WP7 <Involving the user: from co-design to piloting>

Some lessons learned from pilot study

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SUMMARY

1. The road: our starting point
2. Who we are?
3. Who are they?
4. What were we to do?
5. How did we do it?
6. What problems did we face?
7. What was participants' experience?
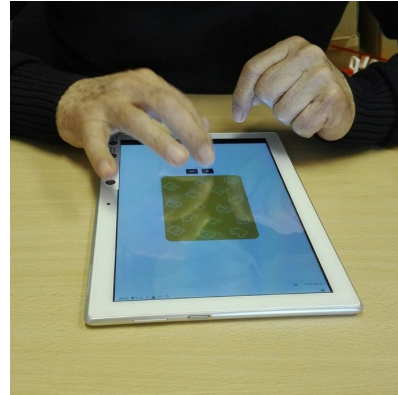8. What did we learn?

The Road: our starting point

WHO WE ARE?

THANK YOU TO MAKE IT POSSIBLE !

ACTIVE

WHO PARTICIPATE

DIVERSE DIGITAL SKILLS

AUTONOMOUS

SOCIAL NETWORK

USERS

HEALTHY HABITS

SMARTPHONE

CONCERNED HEALTH

TABLET / PC
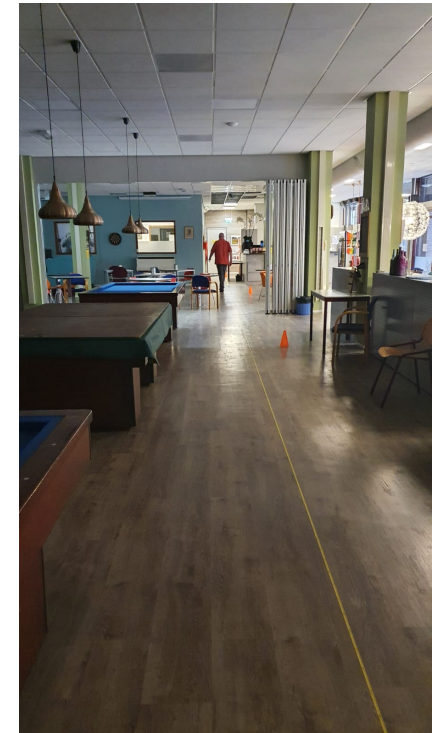
FEELING WELL

WITH INTERESTS

CONCERNED DECLINE

SCALES
WEARABLES
VIRTUAL ASSISTANTS
OTHER DEVICES

BUSY

WORRY ABOUT
AUTONOMY LOSS

STEPS TRACKER APPs

ALTRUIST

ENTHUSIASTIC

PRIVACY ISSUES

AND MUCH MORE...

WHAT THEY EXPECTED?

- To get involved in a project to help older people

- To know how to improve their health status

- To know how they can improve or retain their status

  - To monitor their physical activity performance and to be motivated to do it
  - To retain their autonomy
  - To retain their cognitive status
  - To monitor their sleep quality
  - To know how to improve their healthy eatings habits
  - To lose weight (sub-group)

