

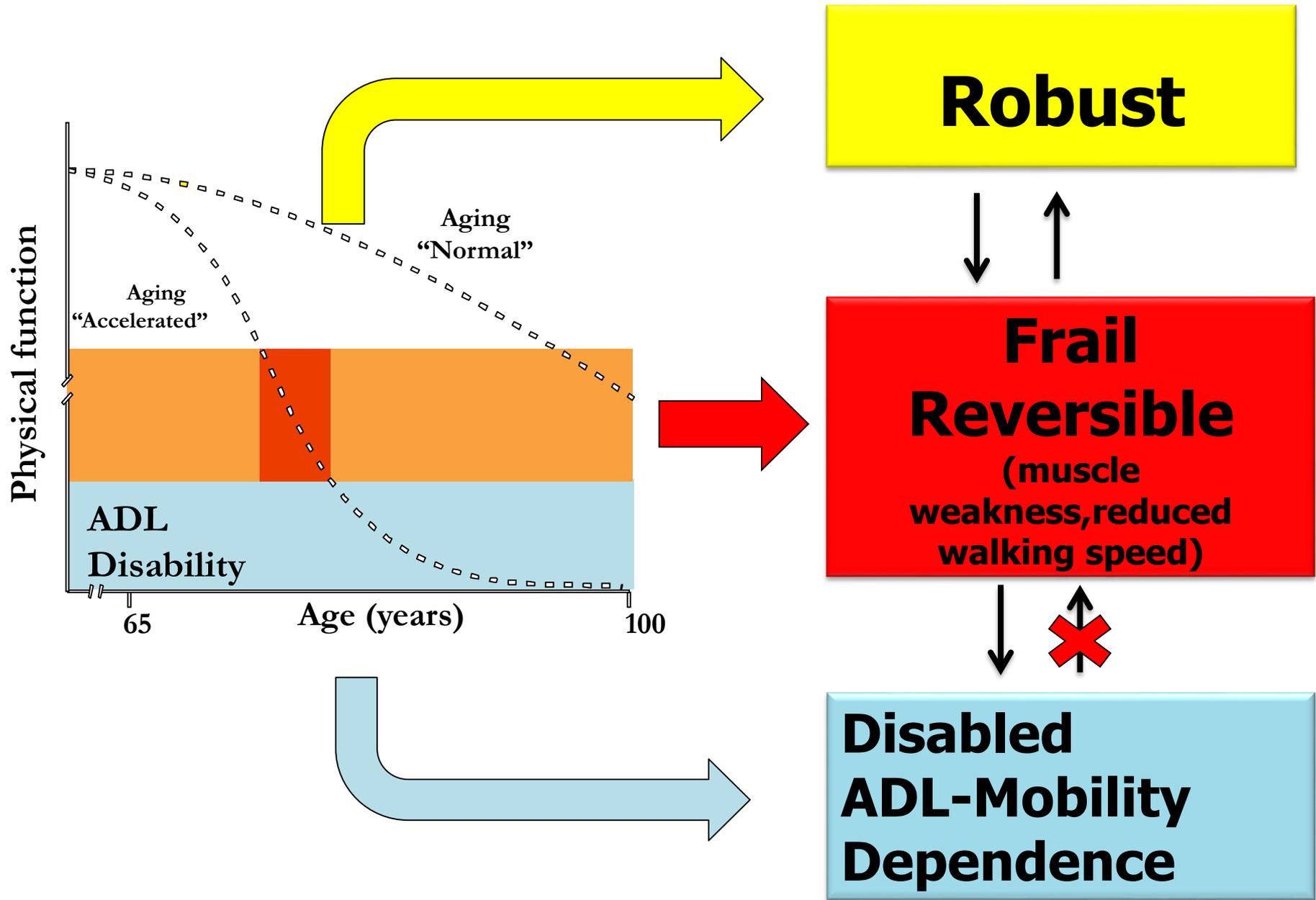


Further on Sunfrail Tool & Results

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Emilia Romagna Region



3 categories of older subjects



Representation of Non autosufficient older persons in Italy

2005 2010 2015 2020 2025



**ROME: 2873000
inhabitants**

Italia	2,349,210	2,731,419	2,999,420	3,267,421	3,569,210
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POTENTIAL SUPPORT RATIO

AFRICA	12,9
ASIA	8,0
AMER.LATINA-CARAIBI	7,6
OCEANIA	4,8
EUROPA 28	3,4
GIAPPONE	2,1
ITALIA*	2,7
ITALIA F20-64/OVER 65*	1,3
LIGURIA*	2,0
LIGURIA F20-64/OV.65*	1,0
PIEMONTE*	2,3
PIEMONTE F20-64/OV.65*	1,2

(Dati ONU 2015, *ISTAT 2016)

