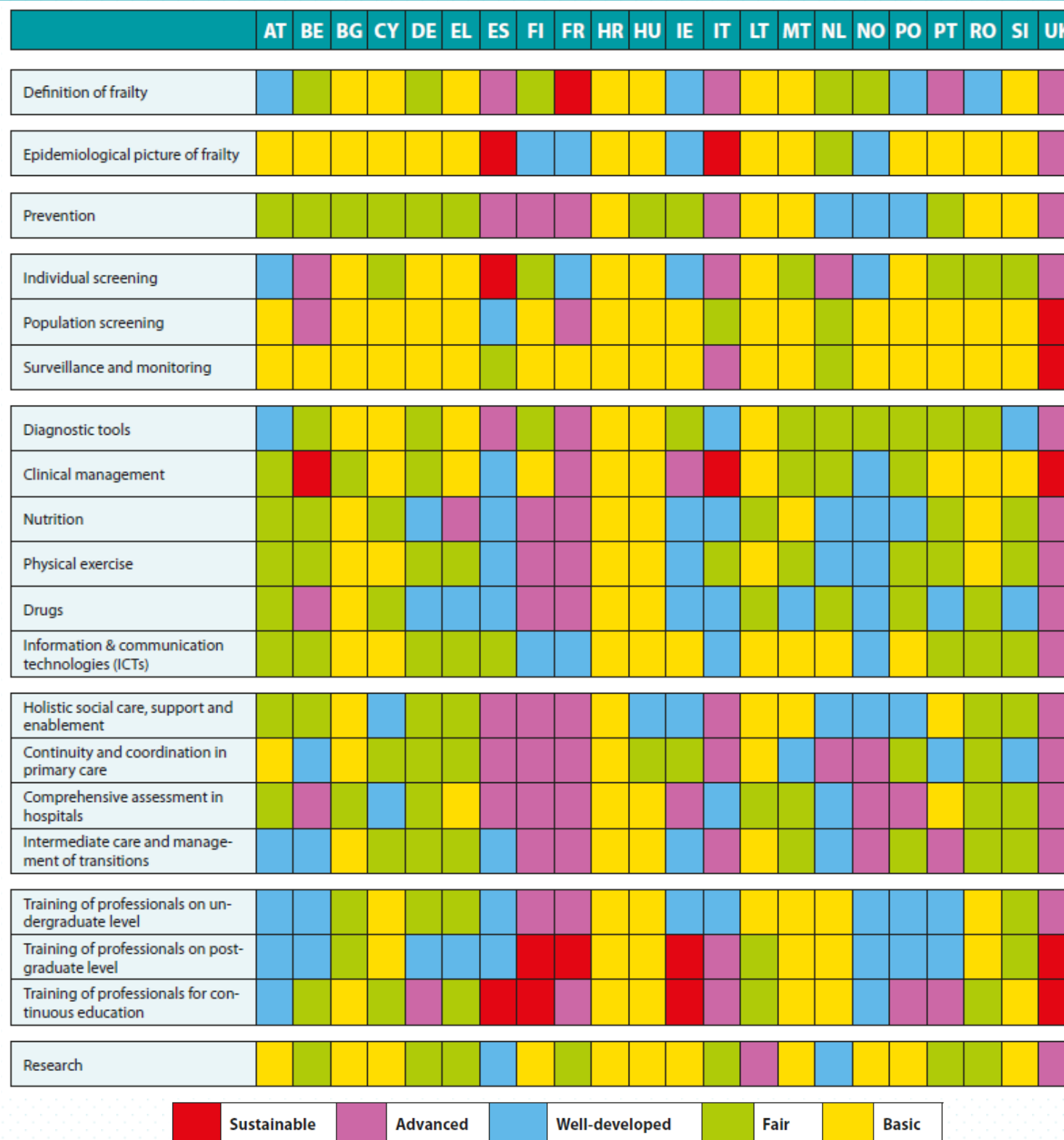
- analysed
- discussed
- used in combination with the State of the Art Report



A Frailty Prevention Approach
Part I. Core document

to rationalise and build consensus for a common European framework for a frailty prevention and management policy.

