

ProMIS

PERSSILAA: Personalised ICT Supported Service for Independent Living and Active Ageing

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PERSSILAA

PERsonalised ICT Supported Service for Independent Living and Active Ageing

Servizi personalizzati supportati da tecnologie informatiche per la vita indipendente e l'invecchiamento attivo



Stakeholders Meeting
Convegno dedicato ai "soggetti interessati"

Miglio d'Oro Park Hotel
Ercolano, 27 Marzo 2014

Need for older adults to actively participate at the maintenance of wellbeing



Need for training in the use of information technologies



Need for Health training



To allow the use of ICT supported services

PERSSILAA's CORE STRUCTURE

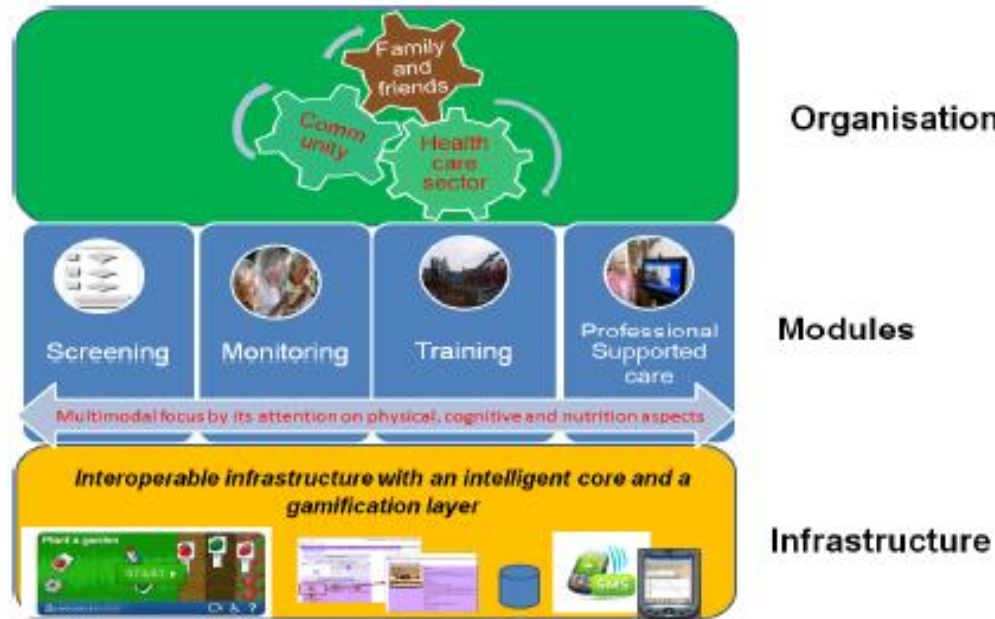


Figure 3: PERSSILAA concept

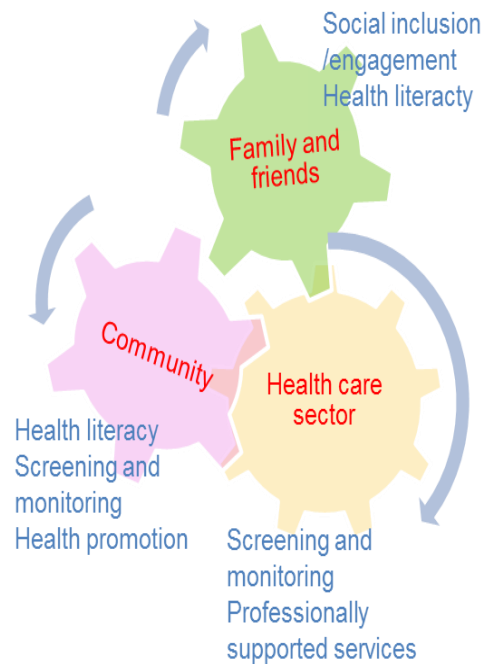
PERSSILAA aims to develop and validate a new service model to screen for, and prevent **FRAILITY** and **FUNCTIONAL DECLINE** in community dwelling adults.

We will focus on the

- cognitive,
- nutritional
- physical domain.

PERSSILAA service model uses **INTERNET TECHNOLOGY** whenever possible during the screening and prevention of frailty and functional decline.