From Certification of Disability To assessment of frailty

FRAILTY

DISABILITY

Simple
Tools

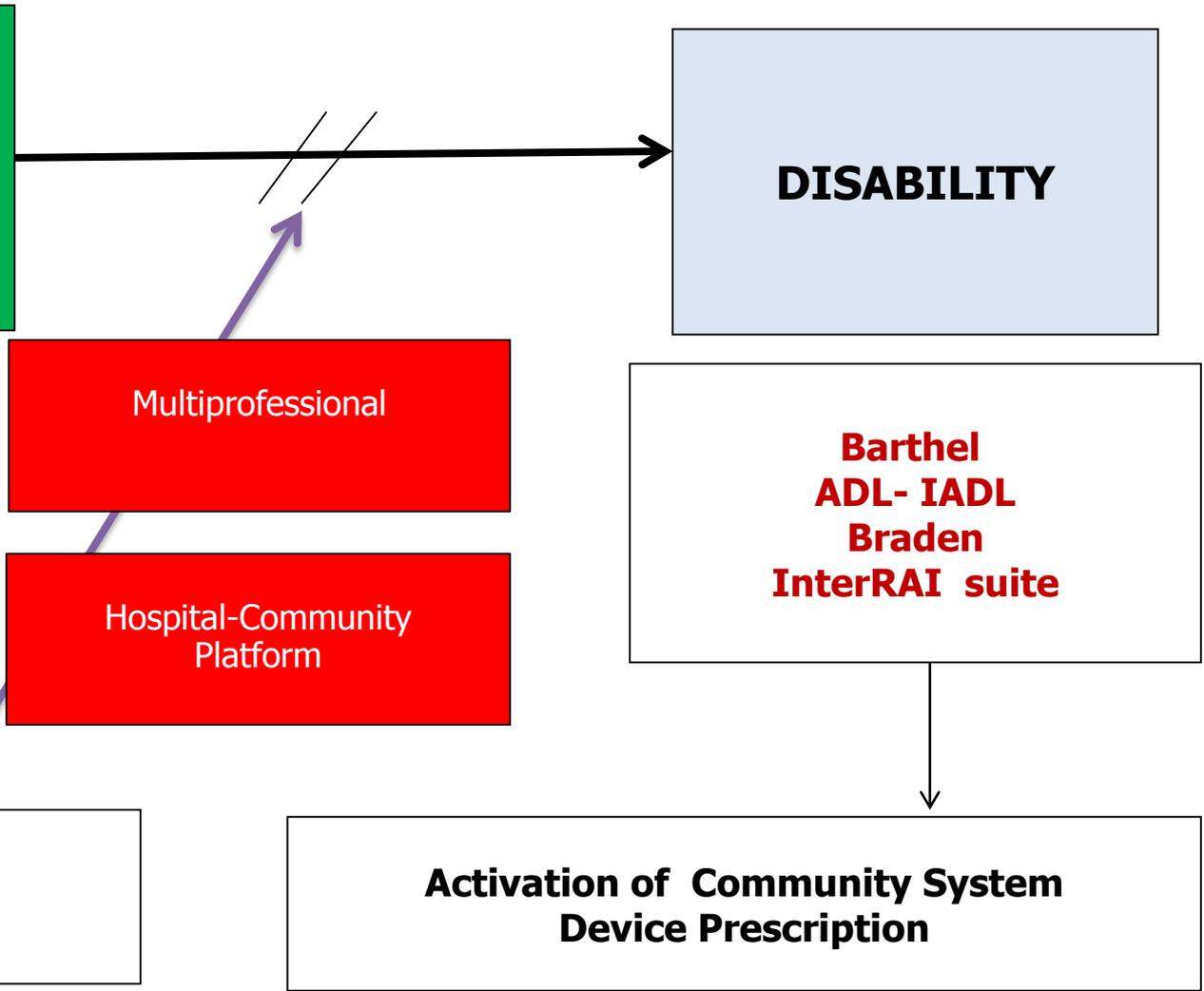
Multiprofessional

Hospital-Community
Platform

**Barthel
ADL- IADL
Braden
InterRAI suite**

**Proactive
Interventions**

**Activation of Community System
Device Prescription**

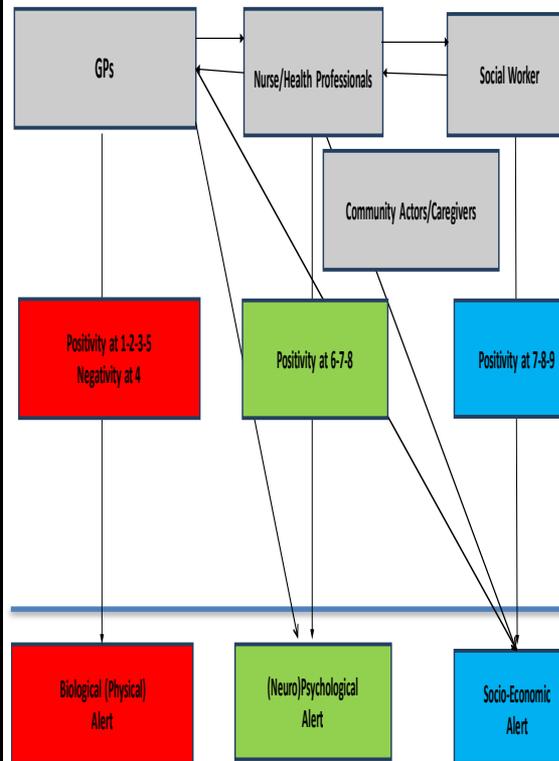


Sunfrail Tool



QUESTIONNAIRE NUMBER		ID
Date and place		
PROFESSIONALS		
<input type="checkbox"/> Nurse <input type="checkbox"/> GPs <input type="checkbox"/> Other Professionals <input type="checkbox"/> Social Worker <input type="checkbox"/> Community Actor <input type="checkbox"/> Caregiver		
BENEFICIARIES		
Gender	Age	Level of education
<input type="checkbox"/> M <input type="checkbox"/> F	<input type="checkbox"/> 65-74 <input type="checkbox"/> 75-85	<input type="checkbox"/> Low (Without studies, Primary School) <input type="checkbox"/> Medium (Secondary school, or vocational degree) <input type="checkbox"/> High (University, Master or PhD degree)
Questions		
1. Do you regularly take 5 or more medications per day?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Have you recently lost weight such that your clothing has become looser?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3. Your physical state made you walking less during the last year?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
4. Have you been evaluated by your GP during the last year?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5. Have you fallen 1 or more times during the last year?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
6. Have you experienced memory decline during the last year?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
7. Do you feel lonely most of the time?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
8. In case of need, can you count on someone close to you?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
9. Have you had any financial difficulties in facing dental care and health care costs during the last year?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