Level of development of frailty prevention and management activities in countries involved in the ADVANTAGE MS survey



ADVANTAGE MS survey

WP4 topics - Definition of frailty

Definition of frailty widely accepted and used by health professionals, social care professionals, carers, patients, policy-makers, managers

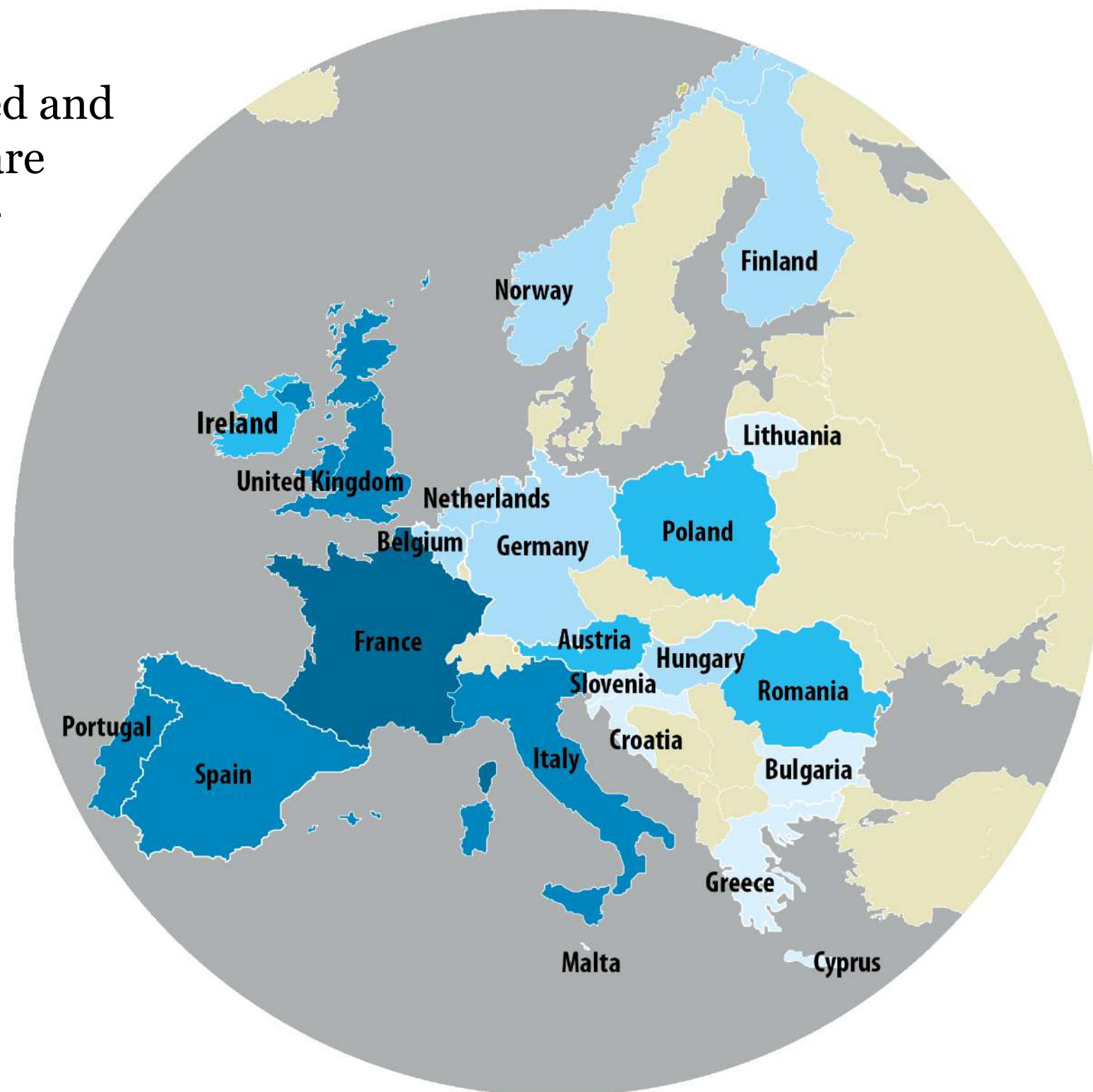
Sustainable ALL THREE groups of health professionals, social professionals and health policy makers/managers widely accept and use the WHO definition

