



**EIP-AHA A3 Action Group
F2F Meeting
SUNFRAIL Preliminary Results**

University of Valencia

Emilia-Romagna Region

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Valencia, 29 th. June 2017



Reference Sites Network for Prevention and
Care of Frailty and Chronic Conditions in
community dwelling persons of EU Countries



The SUNFRAIL Project has
received funding from the
European Union's Health
Programme 2014-2020

SUNFRAIL Project

Promoted by a **network of Italian Reference Sites** of the European Innovation Partnership on Active and Healthy Ageing (EIP-AHA)

3rd EU Health Programme - WP 2014

- To share experiences, good practices and tools to identify and manage **frailty** and **multimorbidity**
- **EIP-AHA Initiative**
- **Italian Ministry of Health: Progetto Mattone Internazionale**



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The Partnership

PARTNER	ORGANISATION	ACRONYM
RS LP1	Regione Emilia-Romagna - Agenzia Sanitaria E Sociale Regionale, Italy	(RER-ASSR)
	Aster - Societa Consortile Per Azioni, Italy	(ASTER)
RS PP2	Regione Piemonte, Italy	(RHAP)
RS PP3	Regione Liguria, Italy	(LIGURIA)
	Galliera Hospital	Affiliated
RS PP4	Azienda Ospedaliera Universitaria Federico II Campania, Italy	
RS PP5	Centre Hospitalier Universitaire De Toulouse, France	(GERONTOPOLE)
RS PP6	Centre Hospitalier Universitaire Montpellier, France	(CHRU)
RS PP7	Unwersytet Medyczny W Lodzi, Poland	(LODZ)
RS PP8	Universidad De La Iglesia De Deusto, Spain	(DEUSTO)
RS PP9	Regional Health & Social Care Board Of Northern Ireland, United Kingdom	(HSCB)
PP10	European Regional And Local Health Authorities Asbl, Belgium	(EUREGHA)
RS PP11	CARSAT Languedoc Roussillon, France	(CARSAT)

Collaborating:

- EIP-AHA Action Groups: A3, B3
- International Scientific Research Networks on frailty and disability (IAGG-GARN)



SUNFRAIL

General Objectives

To improve the **identification, prevention and management of frailty** and care of **multimorbidity** in **community dwelling persons (over 65)** of EU countries

Specific Objectives

1. To design an **innovative, integrated model** for the **prevention and management of frailty and care of multimorbidity**
2. To **validate the model: assess** existing **systems and services** targeting frailty and multimorbidity – citizen's/**patient's** needs
3. To assess the **potential for the adoption/replication** and **sustainability of the model (tools & good practices)** in different organizational contexts
4. To **promote the dissemination** of the results (decision makers, - regional, national, EU level)

Definition of Frailty

Biomedical vs. Bio-Psychosocial Model

Biomedical

- **Biological:** Age, sex
- **Health-diseases**
- **Life Styles:** physical activity, nutrition...
- **Risk Factors:** smoke, alcohol..