flow chart



pathways

Request GP visit	<input type="checkbox"/>
Request Specialist-Geriatrician evaluation	<input type="checkbox"/>
Diagnostic Evaluation	<input type="checkbox"/>
Social Support	transportation for social activity/services, Nutritional Support, economic support, leisure and community and social activities
Proactive & Preventive Interventions	<input type="checkbox"/>
Physical Exercise	<input type="checkbox"/>
Psychological and/or Cognitive support	<input type="checkbox"/>
Other Pathways	<input type="checkbox"/>
Relevant but not available	<input type="checkbox"/>
Non-relevant	<input type="checkbox"/>



Process of Development and Application of the Sunfrail Tool



1. **Design by a multiprofessional team (Geriatricians, Public Health, Sociologist)**
2. **Selection** of items already present in **other questionnaires**
3. **Translation and back translation** - 5 languages:
Italian, English, French, Polish, Spanish
4. **Verification of the understandability/comprehensibility of the Tool** by professionals/beneficiaries
5. **Verification of the applicability into the current practice**
 - Administration **by professionals** (health, social), **community** actors
 - Medical Geriatric assessment/evaluation
 - Identification of **available - missing** pathways

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



Verification of the Understandability & Comprehensibility of the Sunfrail Tool (Gerontopole)



Professionals

Questions	Understandable		Ambiguous
	Yes	No	Yes
<i>Indicate the total number of answers per question</i>			
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

Beneficiaries

Questions	Understandable		Ambiguous
	Yes	No	Yes
<i>Indicate the total number of answers per question</i>			
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



Sunfrail Tool Preliminary Results



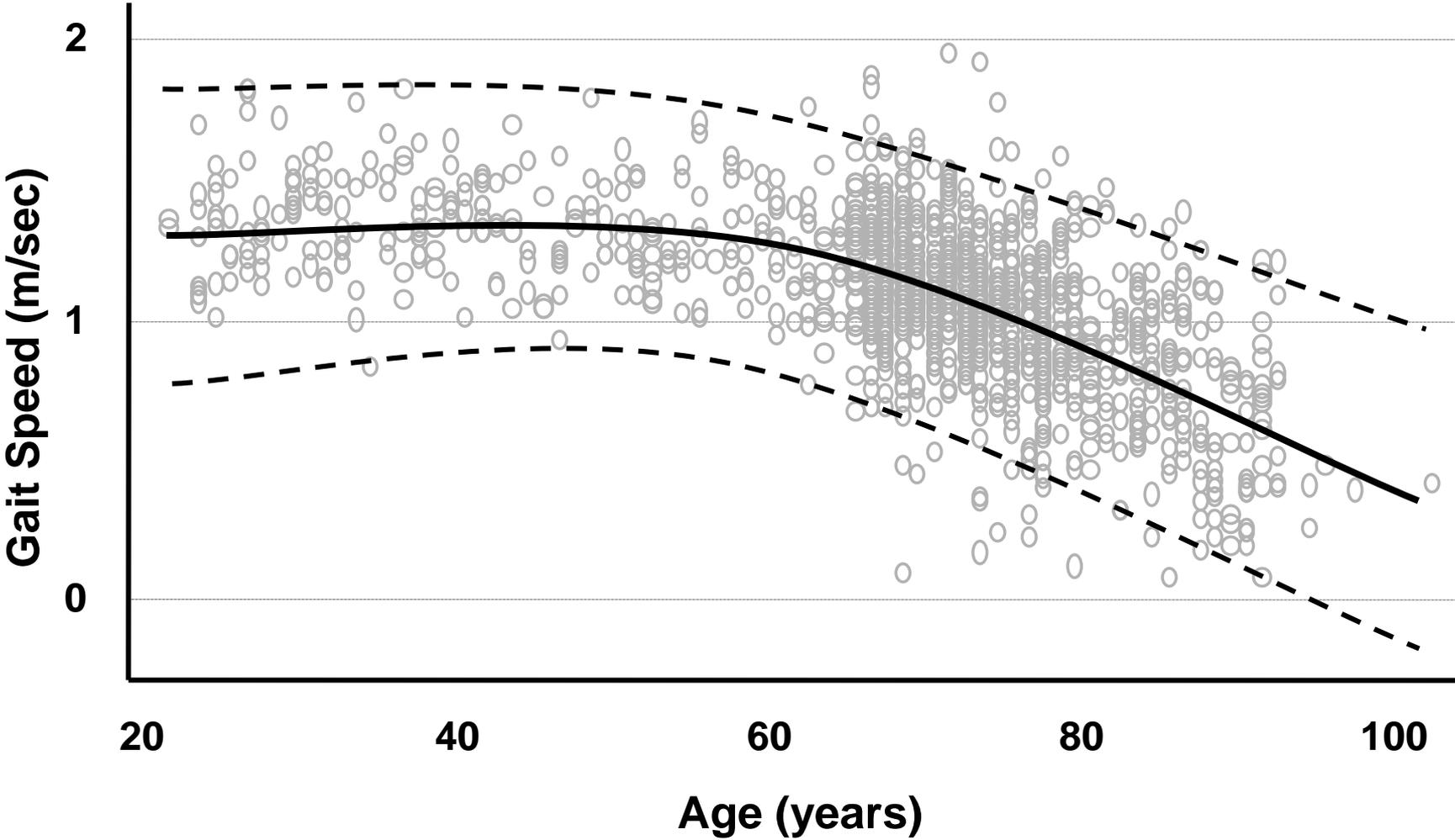
Study Population	N=651	%
Reference Sites		
Deusto University, Spain	105	16,13
Galliera Hospital, Liguria	194	29,8
HSCB, Northern Ireland	127	19,51
Medical University of Lodz, Poland	114	17,51
University of Naples Federico II	111	17,05
<u>Beneficiaries</u>		
Gender		
F	372	57,14
M	279	42,86
Age Class		
65-74	222	34,1
75-85	429	65,9
Education Level		
High (University, Master or PhD degree)	123	18,89
Medium (Secondary school, or vocational degree)	315	48,39
Low (Without studies, Primary School)	213	32,72