Advanced At least TWO groups among health professionals, social professionals and health policy makers/managers widely accept and use the WHO definition

Well-developed At least ONE group mentioned above accept and use a MULTIDIMENSIONAL DEFINITION covering psycho-behavioural, social, cognitive and functional domains

Fair There is no wide/routine use of a frailty definition. A variety of concepts and definitions of frailty may be applied, but not routinely for any of the 3 types of health-related professionals

Basic None in the MS accepts any of the definitions collected by the ADVANTAGE JA. Frailty is not apparent as a distinct concept



ADVANTAGE MS survey

WP4 topics - Individual screening

Screening tools used to identify older people at risk of frailty

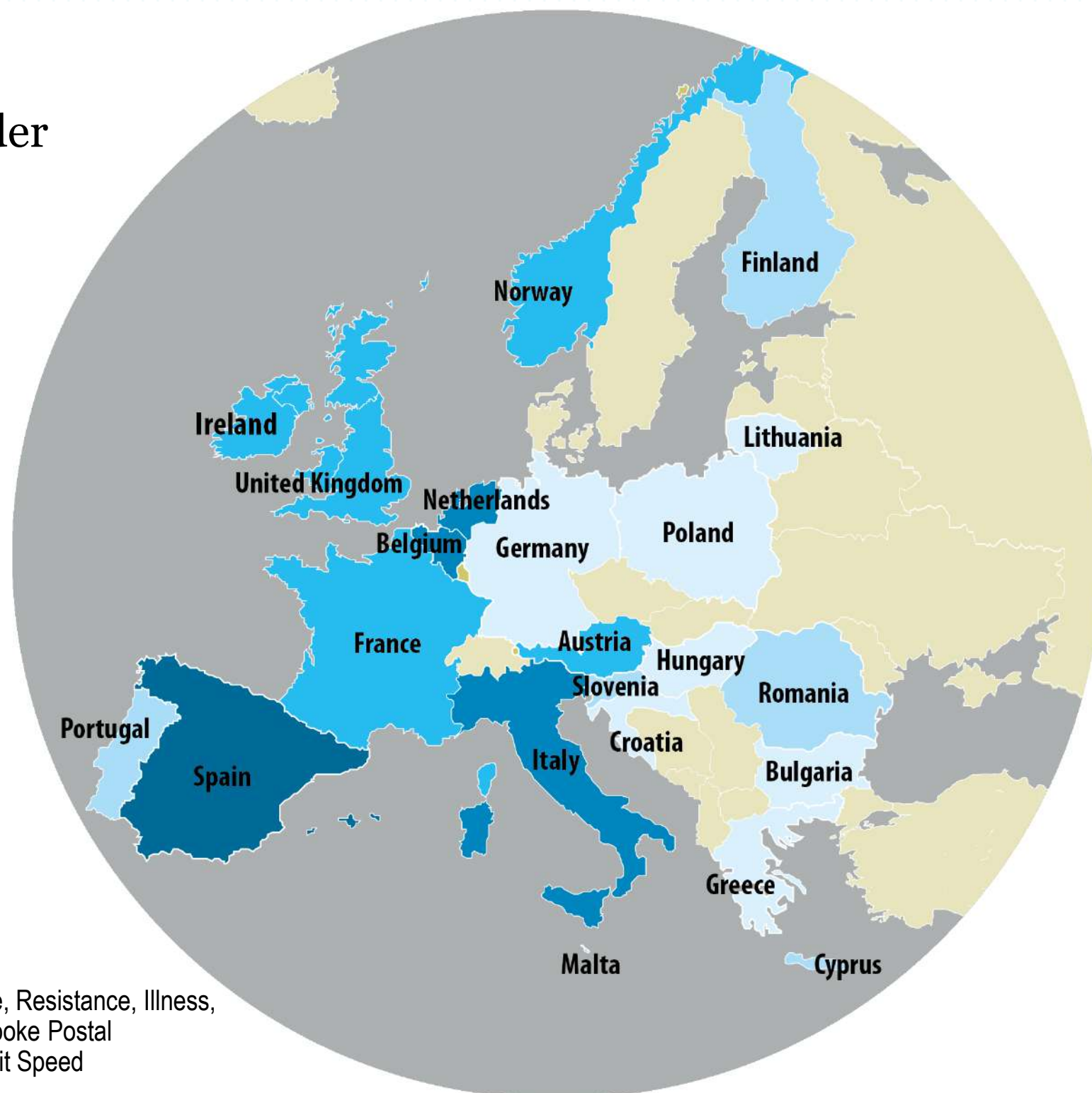
Sustainable Across the WHOLE MS individuals aged over 70 years receiving health care in any level of the system are screened for frailty with one of the JA recommended tools^a