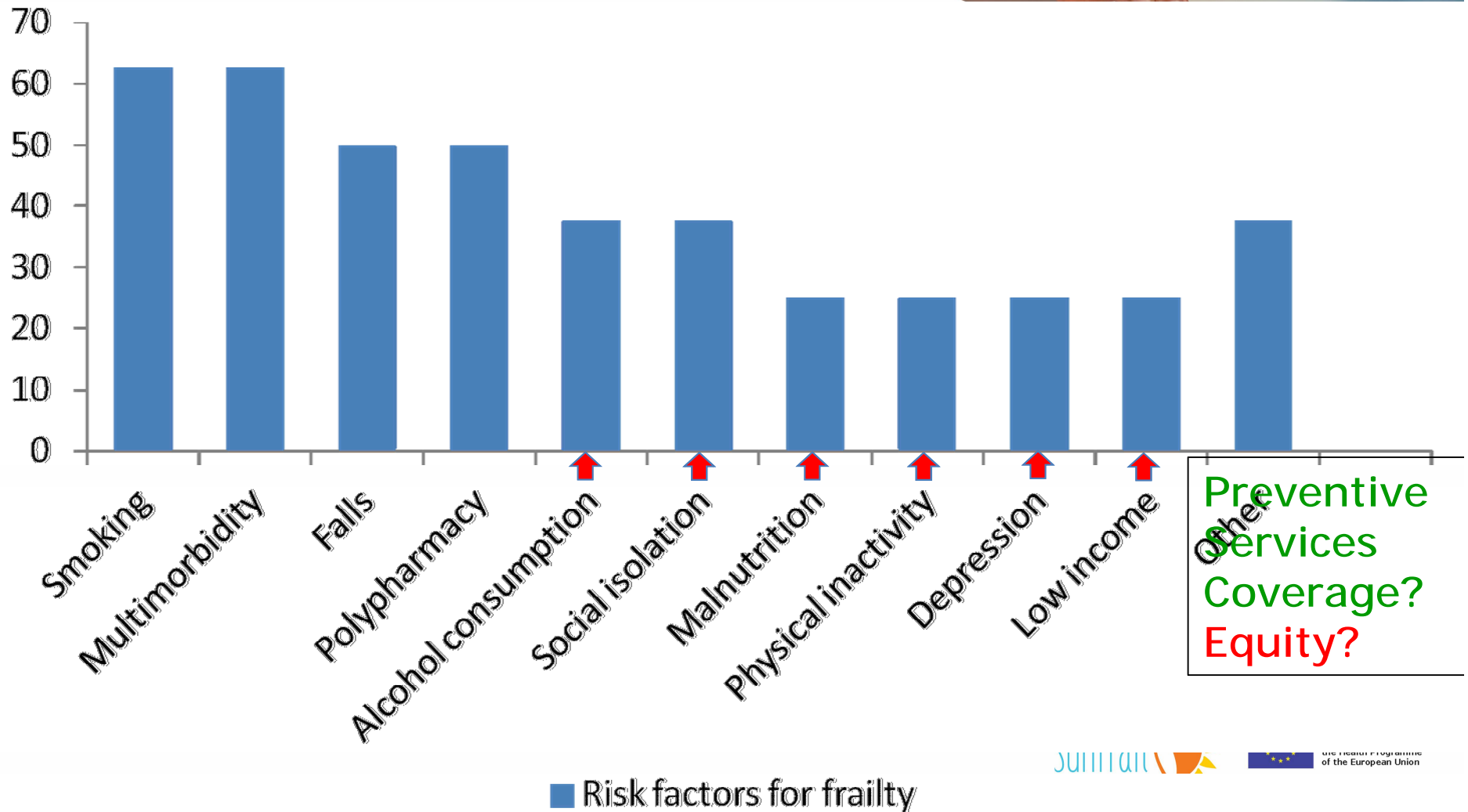
Psyco-Social

- **Well being** (physical, psychological)
- **Independent living**
- **Socialization**
- **Resources:** health care, social interaction, sport, leisures

- **Early Identification**
- **Prevention of Disability**

Systematic Assessment of Risk factors for Frailty

Sunfrail Reference Sites



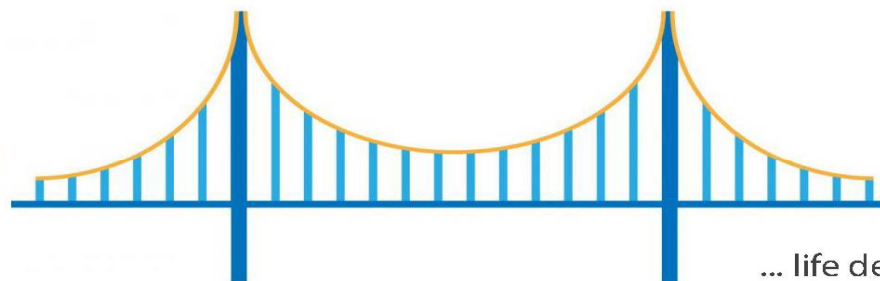
Beneficiaries Perception of Frailty and Barriers to Care

Bridging the Gap

Need for independence ——— FRAILITY? ——— State of...



* playing with grandsons
* driving * dancing * walking



... life decline and extreme vulnerability characterized by weakness and decreased physiologic reserve contributing to increased risk for falls, institutionalization, disability, death.