Positive answers to the Sunfrail Tool items by settings



Questions	Total n=651	Secondary Care (Outpatient) (n=161)	Primary Care n=363	Community n=127
	%	%	%	%
1- Do you regularly take 5 or more medications per day?	50,54	65,22	42,7	54,33
2- Have you recently lost weight such that your clothing has become looser?	24,58	36,02	21,76	18,11
3- Your physical state made you walking less during the last year?	53,3	64,6	46,83	57,48
4- Have you been evaluated by your GP during the last year? (NO)	12,29	10,56	11,85	15,75
5- Have you fallen 1 or more times during the last year?	30,57	42,86	29,48	18,11
6- Have you experienced memory decline during the last year?	49,62	60,87	55,37	18,9
7- Do you feel lonely most of the time?	26,57	31,06	26,72	20,47
8- In case of need, can you count on someone close to you? (NO)	7,83	8,7	9,37	2,36
9- Have you had any financial difficulties in facing dental care and health care costs during the last year?	14,75	22,98	14,88	3,94

Age-related changes of 4 Meter Preferred Walking speed



Ble & Ferrucci (unpublished)

Gait Speed: what does it mean?

- **If your patient walks slower than 0.8 m/s, he is at risk of:**
 - **Loss of ADL** *(Guralnik, 2000)*
 - **Decline in health status** *(Studenski, 2003)*
 - **Increased risk of nursing home admission, morbidity and mortality** *(Guralnik, 1994; Studenski et al. 2011)*

Guralnik JM et al. Lower extremity function and subsequent disability: consistency across studies, predictive models, and value of gait speed alone compared with the Short Physical Performance Battery. *Journal of Gerontology*. 2000;55A:M221-M231.

Studenski S et al. Physical performance measures in the clinical setting. *J Am Geriatr Soc*. 2002;51:314-322.

Guralnik JM, Winograd CH. Physical performance measures in the assessment of older persons. *Aging Clin Exp Res*. 1994;6:303-305.

Studenski S et al. Gait speed and survival in older adults. *JAMA*. 2011;305:50-58.

Gait Speed as a Measure in Geriatric Assessment in Clinical Settings: A Systematic Review

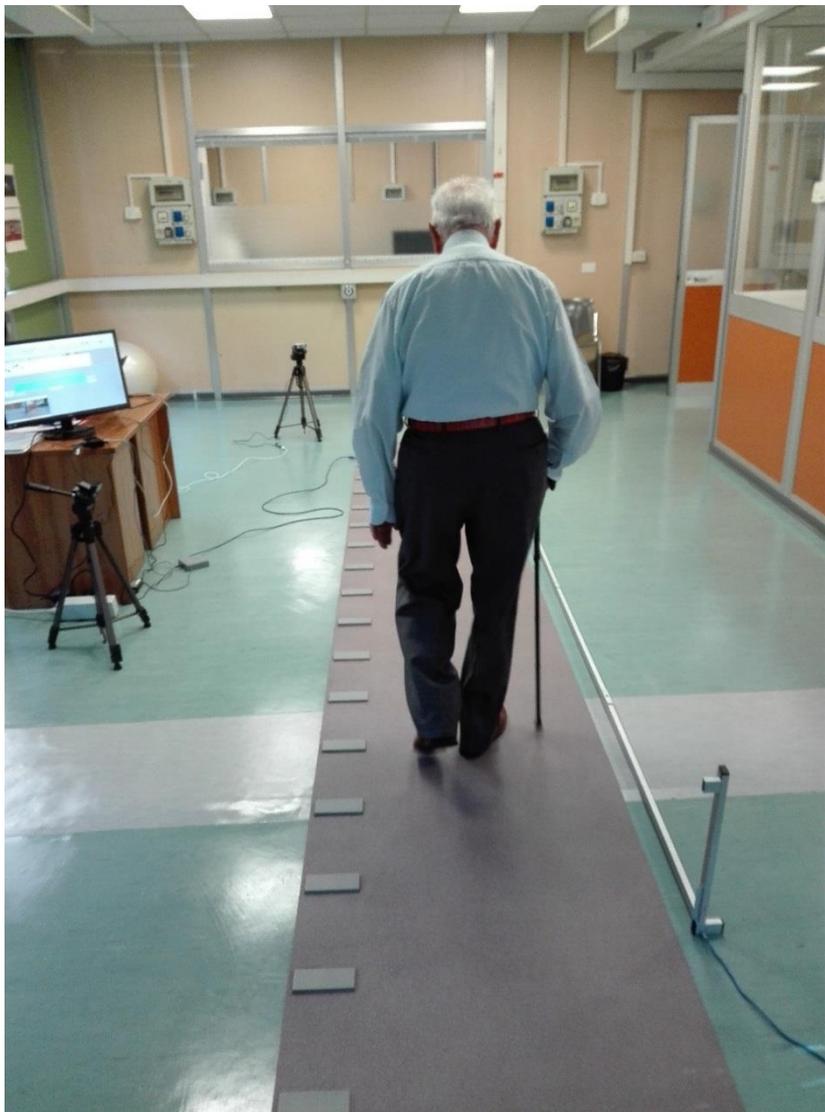
Nancye M. Peel,¹ Suzanne S. Kuys,^{2,3} and Kerenaftali Klein⁴