Advanced Across the WHOLE MS, individuals aged over 70 years receiving health care in any level of the system are screened for frailty with other VALIDATED instruments

Well-developed In MOST practices, individuals receiving health care in any level of the system are screened for frailty with one of the recommended tools

Fair In SOME practices, individuals receiving health care in any level of the system are screened for frailty with other instruments

Basic No screening tools are used



^a Study Osteoporotic Fractures Index (SOF); Edmonton Frailty Scale; Fatigue, Resistance, Illness, Loss of Weight Index (FRAIL Index); Clinical Frailty Scale; Prisma-7; Sherbrooke Postal Questionnaire; Inter-Frail; Short Physical Performance Battery (SPPB) or Gait Speed

ADVANTAGE MS survey

WP4 topics - Diagnostic Tools

Tools used for the **diagnostic confirmation** of frailty

Sustainable Across the WHOLE MS, diagnosis of frailty is performed through a CGA, including one of these tools/instruments: Frailty Index of accumulative deficits, Frailty Phenotype OR Frailty Trait Scale

Advanced Across the WHOLE MS, diagnosis of frailty is performed through a CGA including other VALIDATED DIAGNOSTIC tools/instruments

Well-developed In MOST practices, diagnosis of frailty is performed through a CGA, including one of these tools/instruments: Frailty Index of accumulative deficits, Frailty Phenotype OR Frailty Trait Scale

Fair In SOME practices, diagnosis of frailty is performed through a CGA OR VALIDATED SCREENING OR DIAGNOSTIC tools/instruments

Basic CGA is not performed to diagnose frailty OR diagnosis of frailty is performed using non-validated tools/instruments



ADVANTAGE MS survey

WP4 topics - **Conclusions**

- About half the MS do not have a multidimensional definition of frailty in use, and in less than half the MS frailty screening is done in most (or more) practices
- Diagnostic tools, such as CGA are not routinely used in most MS
- Generally the majority of MS are Fair or Basic in terms of defining, screening and use of diagnostic tools for frailty
- There are large differences between the MS
- Diagnostic tools were overall rated quite low with no country having a Sustainable level of implementation, whereas there were more MS performing better in terms of definition of frailty
- For all three topics there was a large number of MS (between six and eight) in the Basic implementation category, highlighting a need for substantial improvement and nationwide changes

ADVANTAGE State of Art Report → MS survey → Roadmaps → Frailty Prevention Approach

Case Study: Italy, towards a concerted national research framework on aging and frailty

Background: Italy has shown a sustainable or advanced level of development of activities related to the prevention and management frailty (see table 2). Although many research projects on various aspects of aging have been developed, no national research strategy on this topic is currently available.