The Road

Aim 1
- Assess the **feasibility** of a study to show the impact of the device over health status and wellbeing.
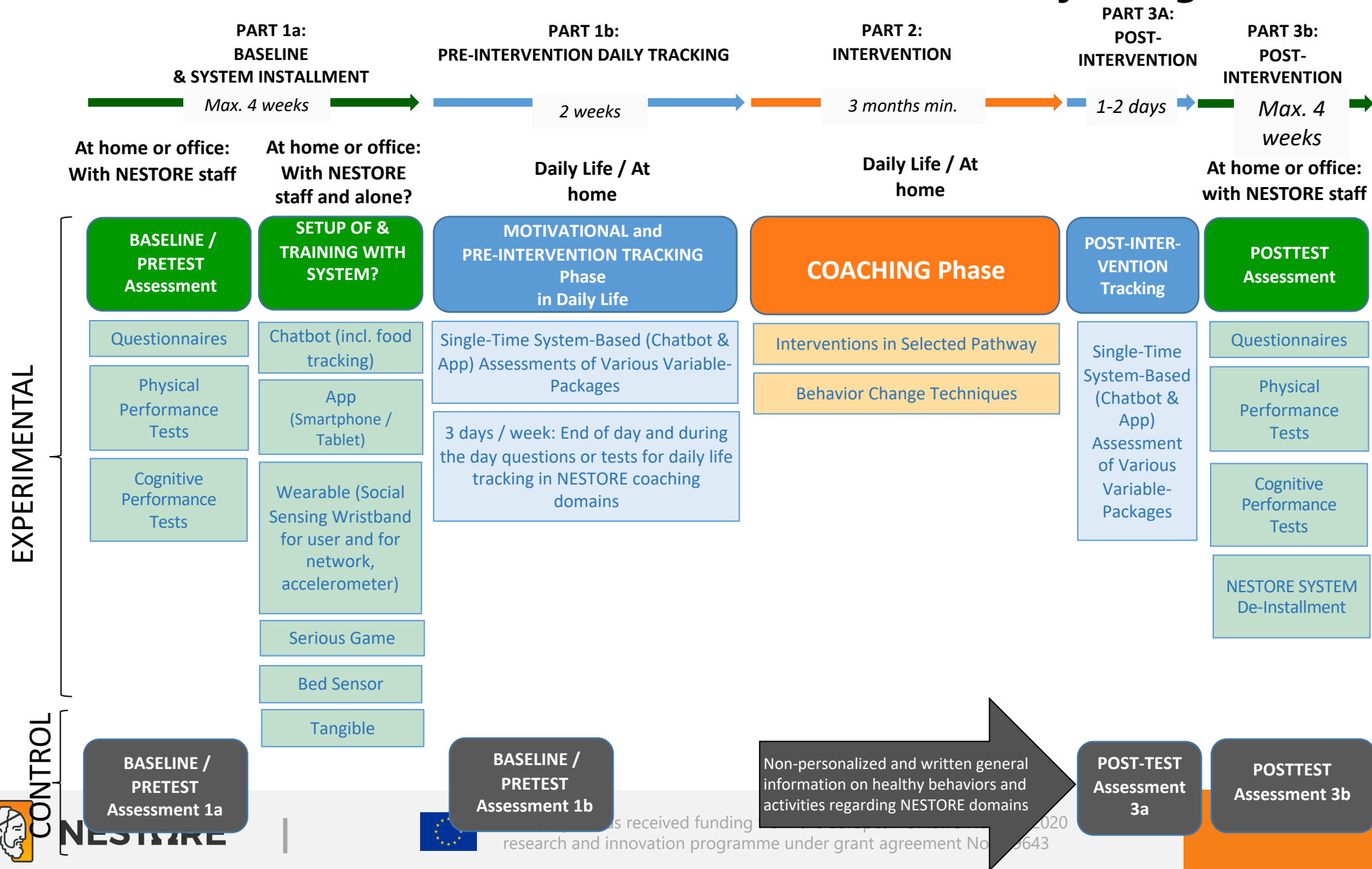
Aim 2
- Assess the **validity** of technological procedures developed by the NESTORE partners for this project.

Aim 3
- Assess the **usability** and applicability of the platform.

WHAT WERE WE TO DO? NESTORE Study Design

	PART 1a: BASELINE & SYSTEM INSTALLMENT	PART 1b: PRE-INTERVENTION DAILY TRACKING	PART 2: INTERVENTION	PART 3A: POST- INTERVENTION	PART 3b: POST- INTERVENTION
	Max. 4 weeks	*2 weeks*	*3 months min.*	*1-2 days*	*Max. 4 weeks*
	At home or office: With NESTORE staff	At home or office: With NESTORE staff and alone?	Daily Life / At home	Daily Life / At home		At home or office: with NESTORE staff