Table 1. Estimates for Usual and Maximal Pace Gait Speed in Clinical Settings

Pace	Location	Gait Speed		
		Estimates (m/s)	<i>SE</i>	95% CI
Usual	Acute	0.455	0.057	0.344–0.567
	Subacute	0.529	0.046	0.438–0.619
	Ambulatory	0.739	0.046	0.648–0.831
Maximal	Acute	0.749	0.080	0.592–0.905
	Subacute	0.822	0.057	0.711–0.933
	Ambulatory	1.033	0.063	0.910–1.156

Notes: CI = confidence interval; *SE* = standard error.

S.C. 94 years



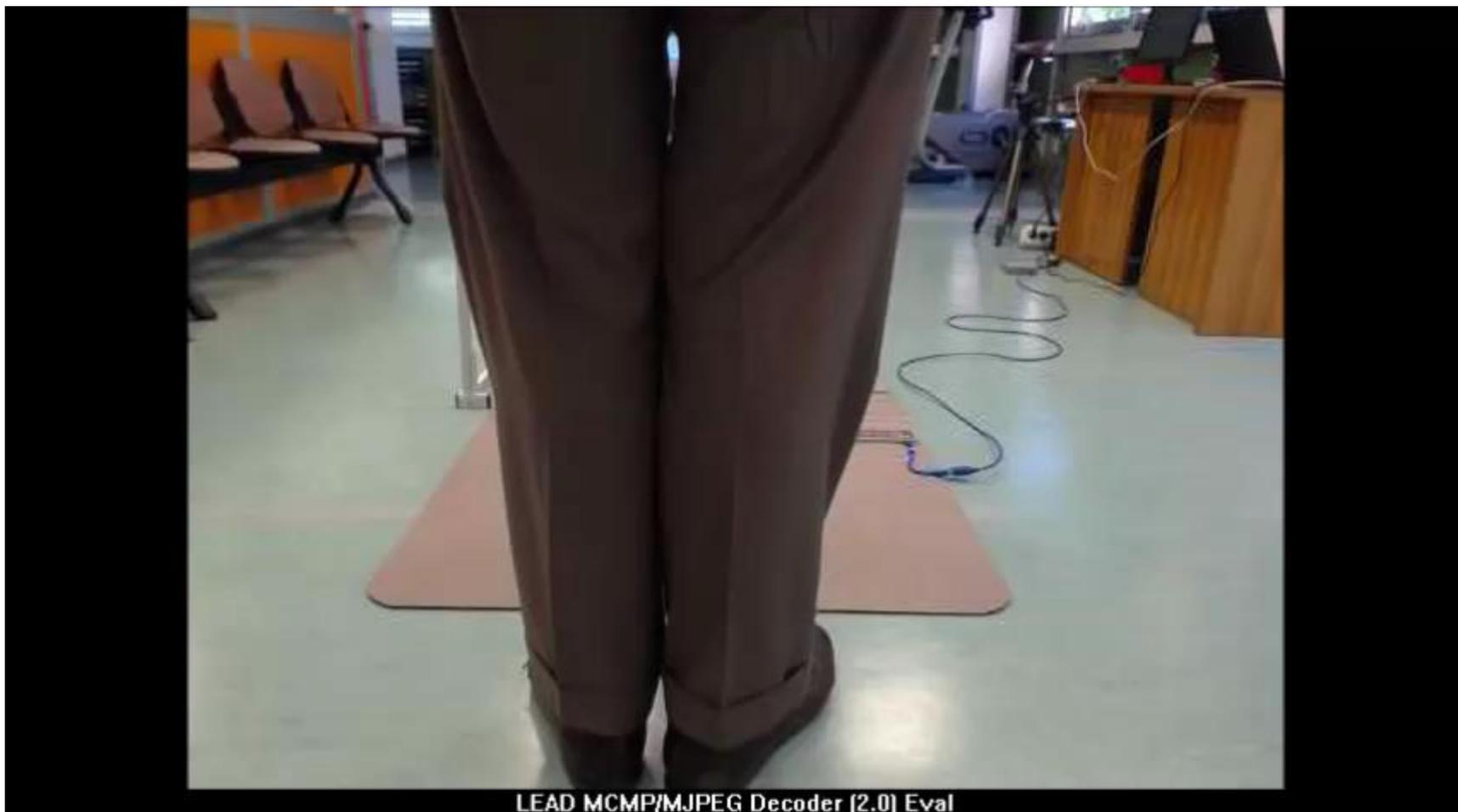
S.C. M 94 years 4 Meter Gait Speed: 0.54 m/sec