PERSSILAA Campania: an example of ICT-driven societal innovation addressing frailty in older adults



**ADOPTION
&
EMPOWERMENT**

Education Package

Older adults
Empowerment

ICT
Literacy

Health and
Nutrition Literacy

- Focusing on local communities where older adults refer: the churches
- Screening older adults for nutrition, cognitive functioning, physical functioning
- Collecting data on interoperable platform
- Carrying out interventions on cognitive, physical and nutritional domains
- Integrating face-to-face and ICT supported services
- Training and literacy on ICT and health domains to empower citizens

PERSSILAA Campania Interventions

Four Communities



Confalone - Napoli



Pilar - Ercolano



Materdei - Napoli



Rogazionisti - Napoli

- Health & ICT Literacy
- Primary Nutritional Interventions & website
- Physical activity
- Neuropersonal training



PERSSILAA ASSESSMENT



PERSSILAA SERVICES



Health literacy training
ICT training



Physical activity
Cognitive training
Nutritional interventions

Contextual factors

Integration of
Face-to-Face
&
ICT-supported

General features of Campania population

Screened subjects: n=236

Participating subjects: n=154

Age (years) : 72.0 ± 5.7

Sex (% M): 13.7

BMI: 28.8 ± 4.4

(n=60) Systolic/diastolic blood pressure (mmHg): $141 \pm 14 / 82 \pm 9$

(n=60) Waist circumference (cm): 97 ± 12

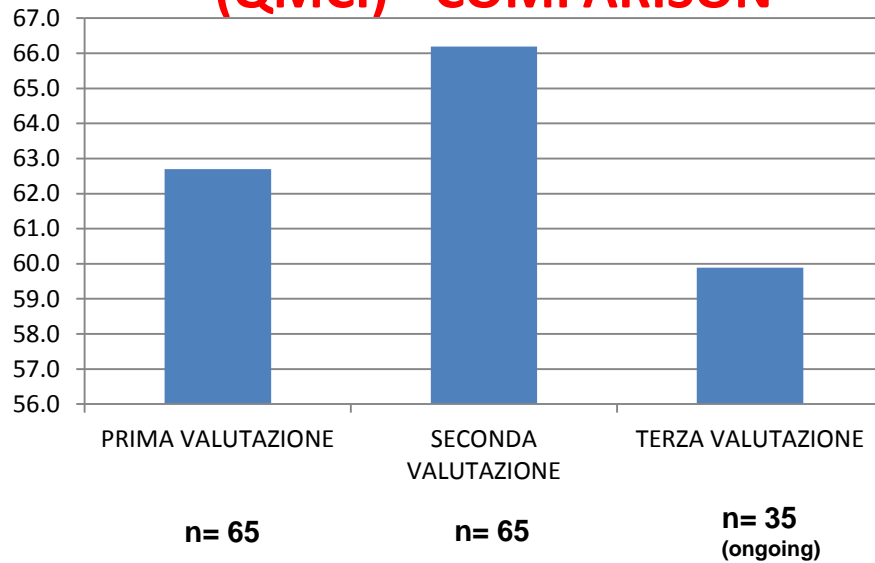
(n=60) Hip circumference (cm): 108 ± 9