EXPERIMENTAL

BASELINE / PRETEST Assessment	SETUP OF & TRAINING WITH SYSTEM?	MOTIVATIONAL and PRE-INTERVENTION TRACKING Phase in Daily Life	COACHING Phase	POST-INTER-VENTION Tracking	POSTTEST Assessment
Questionnaires	Chatbot (incl. food tracking)	Single-Time System-Based (Chatbot & App) Assessments of Various Variable-Packages	Interventions in Selected Pathway	Single-Time System-Based (Chatbot & App) Assessment of Various Variable-Packages	Questionnaires
Physical Performance Tests	App (Smartphone / Tablet)	3 days / week: End of day and during the day questions or tests for daily life tracking in NESTORE coaching domains	Behavior Change Techniques		Physical Performance Tests
Cognitive Performance Tests	Wearable (Social Sensing Wristband for user and for network, accelerometer)				Cognitive Performance Tests
	Serious Game				NESTORE SYSTEM De-Installment
	Bed Sensor				
	Tangible				

CONTROL

BASELINE / PRETEST Assessment 1a	BASELINE / PRETEST Assessment 1b	Non-personalized and written general information on healthy behaviors and activities regarding NESTORE domains	POST-TEST Assessment 3a	POSTTEST Assessment 3b

NESTORE

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WHAT WERE WE TO DO?
GROUPS

- Intervention: 20 persons per site (gender balanced)
  - Will use the NESTORE system (12 weeks)
  - Participant will select at least one pathway of interest.
  - Once selected, the NESTORE system gather information during 2 weeks and then proposes machine-learned tailored advice to the participant until the end of follow-up.
  - Run-in period: Replacement of persons not using the system by their own will during the first 15 days.

- Control: 10 persons per site.
  - Control group will receive printed material or audiovisual with general recommendations of healthy habits, without any component of the NESTORE system

How did we do it?

Mixed methods

Person-centered approach

TiBAR Model applied

QUALITATIVE

QUANTITATIVE

Participation

Be responsive

Identify individual barriers

Offer incentives

Build up trust
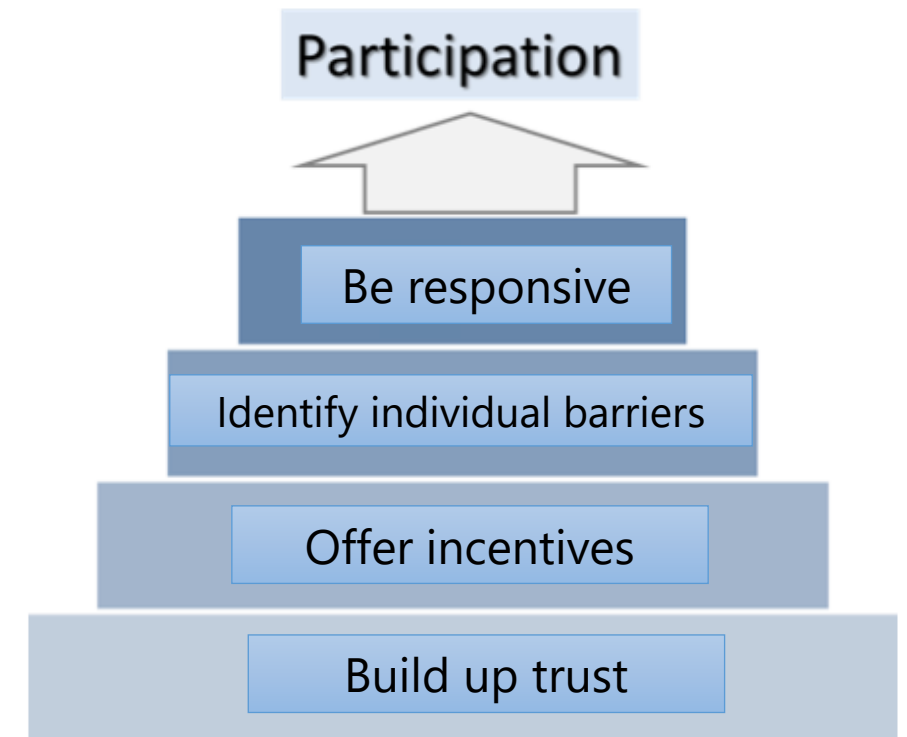
HOW LONG DID IT TAKE?