- Risk Factors
- Prevention
- Cultural, organizational barriers to services
- Multidisciplinary approach



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SUNFRAIL Good Practices - Criteria

1. **Innovation:** novelty (product, process, tools, ICT), etc.
2. **Duration-State of Art:** length of implementation; new practice or continuation/improvement of a previous action
3. **Stakeholders Involved:** e.g. University-Research Institutes, Institutions responsible for planning and implementing services, patients/citizens groups
4. **Law/Regulation Scenario:** existing regional and/or national laws coherent with the local GPs
5. **Deliverables** (guidelines, models, ICT tools, report, questionnaire, database, training)
6. **Transferability** (experience of replication-regions, districts)

33 GPs Identified!!



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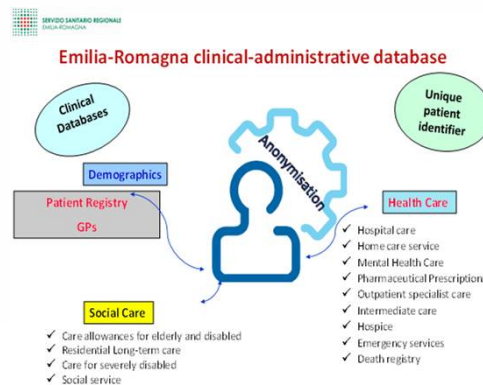
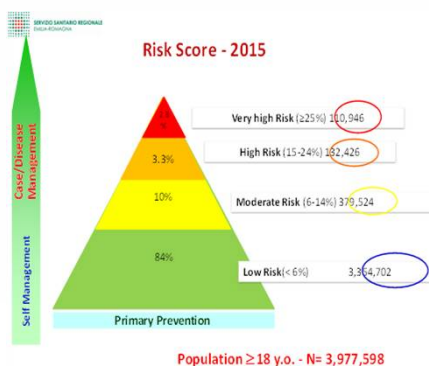
SUNFRAIL Good Practices - Criteria

33 GPs Identified!!



A Regional predictive model to identify patients at high risk of hospitalization and Frailty