Challenges

- High number of knowledge gaps about frailty need to be solved
- Funding for projects on ageing and frailty is scarce

The case: The Italian scientific community is highly committed to aging research at local, national and international levels. The development of multidisciplinary and international research networks on ageing and frailty has allowed Italy to increase opportunities for funding with excellent outcomes in the following main studies:

- ILSA (Italian Longitudinal Study on Aging; 1992-ongoing) <https://www.maelstrom-research.org/mica/individual-study/ilsa>. Among age-related conditions and functional changes investigated in the ILSA cohort (n=5632, age 65-84), special attention has been paid to frailty and its association with cognitive decline. Further analysis to fill the knowledge gaps in the epidemiology of frailty identified through the JA ADVANTAGE are currently ongoing.)
- InCHIANTI (1998-ongoing) at regional level <http://inchiantistudy.net/wp/>
- SPRINT-T project <http://www.mysprintt.eu/en>
- SUNFRAIL project <http://www.sunfrail.eu/detection-of-frailty/>. Funded by the EU Health Programme 2014-2020, its main objective was to develop and test a model, good practices and tools to improve the identification, prevention and care of frailty and management of multimorbidity in community dwelling persons (over 65) in Europe.
- CONSENSO project <https://www.alpine-space.eu/projects/consenso/en/home>
- “Silver Code, Innovative models of care for frail elderly patients in the transition from hospital to community and from community to hospital”
- The Federico II University Hospital (Campania Region) is applying the Italian version of the IFi and a comprehensive geriatric assessment for the detection of frailty and the estimation of its severity.
- Italy has also participated in many other projects as MIDFRAIL, FRAILOMIC, FRAILCLINIC, FRAILTOOLS, and FOD-CC, among others.

Conclusions:

In its roadmap (see Annex 3), Italy has manifested its intention of supporting, aligning and expanding policies and strategies on frailty and aging. This will require the development of an integrated and comprehensive program, including health, social, research and innovation policies, allowing joint and coherent planning and allocation of resources. An explicit commitment to the creation and growth of multidisciplinary and extended research networks, based also on previous well-established programs and valuable research experiences, has been made.

“Developing innovative therapeutic interventions against physical frailty and sarcopenia (ITI-PF&S) as a prototype geriatric indication”



Innovative Medicines Initiative



Overall budget: about €56 millions (24 from European Commission, 26 [in-kind] from the European Federation of Pharmaceutical Industries and Associations [EFPIA])

**IMI Call n.9
(call for interest)
published on July 9th,
2013**



Phase III, multicentre, randomised controlled trial (RCT) aimed at comparing the efficacy in preventing mobility disability of a multi-component intervention, based on long-term structured physical activity, personalised nutritional counselling/dietary intervention and an ICT intervention, versus a healthy ageing lifestyle education programme

NCT02582138

Multicomponent Intervention for Physical Frailty and Sarcopenia (SPRINTT)

This study is currently recruiting participants. (see [Contacts and Locations](#))

Verified March 2016 by Catholic University of the Sacred Heart

Sponsor:

Catholic University of the Sacred Heart

Information provided by (Responsible Party):

Roberto Bernabei, Catholic University of the Sacred Heart

ClinicalTrials.gov Identifier:

NCT02582138

First received: October 8, 2015

Last updated: March 14, 2016

Last verified: March 2016

[History of Changes](#)

[Full Text View](#)

[Tabular View](#)

[No Study Results Posted](#)

[Disclaimer](#)

[? How to Read a Study Record](#)



RCT CENTRES



16 sites open

11 European countries

UCSC- Rome
IRCCS-INRCA-Ancona
HUG-Getafe
HURYC-Madrid
CU-Prague
FAU-Nurnberg
UNIMASS-Maastricht
UH-Helsinki
CHU-Toulouse
CHU-Limoges
JUMC-Krakow
DF-Luton
SL-Opava
UP Parma-Parma
UI-Reykjavik
MUG-Graz