NESTORE fieldwork itinerary in 250 days

June 2019

Project communication

November 2019

Screenings

December 2019

NESTORE System Beta test

Screenings

January 2020

NESTORE System Beta test

Screenings

February 2020

Baseline assessments

Installations

COVID 19 Outbreak

March 2020

February 2021

3 Groups

January 2021

Final assessments

December 2020

October – December 2020

Intervention period

September 2020

Baseline assessments

Installations

June 2020

Project restart

This project has ... ropean Un... research and inn... programme under grant agreem...

WHAT PROBLEMS DID WE FACE?

A problem based on numbers / Recruitment

3600 Mailing
and social media

- 1630 contacted
- 236 interested
- 124 Screened
- 67 Assessed

Contacted persons
assessed

NESTORE
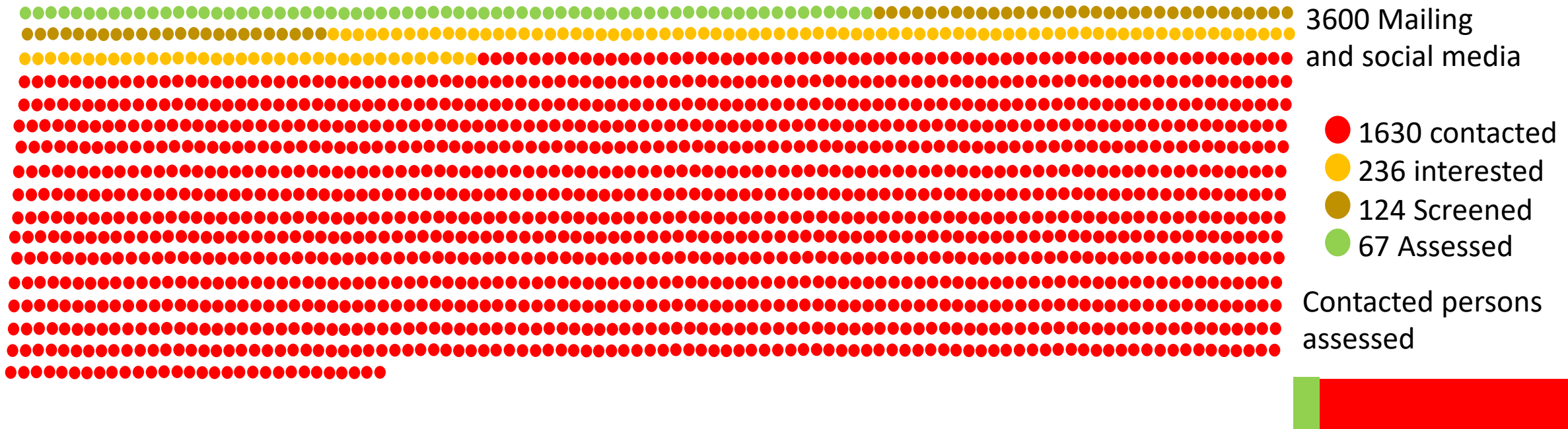
HOW WE DEAL WITH PROBLEMS?
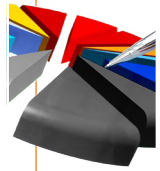
Diversy recruitment sources

STRENGTH
WEAKNESS
Monitor the sample

Gender perspective

Accept our limitations and weakness to reach certain profiles

Time investment

Follow-up

Apply Social Responsibility and Research Ethics

WHAT PROBLEMS DID WE FACE?