Regional Health/Administrative data

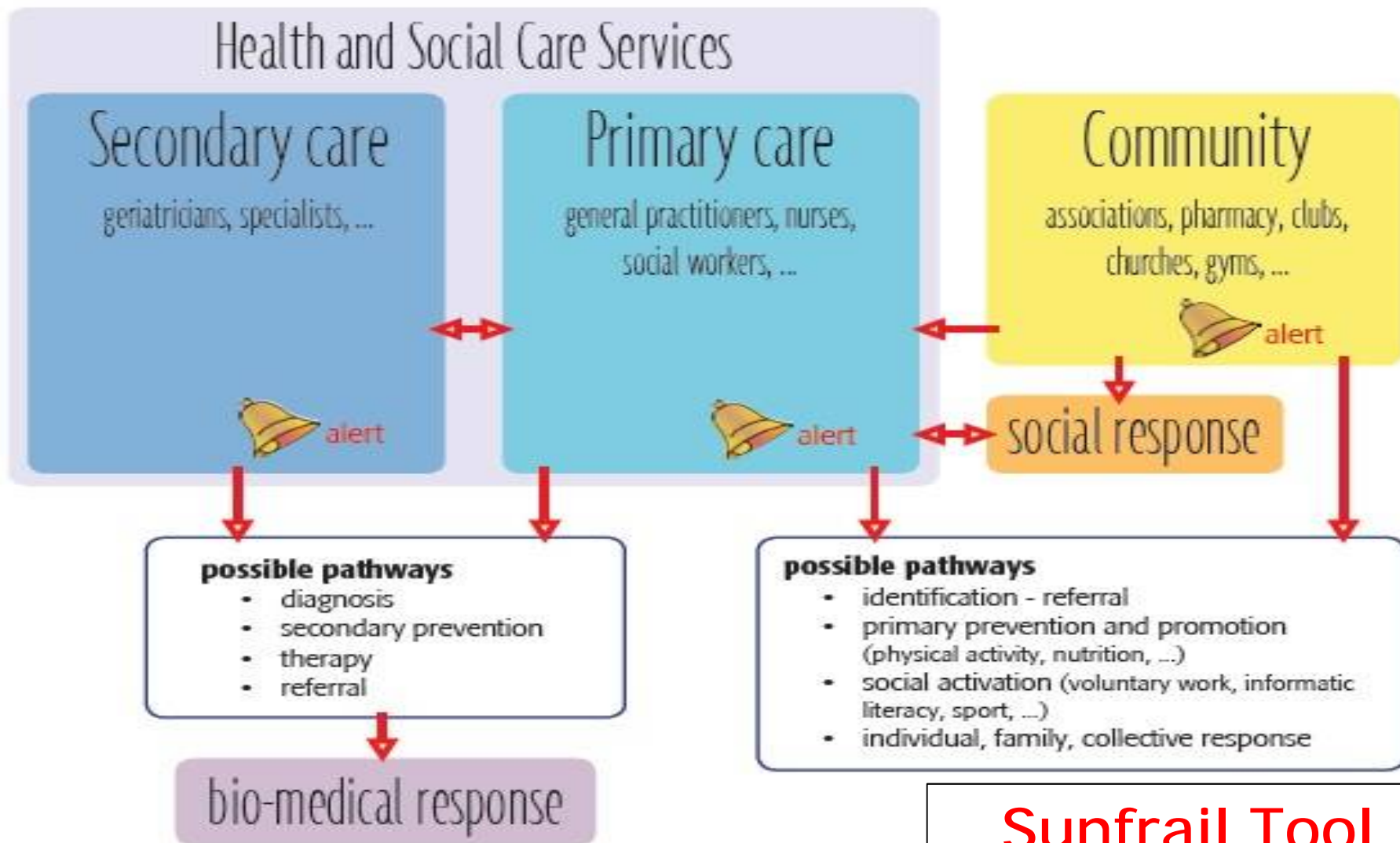


Categorie di Rischio di Ospedalizzazione e morte	
	Rischio Previsto



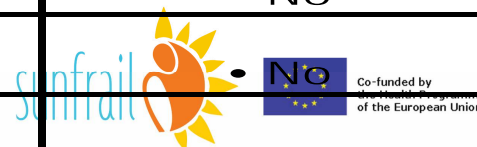
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Sunfrail Pre-Model of Care on Frailty and Multimorbidity



Sunfrail Tool

QUESTIONNAIRE NUMBER		ID
Date and place		
PROFESSIONALS		
<ul style="list-style-type: none"> • Nurse • GPs • Other Professionals • Social Worker • Community Actor • Caregiver 		
BENEFICIARIES		
Gender	Age	Level of education
<ul style="list-style-type: none"> • M • F 	<ul style="list-style-type: none"> • 65-74 • 75-85 	<ul style="list-style-type: none"> • Low (Without studies, Primary School) • Medium (Secondary school, or vocational degree) • High (University, Master or PhD degree)
Questions		
1. Do you regularly take 5 or more medications per day?		<ul style="list-style-type: none"> • Yes • No
2. Have you recently lost weight such that your clothing has become looser?		<ul style="list-style-type: none"> • Yes • No
3. Your physical state made you walking less during the last year?		<ul style="list-style-type: none"> • Yes • No
4. Have you been evaluated by your GP during the last year?		<ul style="list-style-type: none"> • Yes • No
5. Have you fallen 1 or more times during the last year?		<ul style="list-style-type: none"> • Yes • No
6. Have you experienced memory decline during the last year?		<ul style="list-style-type: none"> • Yes • No
7. Do you feel lonely most of the time?		<ul style="list-style-type: none"> • Yes • No
8. In case of need, can you count on someone close to you?		<ul style="list-style-type: none"> • Yes • No
9. Have you had any financial difficulties in facing dental care and health care costs during the last year?		<ul style="list-style-type: none"> • Yes • No



Rationale and Steps in the development and application of the Sunfrail Tool



1. Building up by a multiprofessional working group (Geriatricians, Public Health Experts, Sociologist)
2. Selection of items already present in other questionnaires
3. Translation and back translation of the tool into 5 languages: Italian, English, French, Polish, Spanish
4. Verify the understandability/comprehensibility of the Sunfrail Tool by professionals/beneficiaries
5. Verify the applicability of the Sunfrail tool into the current Practice
 - Administration **by professionals** (GPs, Nurses, social workers, others), **community** actors
 - Medical assessment/evaluation
 - Identification of **available pathways**

Settings: community, primary care, secondary care (outpatients Depts.)