RCT TARGET POPULATION

- 1,500 community-dwellers, aged 70+ years
 - Low muscle mass (DXA, FNIH)
 - SPPB 3-7 (n = 1,200) and 8-9 (n = 300)
 - Able to walk 400 metres at usual pace in 15 minutes at baseline
-
- **Exclusion criteria:** inability or unwillingness to provide informed consent, terminal illnesses, unstable health status, cognitive impairment, chronic dialysis, active cancer treatment, plans to relocate out of the study area
 - **Two treatment arms:** multi-component intervention and successful ageing programme

MULTI-COMPONENT INTERVENTION (MCI)

Physical activity intervention

**Structured exercise and physical activity (LIFE study protocol)
(aerobic, resistance, balance, and flexibility exercises)**

Nutritional assessment and dietary intervention

**Personalised dietary recommendations (targets: 25-35 kCal/kg/day
and 1.0-1.2 g protein/kg/day)**

Health technology intervention

Remote monitoring of physical activity at predefined intervals or on-demand by the investigator, reinforcement of intervention compliance

OUTCOMES

Primary outcome

Incidence of mobility disability (incident inability to complete the 400-m walk test)

Secondary outcomes

- Changes in physical performance (i.e., SPPB, handgrip strength)
- Body composition modifications
- Incidence of falls and injurious falls
- Changes in nutritional status
- Changes in functional status (i.e., ADL, IADL, PAT-D)
- Changes in cognitive function and mood
- Changes in healthcare services utilisation
- Changes in quality of life (i.e., EuroQoL-5D, Participant-Reported Outcomes)
- Cost-effectiveness analysis
- Mortality rate

Beginning of trial activities

January 11, 2016

First participant in

February 3, 2016

Enrolment completion

November 15, 2017





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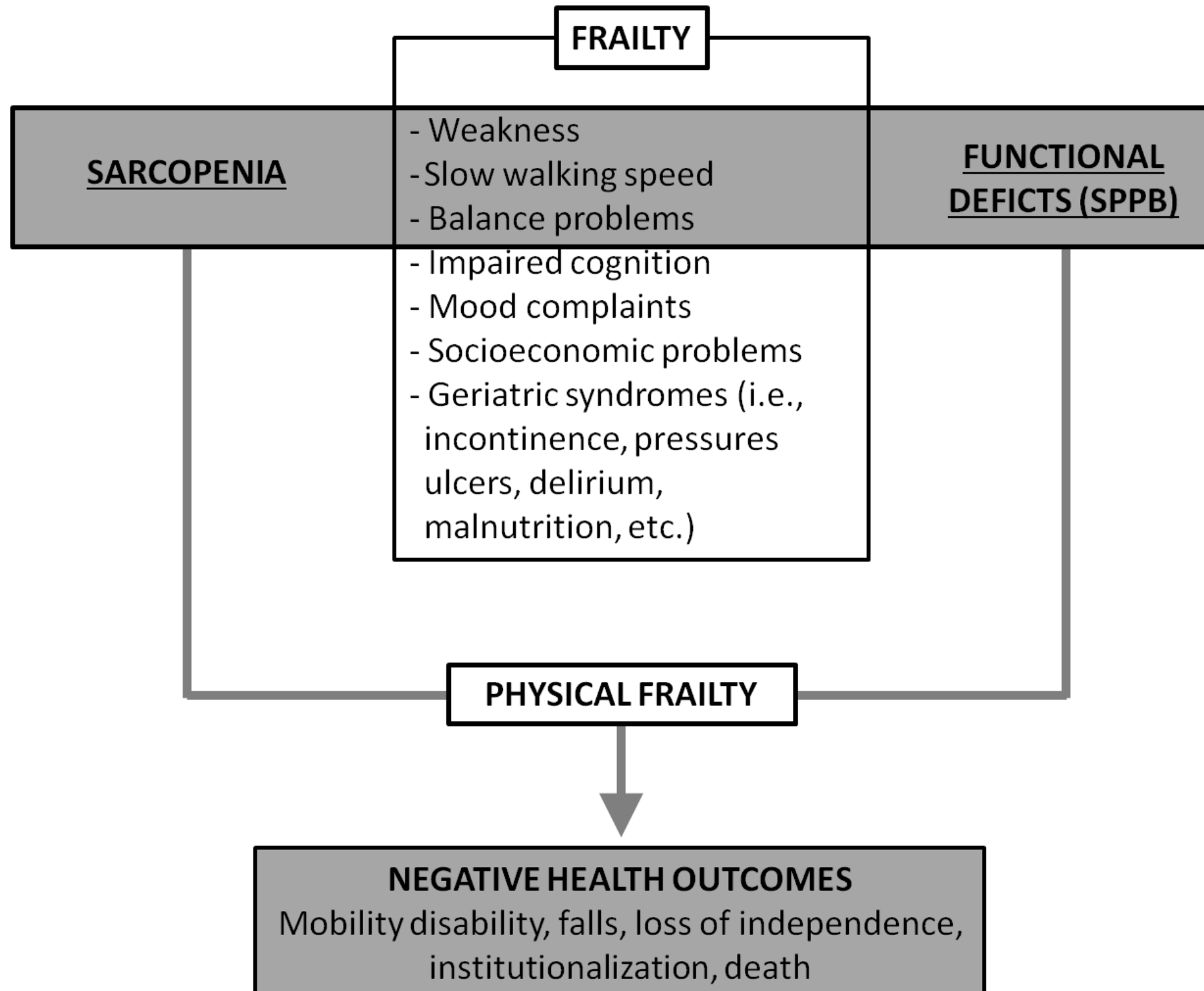
Focus on function vs. disease(s)

