



Pre-validation Experience and Updates on Deployment Tuscan Site

UP- Umanapersone

Cabina di regia Cantiere digitalizzazione e tecnologie assistive

The network involved in the prevalidation- Phase 2:

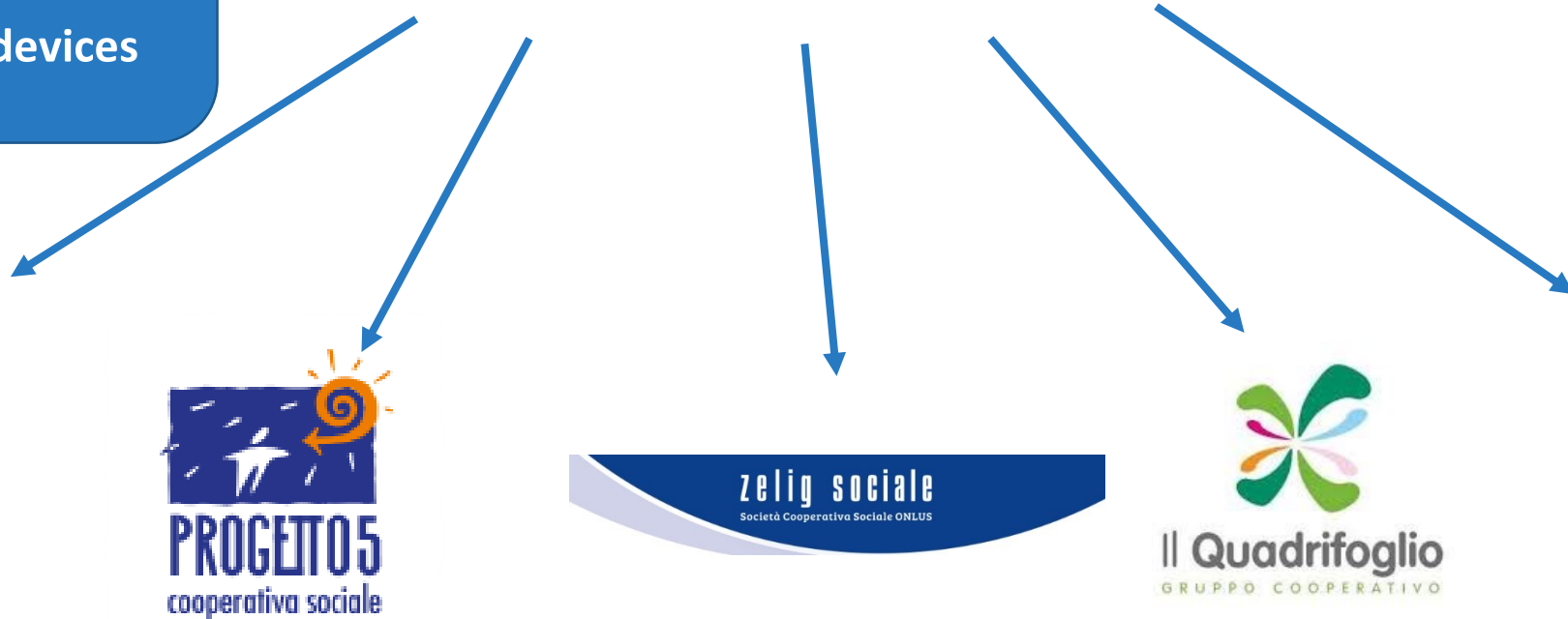
UP:

- Procurement
- First configuration of the devices
- Training on the «devices management»