(n=60) Waist/Hip ratio: 0.9 ± 0.1

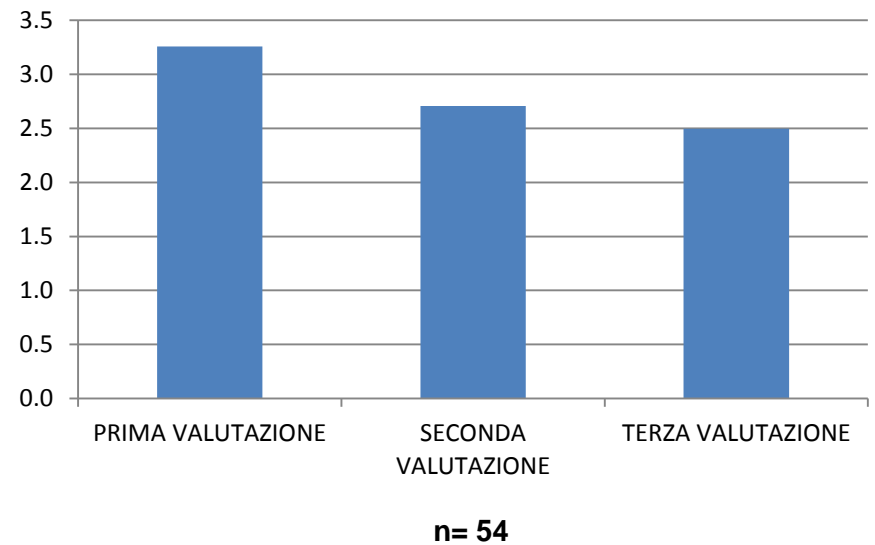
media \pm standard deviation

Results: Cognitive decline

Quick Mild Cognitive Impairment (QMCI) - COMPARISON

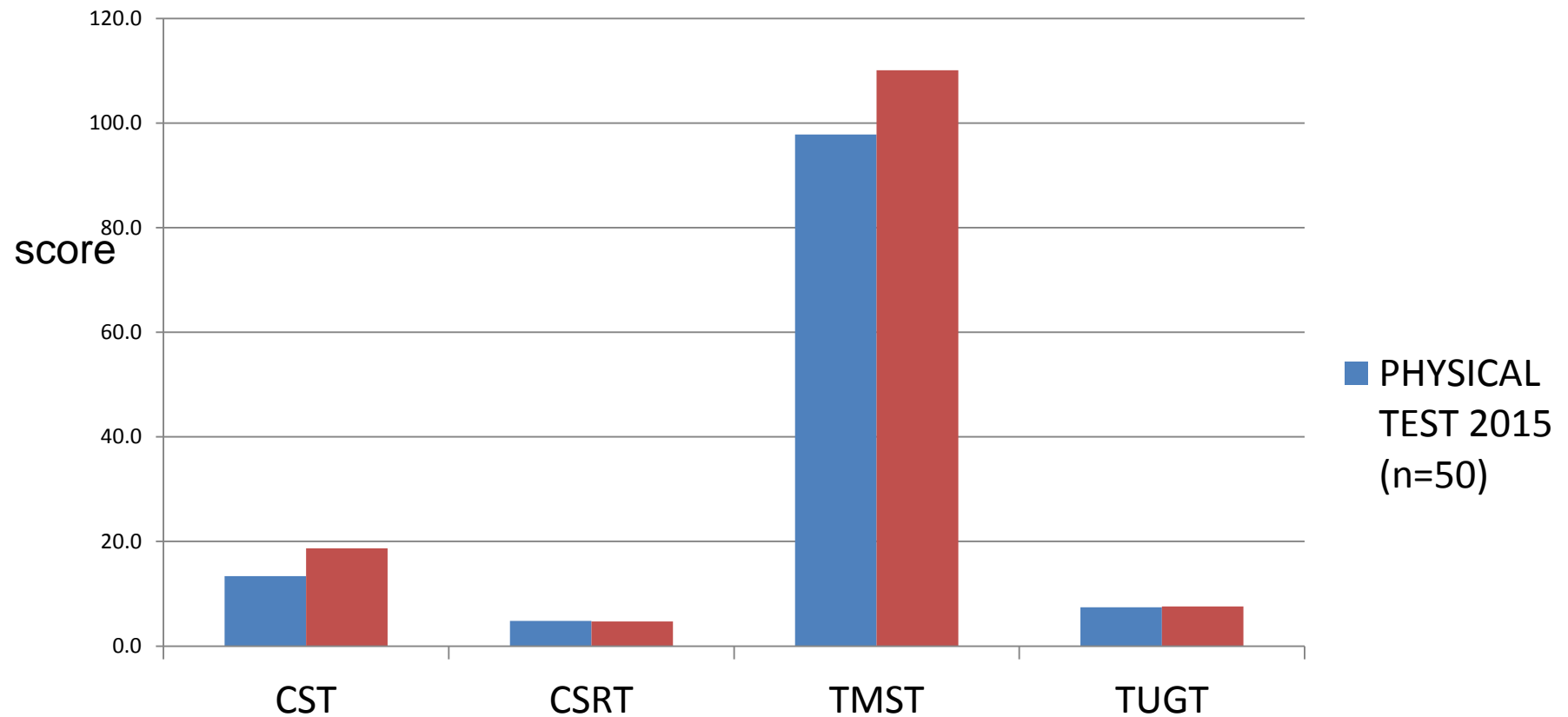


AD-8 dementia screening - COMPARISON



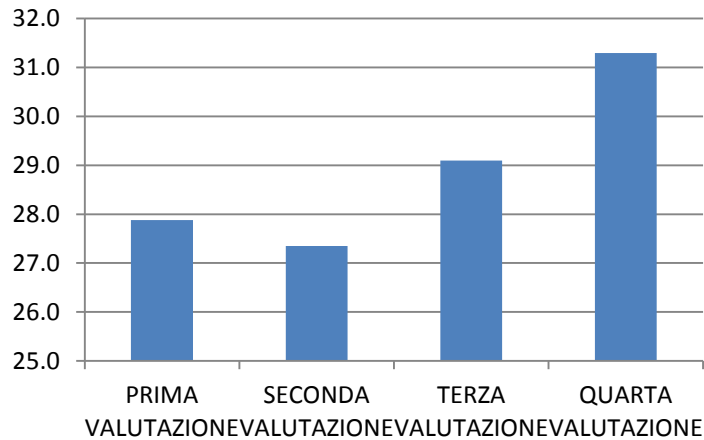
Results: Physical tests

TABELLA DESCRITTIVA	PRIMA VALUTAZIONE (n=81)	SECONDA VALUTAZIONE (n=50)
CST Chair Stand Test (Numero di alzate dalla sedia)	13,4 ± 3,6	18,7 ± 6,0
CSRT Chair sit and reach Test (Distanza in cm)	4,8 ± 4,3	4,7 ± 4,3
TMST Two minutes step Test (Numero di sollevamenti delle ginocchia)	97,8 ± 36,4	110,,1 ± 41,1
TUGT Timed up and go Test1 (Secondi di percorrenza (media di 3 test))	7,3 ± 1,4	7,6 ± 1,4