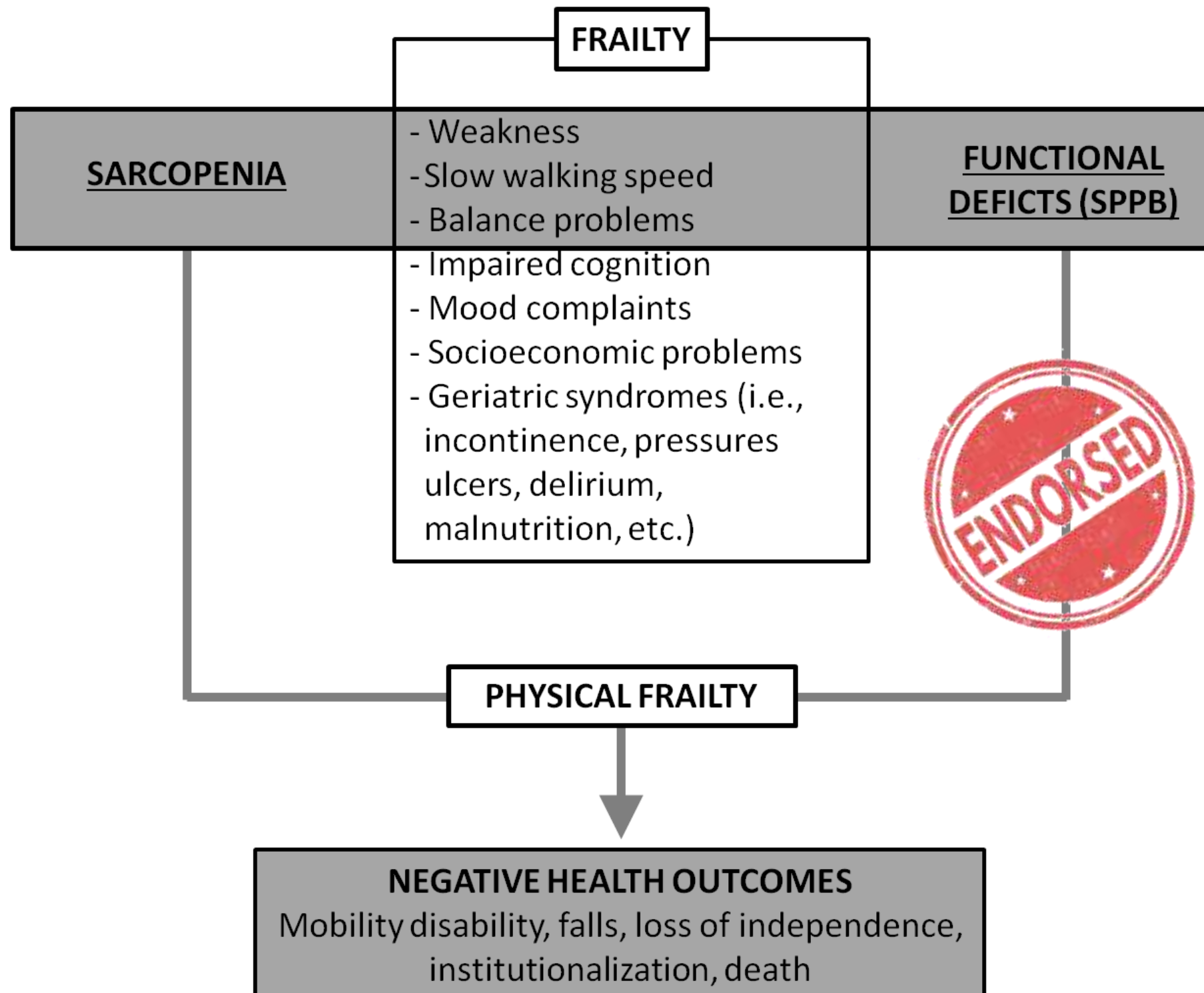


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Focus on function vs. disease(s)





Baseline characteristics

Characteristic	MCI (N=759)	HALE (N=758)
Age (years)	79.1 (5.9)	78.7 (5.7)
Female (%)	546 (71.9%)	540 (71.2%)
White (%)	670 (98.4%)	665 (98.2%)
Weight (kg)	70.7 (15.6)	70.9 (16.9)
BMI (kg/m ²)	28.6 (5.9)	28.6 (6.0)
≥ 30 kg/m ² (%)	276 (36.5%)	280 (37.0%)
SARC-F	2.9 (1.8)	3.0 (1.9)
≤4 (%)	628 (82.9%)	600 (79.2%)
SPPB total score	6.7 (1.4)	6.7 (1.4)
3-7 (%)	603 (79.4%)	599 (79.0%)
8-9 (%)	156 (20.6%)	159 (21.0%)
MMSE total score	27.9 (1.8)	27.9 (1.9)
400-m walk test (min)	8.7 (2.5)	8.7 (2.4)
DXA (local values)		
aLM (kg) (M/F)	21.0 (3.4) / 14.7 (1.9)	21.1 (3.6) / 14.8 (2.3)
aLM/BMI (M/F)	0.728 (0.086) / 0.528 (0.075)	0.723 (0.084) / 0.530 (0.078)



Marzetti et al., Experimental Gerontology 113 (2018) 48–57

Medication Inventory

- 95.7% participants reported at least one ATC coded medication at screening
 - Main Anatomic classes:
 - Cardiovascular system for 78.9% of participants:
 - Agents acting on the renin-angiotensin system (51.1%)
 - Lipid modifying agents (40.3%)
 - Beta blocking agents (31.6%)
 - Alimentary tract and metabolism for 65.3%
 - Drugs for acid related disorders (34.7%)
 - 93% of participants with multiple ATC coded medications reported
 - 35% with 2 to 4 ATC coded medications
 - 48% with 5 to 9 ATC coded medications
 - 10% with ≥ 10 ATC coded medications
- 29% (N=440) with at least one nonATC medications reported at screening

Primary outcome: 400-m walk test

Primary outcome: 400m walk test



The clinical relevance of the 400m walk test should be confirmed via the results of the study (e.g. relation to other outcomes like falls, fractures, ADLs and IADLs)