**UMANA
PERSONE**

IMPRESA SOCIALE RICERCA E SVILUPPO



USCITA DI SICUREZZA



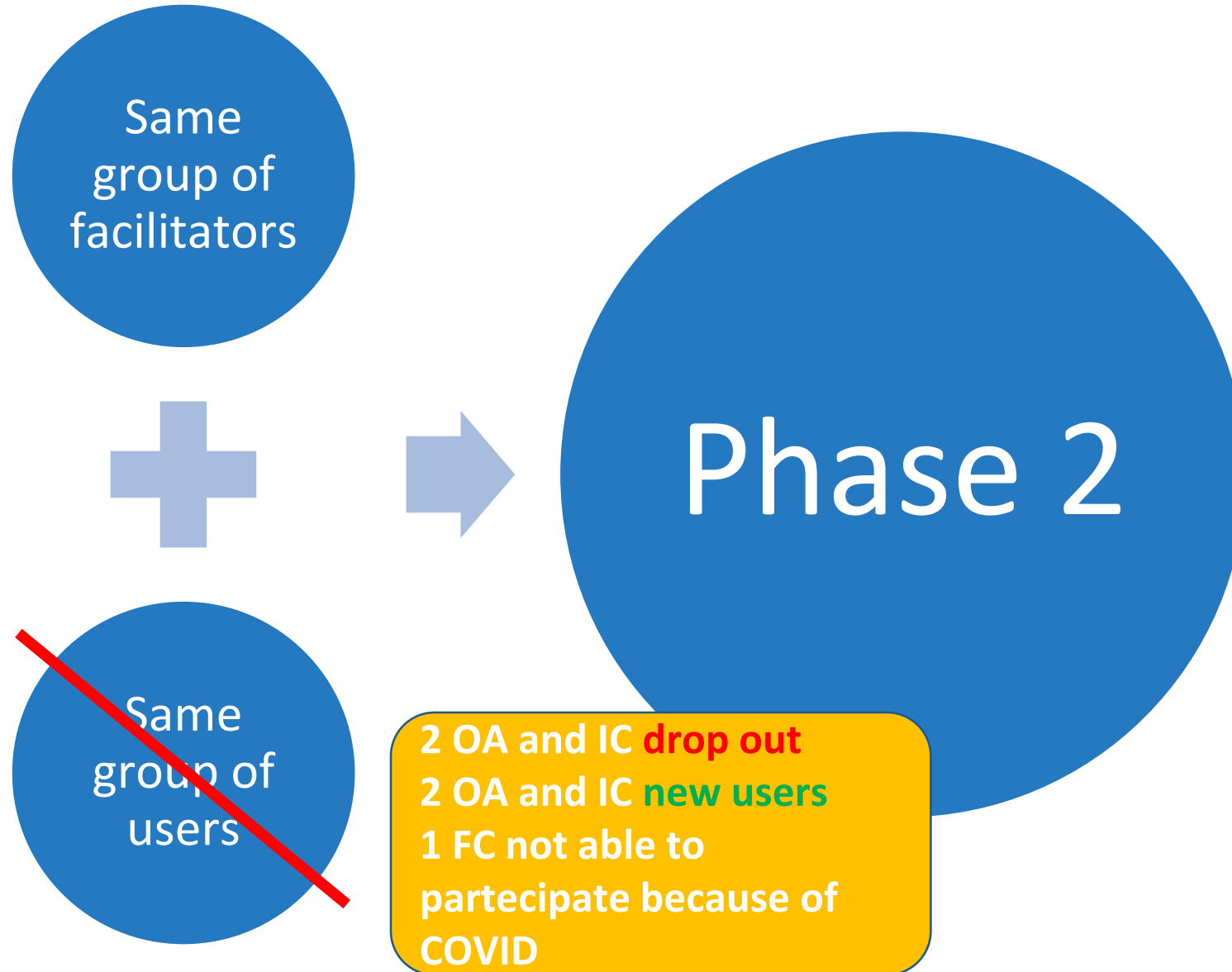
Cooperatives:
Recruitment
installation of devices at home
Users training

Phase 2- A brief timeline



Participants socio-demographic data collected and tests for the local KPI administered

Recruitments in Phase 2: Intentions vs reality



Prevalidation: where?



Phase 1: on the premises
of the cooperatives



Phase 2: At home

Older Adults

General

Quality of life

Acceptability and Usability

Data collected

Sociodemographic data

Physical wellbeing and quality of life levels

Mobility

Cognitive abilities level

Psychological and behavioural symptoms

Social aspects

Resiliency level

Caregiver constraint

Loneliness level

Acceptability of technology

Usability of technology

General opinion about the experience

Difficulty level of use

Informal/Formal Caregivers

General

Quality of life

Acceptability and Usability

Data collected

Sociodemographic data

Caregiver constraint

Acceptability of technology

Usability of technology

General opinion about the experience

Difficulty level of use

+ Global KPIs:

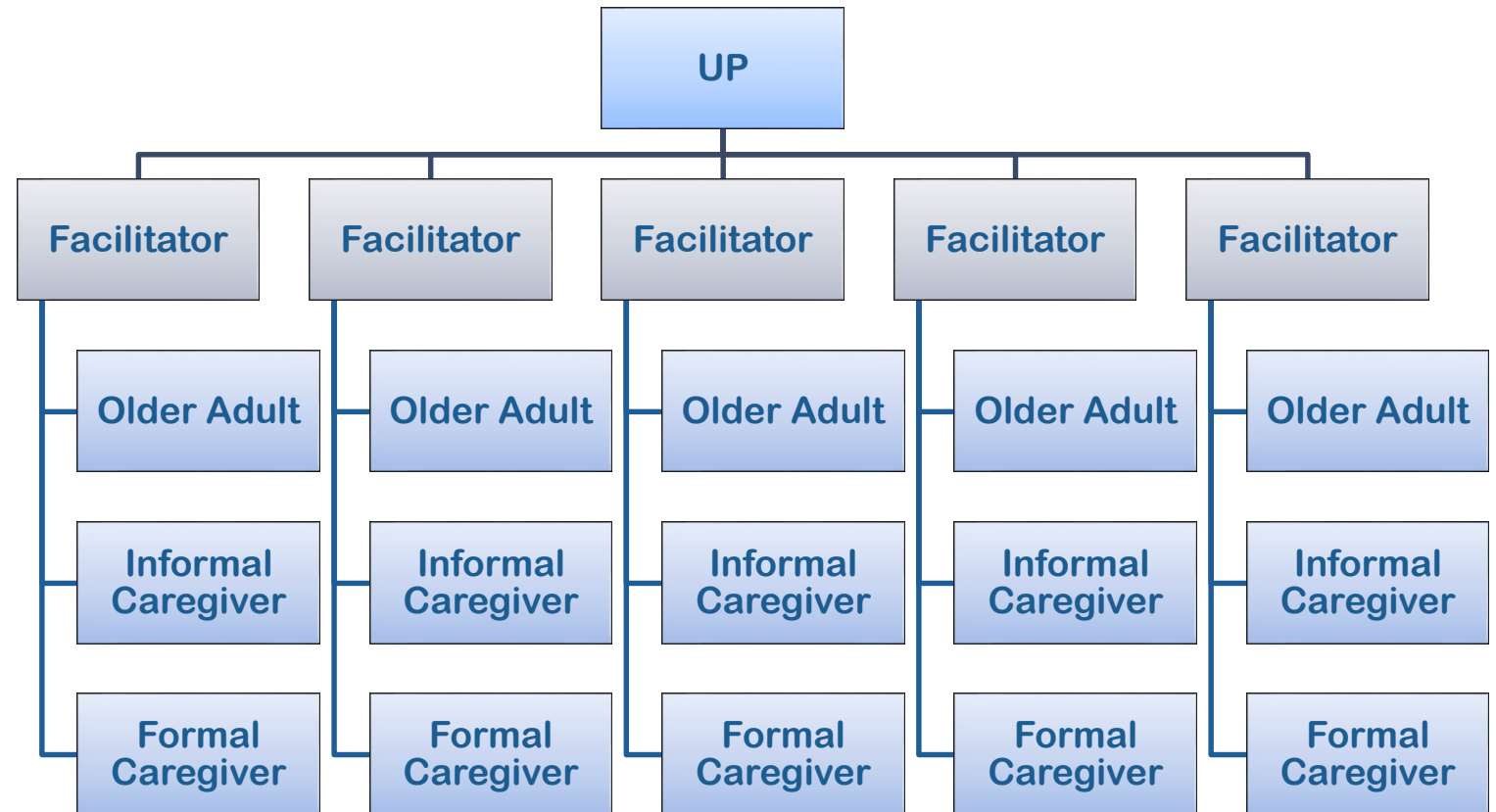
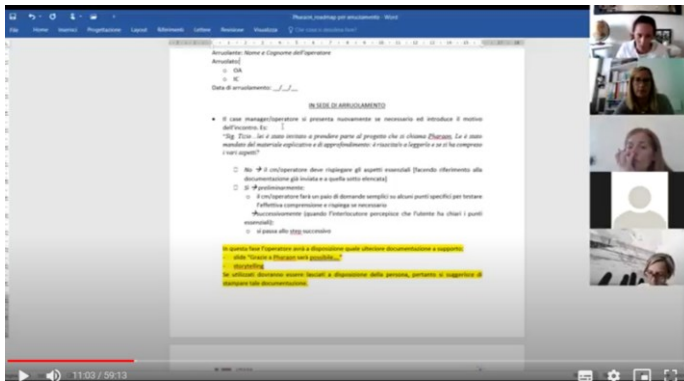
- UCLA Loneliness test