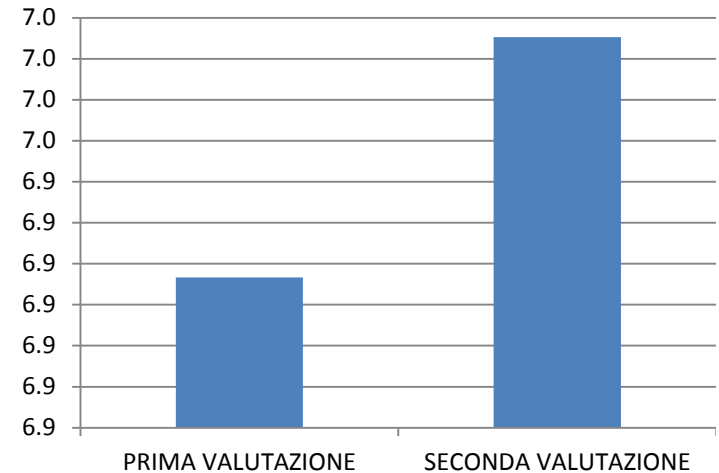
Results: Quality of life

SF-12 - COMPARISON



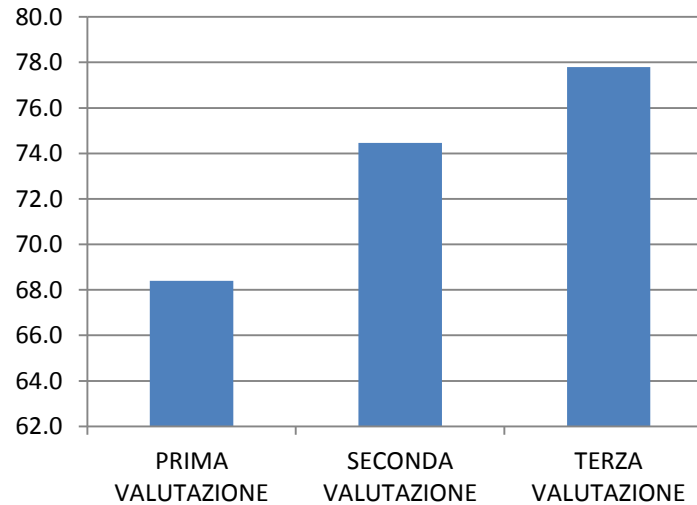
n= 36

RAND-36 – COMPARISON



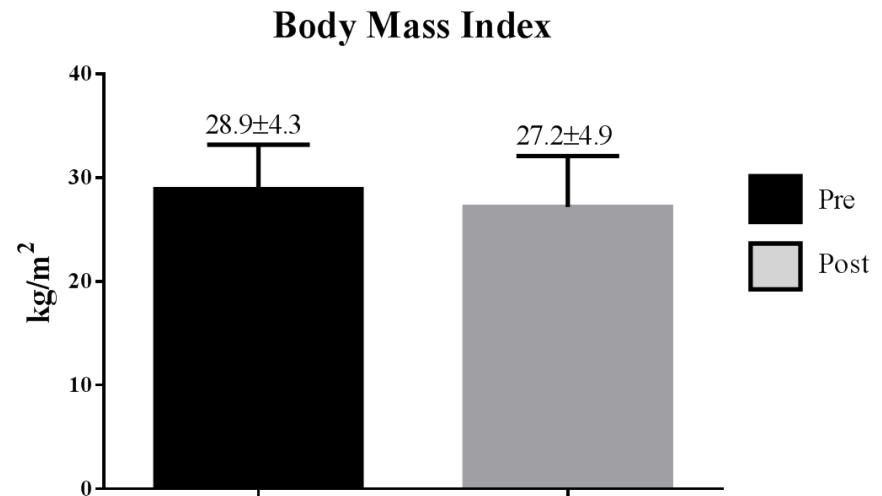
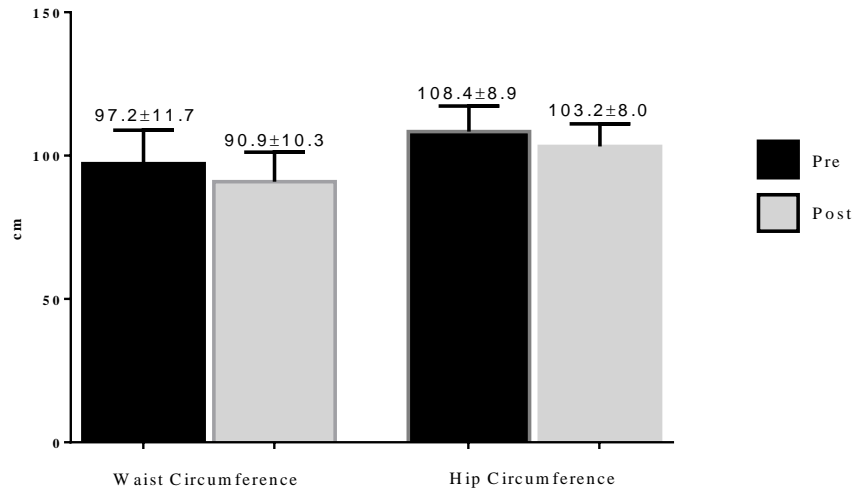
n= 33