S.C. M 94 years 4 Meter Gait Speed: 0.54 m/sec



GR. M 78 years old 4 Meter Gait Speed 1.17 m/sec



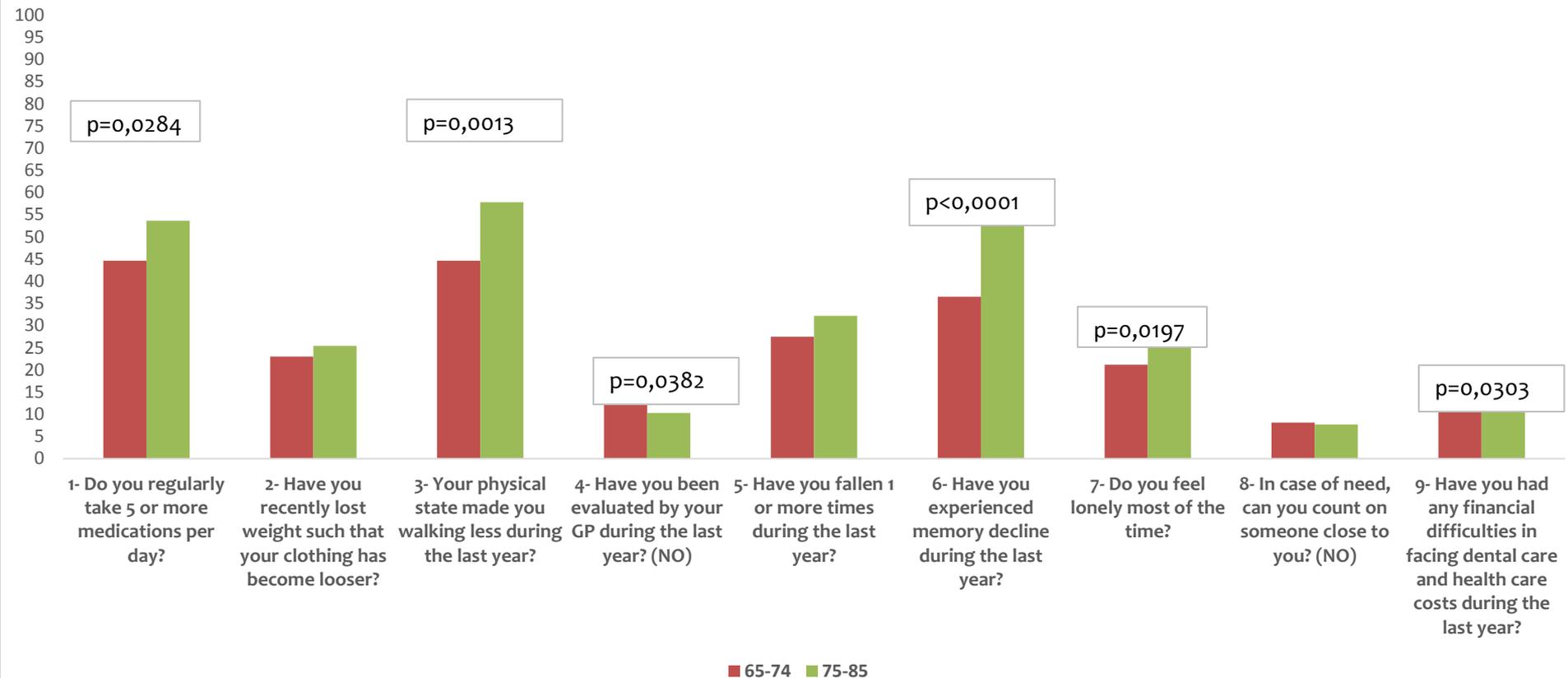
GR. M 78 years old 4 Meter Gait Speed 1.17 m/sec