- Rockwood Frailty test

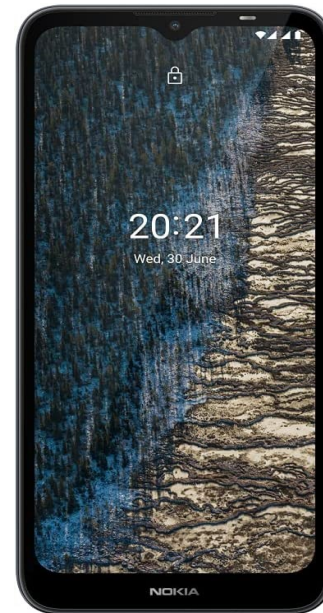
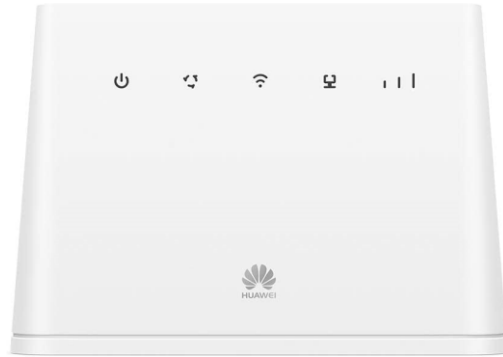
+ Technostress

In the Tuscan pilot site we privileged a training “on-the-job”. This was possible because facilitators have a direct relationship with users which includes home visits.

We adopted a
cascade training method



The devices



Socialization and Stimulation Service

SENTAB TV



SENTAB TV

Remote socio- educational intervention
Once every 2 weeks



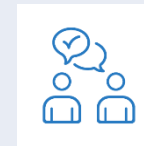
Actions to encourage the creation of
virtual communities



Getting in touch with family and caregivers



Cognitive games (Words, Picture, Sudoku)



Open Call

Cognitive Stimulation and coaching

Monitoring Service

Max Health Band Smartwatch



Shelly Sensors?



Evaluation	Next move
MaxHealthBand watch is not adequate. Sensor data is not reliable.	FitBit series devices under evaluation, both under the technical point of view (integration) and privacy aspects
Shelly Sensor (PIR and H&T) not offering UI to the OA	Evaluating the replacement with Air Quality sensor (Qingping) with User Interface, more parameters, no battery needed
Discovery Dashboard	Collaborating in better defining the user stories and be aligned on the charts to be showed.



OHMNI ROBOT

At the moment there is only one direction for call:
From a device (PC, tablet, smartphone) to Ohmni Robot

Older adult and formal caregiver (nurse, educator, social assistant...) can schedule recurring virtual appointments with Ohmni Robot.

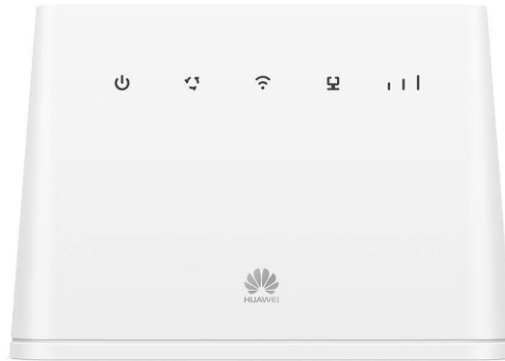
Evaluating the possibility for OA to use the robot to notify the caregiver a request of call.

Refinement of user story.

Needed for all the services:

Internet @Home

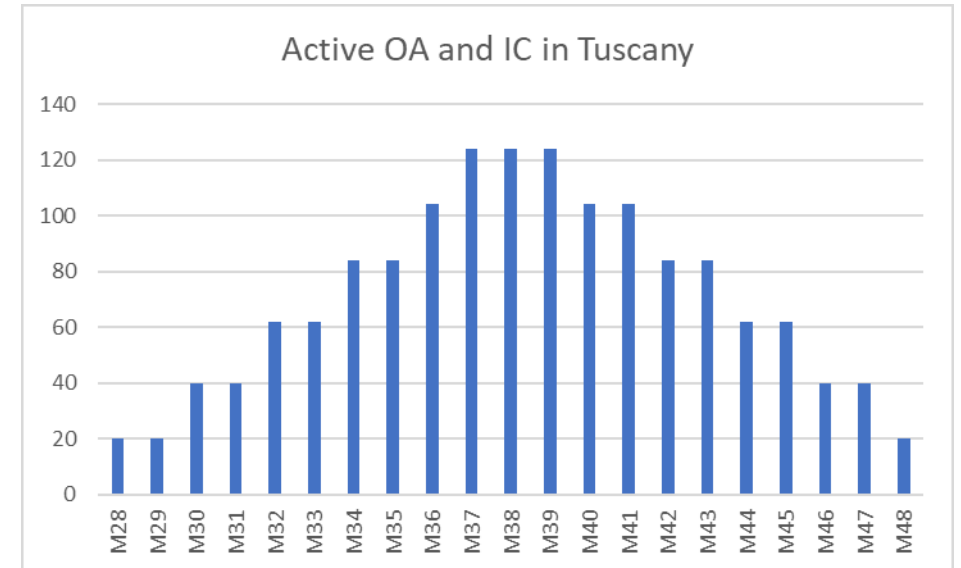
Not easy to pre-estimate how many
SIM cards and routers needed



Huawei Router + SIM

DEPLOYMENT Phase: Planned roadmap

Tuscany		OLDER ADULT			INFORMAL			FORMAL		
Group	Service	Total	Interven	Control	Total	Interven	Control	Total	Interven	Control
G1A*	SOC	20	10	10	20	10	10	14		
G1B*	MONIT	20	10	10	20	10	10	0	7	7
G2A	SOC	22	11	11	22	11	11	16		
G2B	MONIT	22	11	11	22	11	11	0	8	8
G3A	STIM Cogni	20	10	10	20	10	10	12		
G3B	STIM Cogni	20	10	10	20	10	10	0	6	6
	Total	124	62	62	124	62	62	42	21	21



	2022										2023												
	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov		
	M28	M29	M30	M31	M32	M33	M34	M35	M36	M37	M38	M39	M40	M41	M42	M43	M44	M45	M46	M47	M48		
G1A	START					INTER						END											
G1B			START					INTER						END									
G2A					START					INTER						END							
G2B							START					INTER						END					
G3A									START					INTER						END			
G3B										START					INTER						END		

Phases	Control Group	Intervention Group	Service
From prevalidation	-	5 OA, 5 IC, 5 FC	Socialization & Stimulation
By the end of March '22 (deployment, G1A)	+10, from home care services	+5 OA, +5 IC, +2 FC, pre-recruited, waiting for Sentab TV boxes	
May '22 G1B	+10, from home care services	+10 OA, +10 IC, +5 FC	Monitoring

Next Steps



Evaluation framework: timeline

GLOBAL KPIS



EQ-5D-3L
CarerQoL
UCLA
Training Evaluation (TEI
17-item)



EQ-5D-3L
CarerQoL
UCLA
SUS



EQ-5D-3L
CarerQoL
UCLA
SUS

RECRUITMENT

T0 - Baseline

T3

T6 -
Intermediate

T9

T12 – Final

LOCAL KPIS

Periodic socio-educational
interventions



Periodic posts of content on
SENTAB platform



Cognitive (OA)
Technology (SUS,AMQ,
Technostress)













Technology (SUS,AMQ,
Technostress)



Cognitive (OA)
Technology (SUS,AMQ,
Technostress UEQ)

- **Co-controllerships** on data treatment between tech partners and pilot site (UP)
- Challenge both from the Ethical perspective and from the Data Protection point of view
- Addressing it with **coordinated clear approach**, sharing and defining together **data flows**
- Least information rule (**minimum data principle**): use only the needed information (while keeping the system usable)
- **Informing** the participants correctly
- FitBit series devices under evaluation
- **First release of DPIA** (only for Fitbit) done

PARTNER	Status		
ENT			
SENTAB			
SENLAB			
ASCORA			
UNIFI			
ORTHOKEY			

Thanks to:



USCITA DI SICUREZZA

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Francesco Monaci



Giovani Valdarno
Società Cooperativa Sociale
SERVIZI SOCIO SANITARI EDUCATIVI
DI ORIENTAMENTO E FORMAZIONE
DAL 1978

Irene Ghezzi