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SUNFRAIL Tool Results:

Verify the understandability/comprehensibility (Gerontopole)



By Professionals

Questions	Understandable		Ambiguous
	Yes	No	Yes
Indicate the total number of answers per question			
1. Do you regularly take 5 or more medications per day?	10	0	0
2. Have you unintentionally lost weight during the past year such that your clothing has become looser?	10	0	0
3. Your physical state made you walk less during the past year?	10	0	0
4. Have you been seen by your GP during the past year?	9	0	1
5. Have you fallen 1 or more times during the past year?	9	0	1
6. Have you experienced any memory decline during the past year?	9	0	1
7. Do you experience loneliness most of the time?	10	0	0
8. In case of need, can you count on someone close to you?	10	0	0
9. Have you had any economic difficulty in facing dental care and health care costs during the past year?	10	0	0
Total	87	0	3

By Beneficiaries

Questions	Understandable		Ambiguous
	Yes	No	Yes
Indicate the total number of answers per question			
1. Do you regularly take 5 or more medications per day?	20	0	0
2. Have you unintentionally lost weight during the past year such that your clothing has become looser?	20	0	0
3. Your physical state made you walk less during the past year?	20	0	0
4. Have you been seen by your GP during the past year?	20	0	0
5. Have you fallen 1 or more times during the past year?	20	0	0
6. Have you experienced any memory decline during the past year?	20	0	0
7. Do you experience loneliness most of the time?	20	0	0
8. In case of need, can you count on someone close to you?	20	0	0
9. Have you had any economic difficulty in facing dental care and health care costs during the past year?	20	0	0
Total	180	0	0



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Sunfrail Tool - Preliminary Results

Study Population	n. 481	
Reference Site	n	%
Deusto University, Spain	139	28,90
HSCB, Northern Ireland	127	26,40
Medical University of Lodz, Poland	114	23,70
University of Naples Federico II	101	21,00
Beneficiaries		
Gender		
F	330	68,61
M	151	31,39
Age Group	481	
65-74	176	36,59
75-85	305	63,41
Education Level	481	
High (University, Master or PhD degree)	75	15,59
Medium (Secondary school, or vocational degree)	173	35,97
Low (Without studies, Primary School)	233	48,44