EQ-5D - COMPARISON



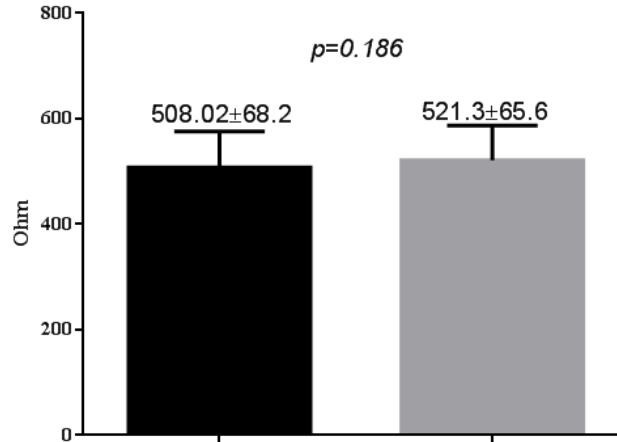
n= 42

Results: Anthropometric measurements

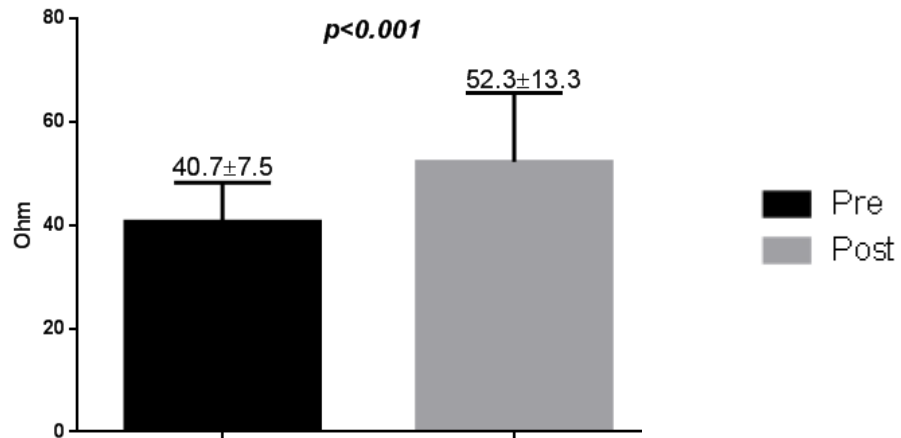


Results: Bioelectrical Impedance Analysis (BIA)

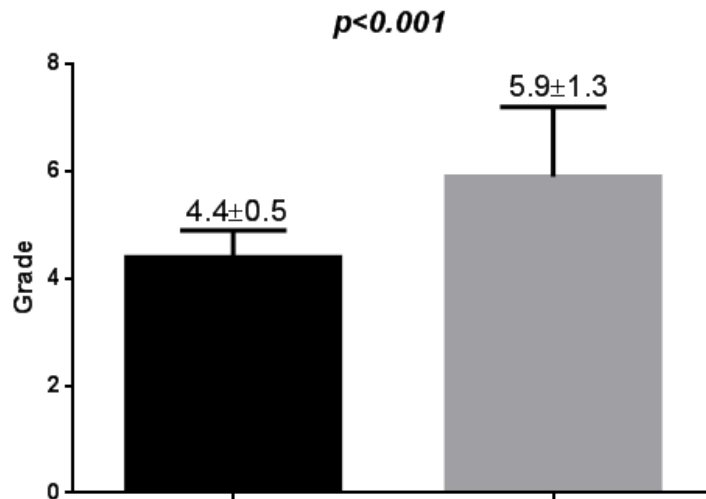
Resistance



Reactance



Phase Angle (°)



N = 40

Phase Angle

Age	Cut-off
< 30	6 - 8
< 50	5,5 - 6
< 70	5 - 5,6

Results: CALCANEAL ULTRASOUND

	Normal	Osteoporosis	Osteopenia
Numero valutazioni	36	25	60
Normalie n (%)	31 (86)	16 (64)	53 (88)
Alterato, n (%)	5 (14)	9 (36)	7 (12)