% Positive answers by age-groups



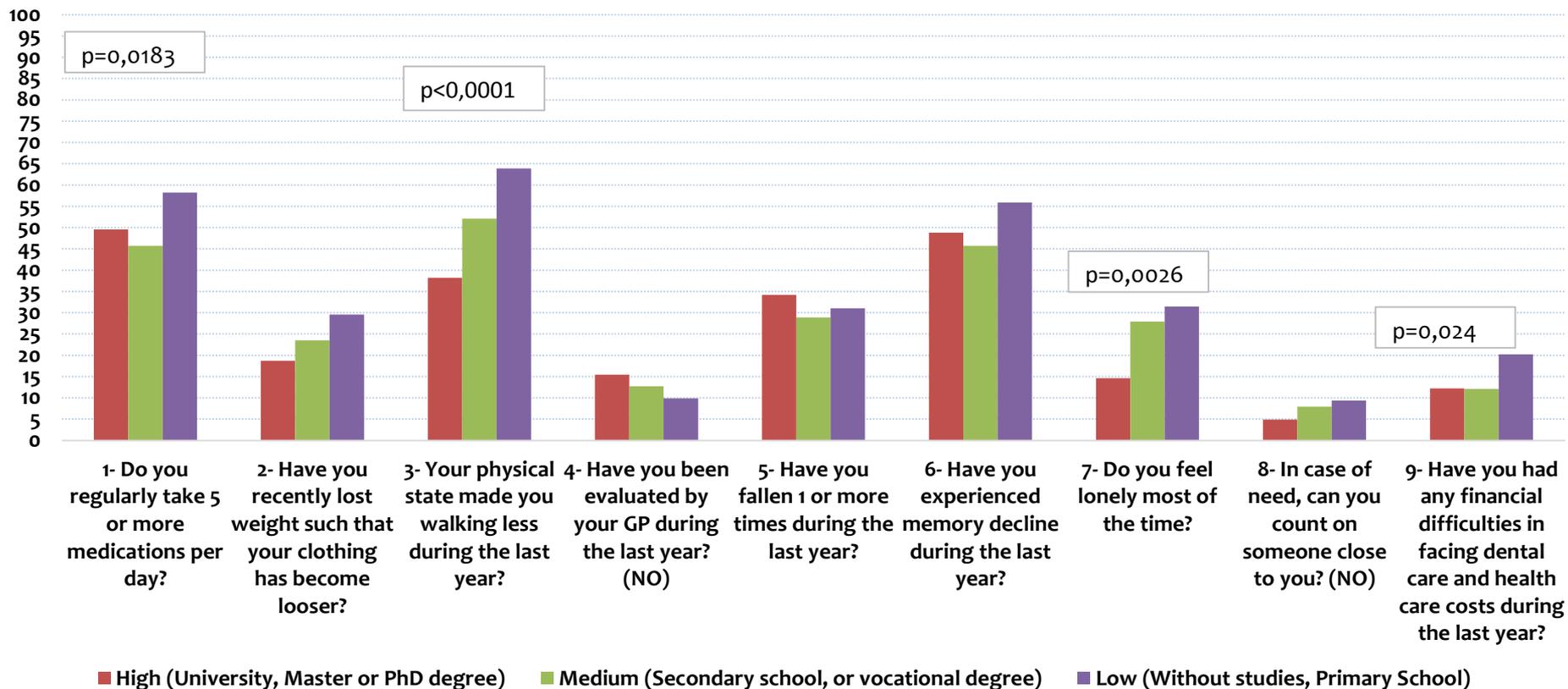
% of positive Items by Age Group



% positive answers by education level



% of Positive Items by Education Level



Positive answers to the Sunfrail Tool items by settings

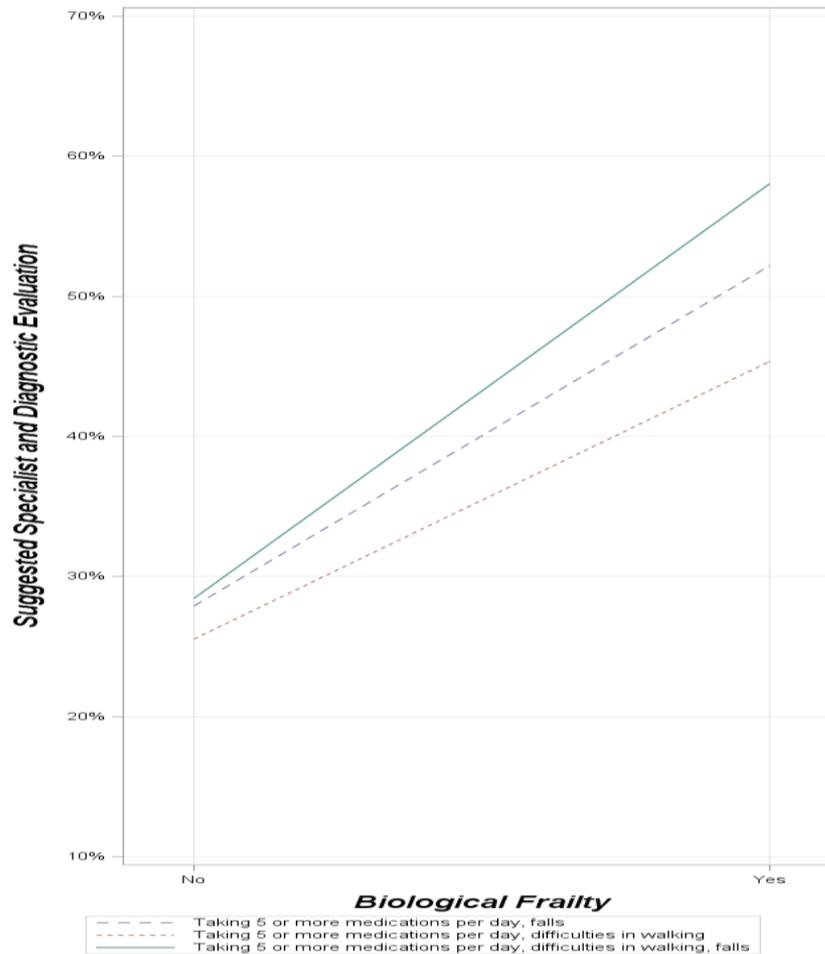


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9- Have you had any financial difficulties in facing dental care and health care costs during the last year?	14,75	22,98	14,88	3,94