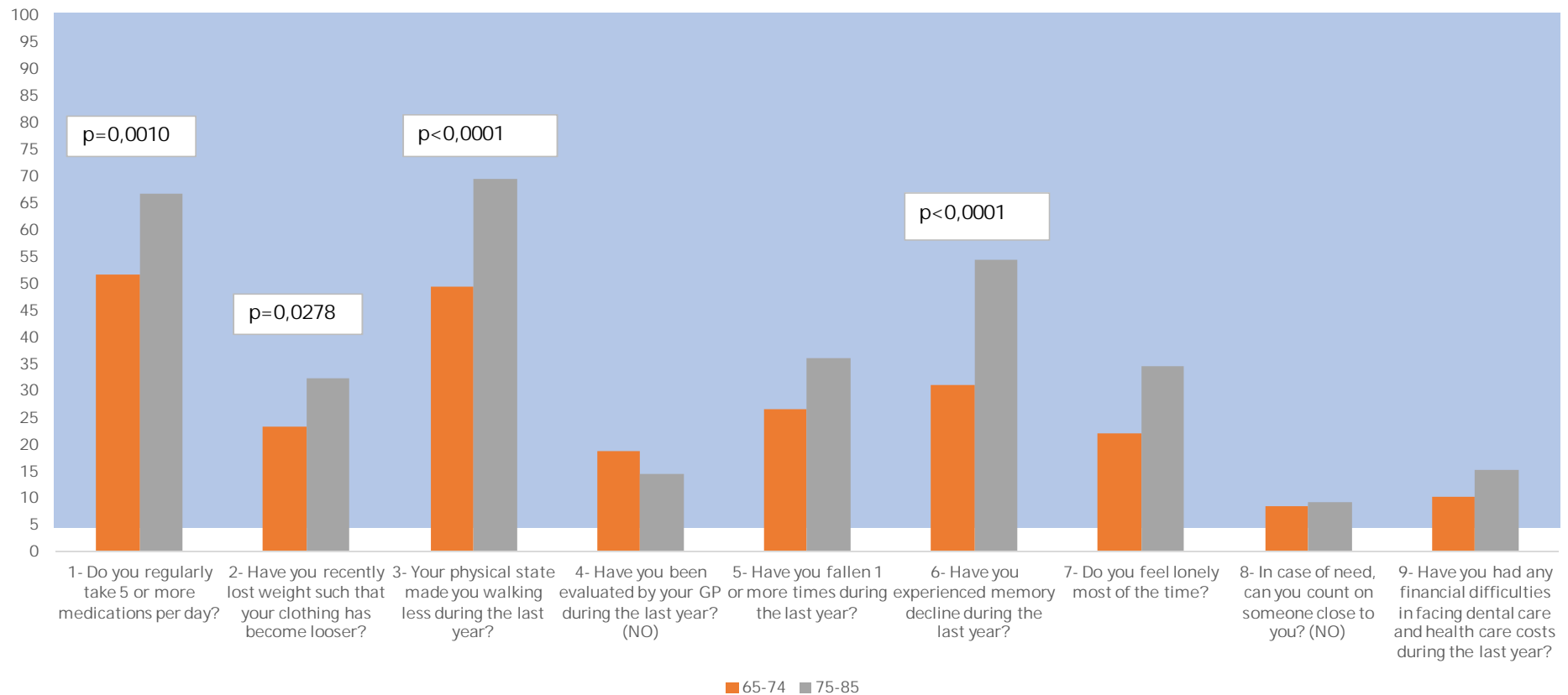
Sunfrail Tool - Preliminary Results

(n. 481)

Questions	n. Positive Answers	%	(95% CI)
1- Do you regularly take 5 or more medications per day?	295	61,33	(56,91-65,58)
2- Have you recently lost weight such that your clothing has become looser?	140	29,11	(25,22-33,32)
3- Your physical state made you walking less during the last year?	299	62,16	(57,75 - 66,38)
4- Have you been evaluated by your GP during the last year? (NO)	77	16,01	(12,99 - 19,56)
5- Have you fallen 1 or more times during the last year?	157	32,64	(28,61 - 36,96)
6- Have you experienced memory decline during the last year?	221	45,95	(41,54 - 50,41)
7- Do you feel lonely most of the time?	145	30,15	(26,21 - 34,39)
8- In case of need, can you count on someone close to you? (NO)	43	8,94	(6,68 - 11,85)
9- Have you had any financial difficulties in facing dental care and health care costs during the last year?	65	13,51	(10,73 - 16,87)