Adherence of Mediterranean Diet

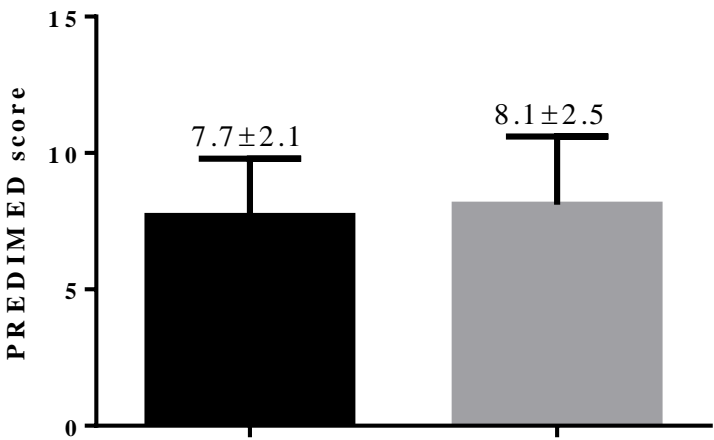
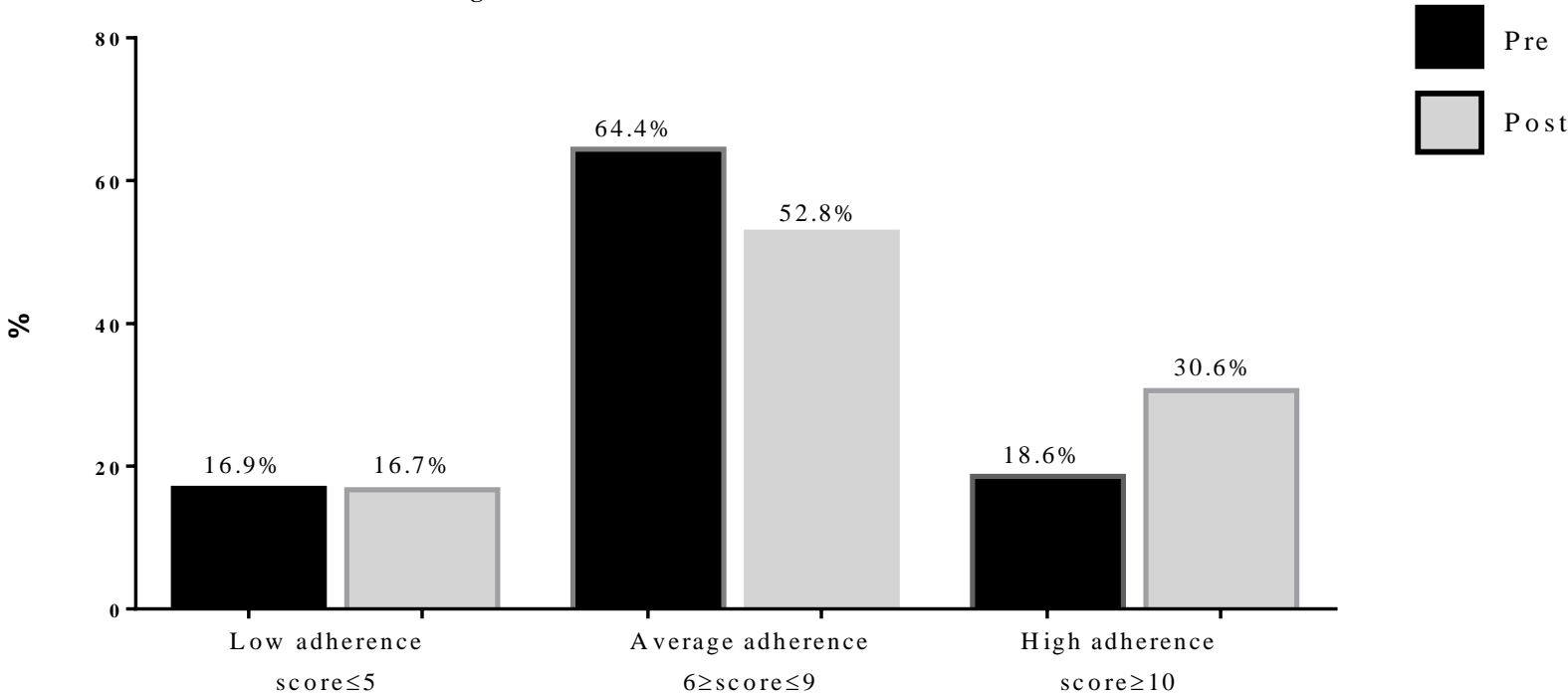


Table 1. Validated 14-item Questionnaire of Mediterranean diet adherence.