positive answers and suggested pathways



Biological Frailty (Q1, Q3, Q5) & Suggested Specialist/Diagnostic Evaluation

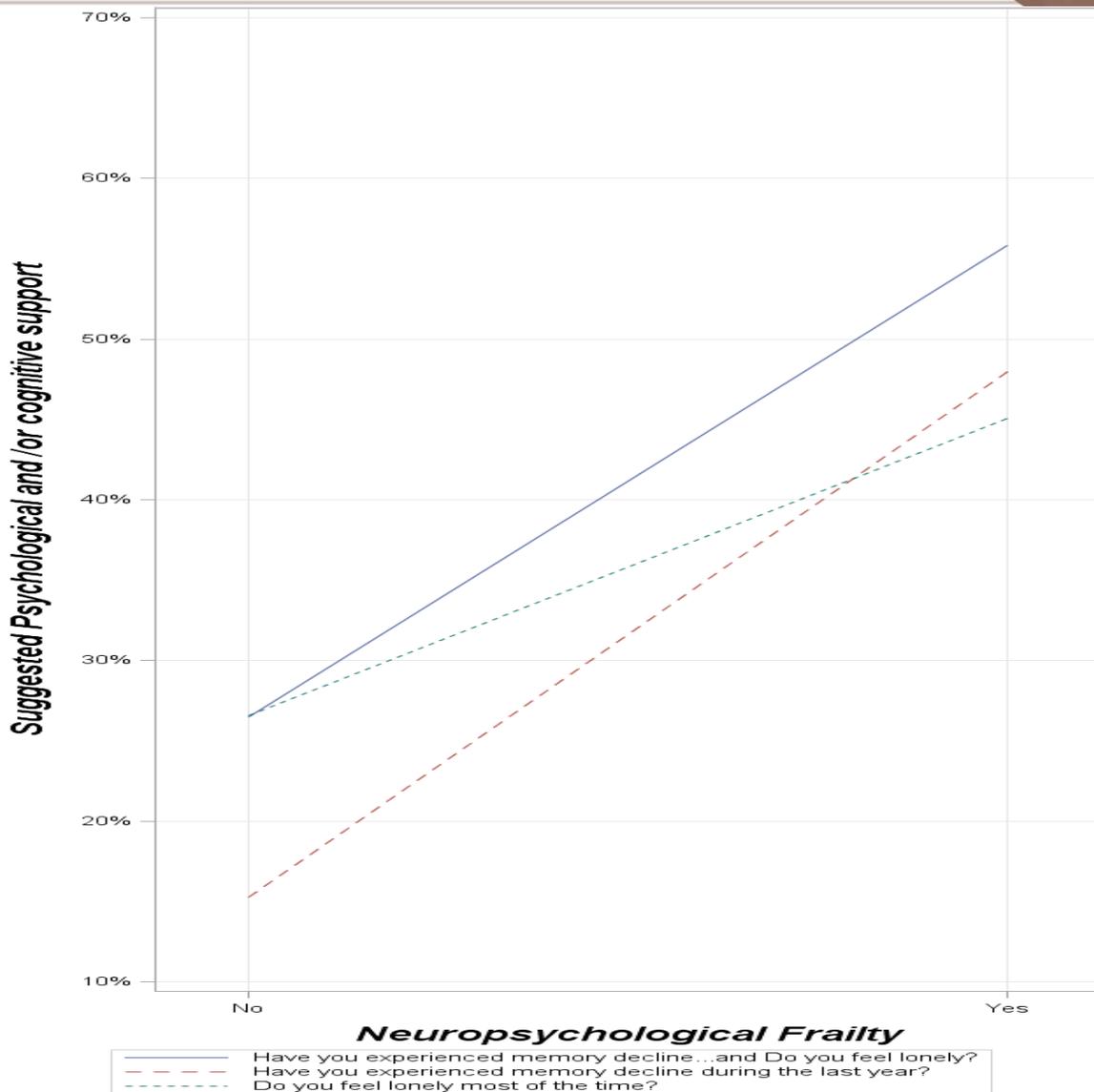


Positive answers to the Sunfrail Tool items by settings



Questions	Total n=651	Secondary Care (Outpatient) (n=161)	Primary Care n=363	Community n=127
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Neuropsychological Frailty (Q6-Q7) & Suggested Psychological/Cognitive Support



Confirmation of the positivity of Sunfrail Tool Results with Specialist Tests

Questions			Naples n=101						Poland n=114						R. Liguria N=194					
			n	media	ds	diff*	ic95%	p-value	n	media	ds	diff*	ic95%	p-value	n	media	ds	diff*	ic95%	p-value
1- Do you regularly take 5 or more medications per day?	n. medication per day	no	33	2,818	1,467			17	3,529	1,772				109	2,954	1,734				
		yes	68	7,529	2,216	4,711	3,886-5,536	<0,0001	35	7,229	2,591	3,699	2,274-5,124	<0,0001	85	7,082	2,117	4,119	3,575-4,664	<0,0001
3- Your physical state made you walking less during last year?	4-m WS (0,8 m./sec.)	no	31	0,821	0,06			28	1,243	0,2047*				98	1,249	0,291				
		yes	70	0,365	0,127	0,456	0,408-0,503	<0,0001	24	1,069	0,281	0,174	0,041-0,307	0,033	94	0,995	0,305	0,254	0,169-0,338	<0,0001
6- Have you experienced memory decline during the last year?	MMSE (<24)	no	34	25,621	4,123			23	29,348	1,071				76	27,79	2,271				
		yes	63	20,656	3,597	4,965	2,531-7,399	0,002	29	28,655	1,518	0,693	-0,069-1,455	0,082	117	26,684	3,458	1,091	0,198-1,984	0,017



D 6.2: Sunfrail Tools for the Identification of Frailty and Multimorbidity



The tool is a friendly instrument, easy to apply; its questions are simple to be understood and encourage a more in-depth dialogue in everyday practice.

The training is proved to be useful and important for both health professionals and community actors, addressing the multi-domain nature of frailty

The tool can help identifying early frailty signs, to be explored with further interventions/assessments paying attention to the cultural and social context of application.

The tool can improve beneficiaries' awareness, encouraging them to move from a "disease" oriented vision to a proactive and preventive approach.

It is important to map the local network of services and community resources, in order to activate sustainable and accessible care pathways.





Thank you for your attention!

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Maria Luisa Moro
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