Sunfrail Tool - Preliminary Results

% of Positive Items by Age Group

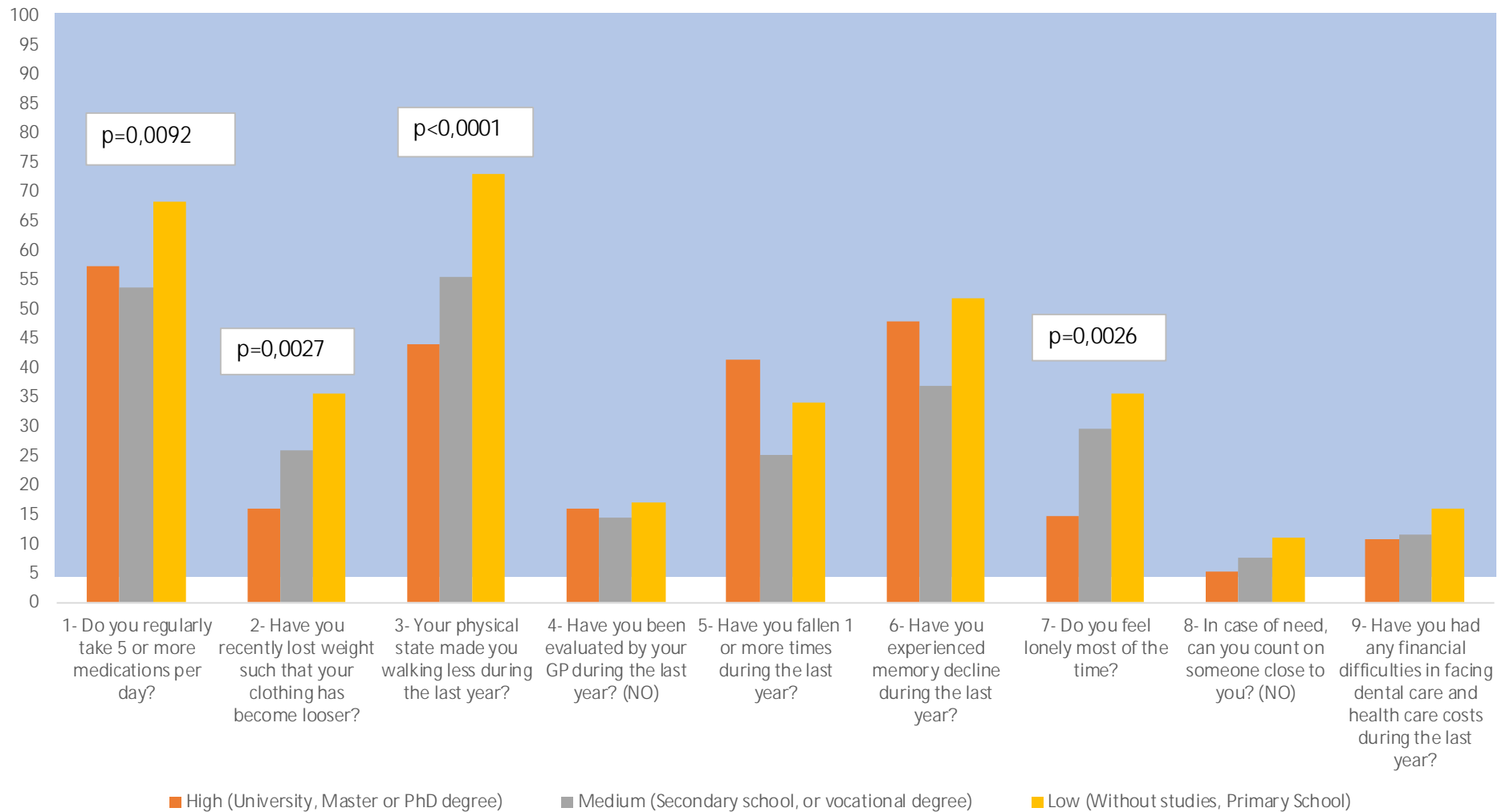


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Sunfrail Tool - Preliminary Results



% of Positive Items by Education Level



Sunfrail Tool - Preliminary Results

Domains	Positive Answers					
	n. Answers	%	n. Persons	% (of 481)	Score Frailty (0-1)*	Standard Deviation
Biological (max 5 positive answers)	968	67,13	437	90,85	0,403	0,226
Neuro-Psychological (max 2 positive answers)	366	25,38	278	57,80	0,380	0,370
Socio-Economic (max 2 positive answers)	108	7,49	96	19,96	0,112	0,237
Total (max 9 positive answers)	1442	100,00	453	94,18	0,333	0,191
*n. Positive Answers /max n. Positive Answers						

Research Clinical question
Tested in preliminary data in 340 outpatients of Frailty Multimorbidity Lab
of Geriatric Clinic
University Hospital of Parma
(Emilia Romagna Region)

Participants who answer yes to items number

3. Your physical state made you walking less during the last year
5. Have you fallen 1 or more times during the last year.
6. Have you experienced memory decline during the last year.

- a. will have lower performance score in terms of 4 meters walking speed, hand grip strength and MMSE than participants who answer no?
- b. the difference (if any) between these groups will be statistically significant?