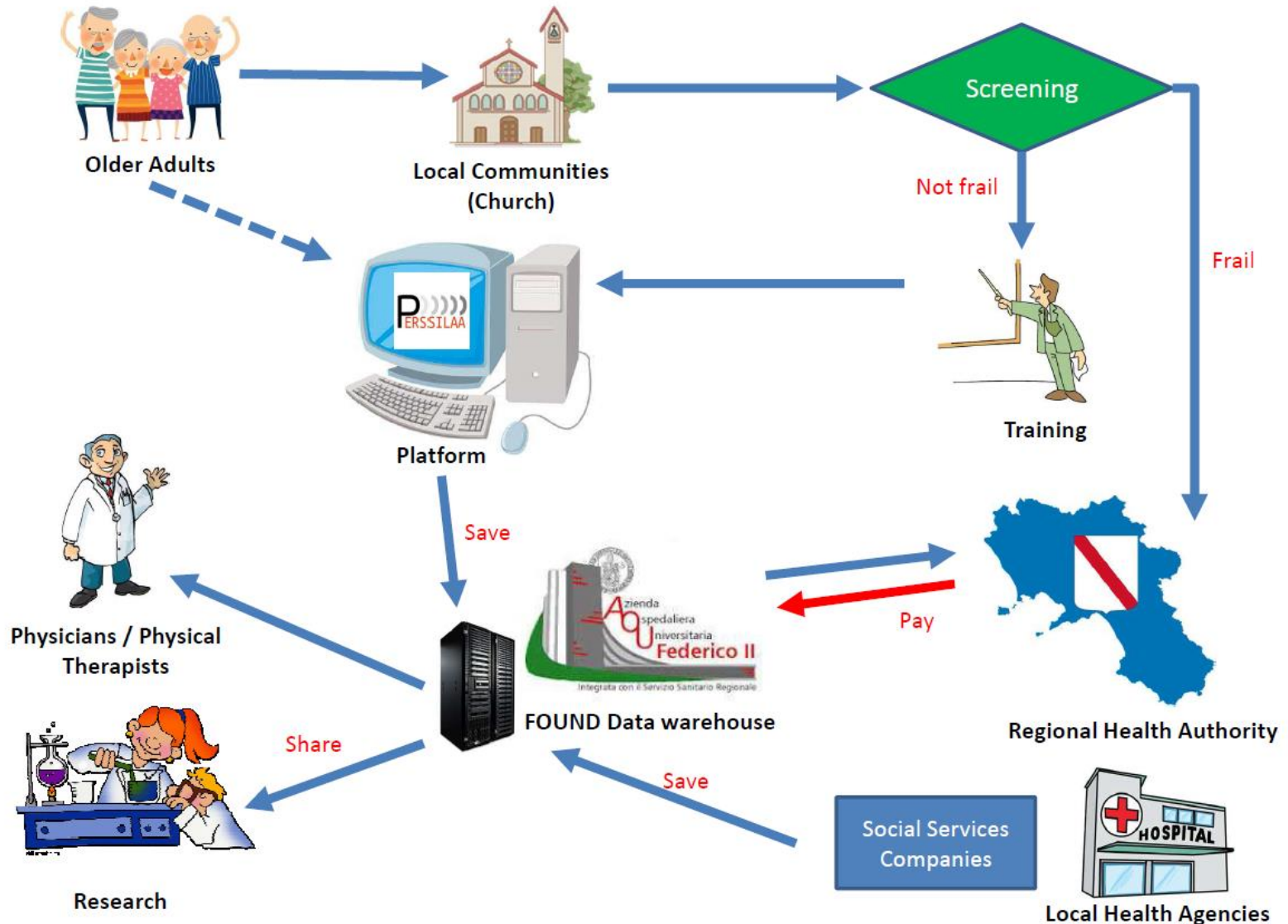
Questions	Criteria for 1 point
1. Do you use olive oil as main culinary fat?	Yes
2. How much olive oil do you consume in a given day (including oil used for frying, salads, out-of-house meals, etc.)?	≥4 tbsp
3. How many vegetable servings do you consume per day? (1 serving : 200 g [consider side dishes as half a serving])	≥2 (≥1 portion raw or as a salad)
4. How many fruit units (including natural fruit juices) do you consume per day?	≥3
5. How many servings of red meat, hamburger, or meat products (ham, sausage, etc.) do you consume per day? (1 serving: 100–150 g)	<1
6. How many servings of butter, margarine, or cream do you consume per day? (1 serving: 12 g)	<1
7. How many sweet or carbonated beverages do you drink per day?	<1
8. How much wine do you drink per week?	≥7 glasses
9. How many servings of legumes do you consume per week? (1 serving : 150 g)	≥3
10. How many servings of fish or shellfish do you consume per week? (1 serving 100–150 g of fish or 4–5 units or 200 g of shellfish)	≥3
11. How many times per week do you consume commercial sweets or pastries (not homemade), such as cakes, cookies, biscuits, or custard?	<3
12. How many servings of nuts (including peanuts) do you consume per week? (1 serving 30 g)	≥3
13. Do you preferentially consume chicken, turkey, or rabbit meat instead of veal, pork, hamburger, or sausage?	Yes
14. How many times per week do you consume vegetables, pasta, rice, or other dishes seasoned with sofrito (sauce made with tomato and onion, leek, or garlic and simmered with olive oil)?	≥2

Miguel Angel Martínez-González et al. A 14-Item Mediterranean Diet Assessment Tool and Obesity Indexes among High-Risk Subjects: The PREDIMED Trial. PLoS One. 2012

Categories of adherence to Mediterranean Diet



Campania Implementation Strategy





Grazie per l'attenzione!

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