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Mean Differences in Cognitive and Motoric Parameters, stratified on positivity to Sunfrail questionnaire

		MMSE	(SD)	p*
6. Memory decline :	YES (n=241)	20.7	6.5	
	NO (n=102)	23.9	5.2	
		4-m WS	(SD)	<0.001
5. Falls during last year:	YES (n= 161)	0.46	0.35	
	NO (n=181)	0.75	0.37	
		Handgrip	(SD)	<0.0001
5.Falls during last year:	YES (n= 159)	18.64	8.60	
	NO (n=182)	22.0	9.70	
		4-m WS	(DS)	0.005
3.Walking less because of your physical Status:	YES (n=253)	0.53	0.37	
	NO (n=89)	0.85	0.31	
				0.0001

*Adjusted for age and sex

The Application of the Sunfrail Tool in other EU Projects: Consenso* - Community nurse supporting elderly in a changing society



Questions (Consenso)	n. Positive Answers	% (1740)
1- Do you regularly take 5 or more medications per day?	NA	NA
2- Have you recently lost weight such that your clothing has become looser?	222	13
3- Your physical state made you walking less during the last year?	639	37
4- Have you been evaluated by your GP during the last year? (NO)	166	9,5
5- Have you fallen 1 or more times during the last year?	387	22
6- Have you experienced memory decline during the last year?	655	38
7- Do you feel lonely most of the time?	NA	NA
8- In case of need, can you count on someone close to you? (NO)	149	8,60
9- Have you had any financial difficulties in facing dental care and health care costs during the last year?	474	27

Questions (Sunfrail)	n. Positive Answers	% (481)
1- Do you regularly take 5 or more medications per day?	295	61,33
2- Have you recently lost weight such that your clothing has become looser?	140	29,11
3- Your physical state made you walking less during the last year?	299	62,16
4- Have you been evaluated by your GP during the last year? (NO)	77	16,01
5- Have you fallen 1 or more times during the last year?	157	32,64
6- Have you experienced memory decline during the last year?	221	45,95
7- Do you feel lonely most of the time?	145	30,15
8- In case of need, can you count on someone close to you? (NO)	43	8,94
9- Have you had any financial difficulties in facing dental care and health care costs during the last year?	65	13,51

*Countries: Italy, France, Slovenia, Austria



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Potential Synergies/Collaboration

n 74 EIP-AHA Reference Sites (22 Countries)

n 12 Italian RS



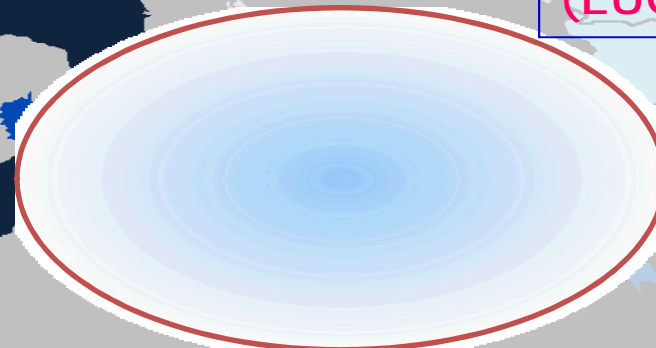
EIP-AHA
A3 ?
B3 !

EUGMS
Geriatric
Societies ?



European
Union
Geriatric
Medicine
Society
(EUGMS)

Italian
Geriatric
Society
(SIGG)



Sunfrail Main Outcomes



Model and Tools - Potential for:

- Early detection, prevention and management of frailty and multimorbidity (primary care, community, secondary care)
- Involvement of community and final beneficiaries (assessment of risk factors) – (**empowerment/self-help**)
- Involvement of different sectors and actors



- Multidisciplinary approach by professionals





Potential For Synergies

SUNFRAIL & JOINT ACTION ON FRAILTY-ADVANTAGE

General Aim

- To build a **common understanding on frailty** to be used in the **Member States** by policy makers and other stakeholders involved in the management, both at individual and population level....
- To contribute to the **reduction of disability and dependence**....

Participation of Sunfrail IT Reference Sites – Pro.M.I.S (Mattone Internazionale)

WP2 (Dissemination) (**R. Marche-Leader**)

- **Disseminate the outcomes** of the **JA** at local, national and EU level (**EIP-AHA**, Reference Site Collaborative Network - **RSCN**, others)
- Participate to specific **WPs**
 - WP4** - knowing frailty at the individual level: Definition
 - WP6** - Managing Frailty: Prevention and Clinical Management
 - WP7** - Models of Care
 - WP8** - Extending and Expanding the knowledge on frailty



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Thank you for your attention!

www.sunfrail.eu

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