A problem based on numbers / The System

Wearable
Bioimpedance scale
Tangible Coach
Sleep Monitor
5 Environtmental beacons
5 Social beacons
Flexibility tool

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Manuals:

NESTORE System manual
Scale manual
Tangible manual +
examples of interactions
Flexibility tool manual

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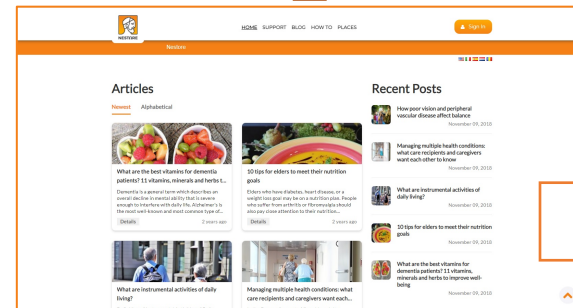
http:// my.nestore-coach.eu

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NESTORE
Pocket Odyssey

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NESTORE

HOW WE DEAL WITH PROBLEMS?

Video recordings

Videoconferences

Online support:
Team Viewer

Face to Face support

Time investment and full availability

Personalized support

TiBAR MODEL

WHAT PROBLEMS DID WE FACE?
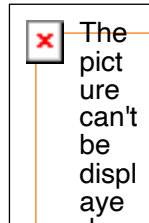
SARS- COV 19 Confinement and Restrictions
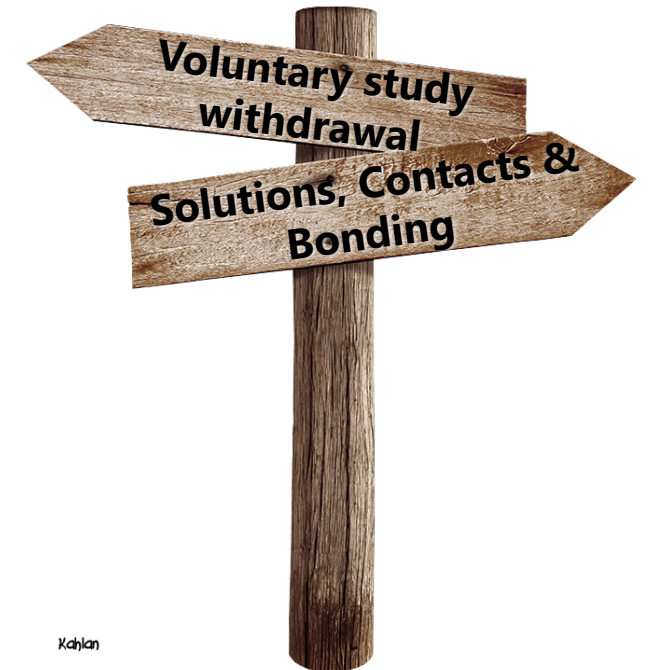
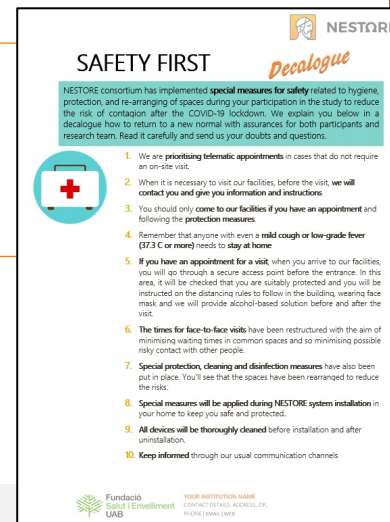# HOW WE DEAL WITH PROBLEMS?

Scheduling visits

Phone call assessments

Online assessments

Safety first Decalogue

Building confidence and safety perception

Flexibility

Participants tracking

WHAT WAS PARTICIPANTS' EXPERIENCE?

Even though, technical problems, participants strongly believe that NESTORE project is a good idea and could contribute to improve active aging and wellbeing. The project has wide scope for improvement:

What works and not?

- Keep it simple
- Fit my life and respect my schedules
- Personalization
- Jazz up the experience (amusement and gamification)
- Interaction
- My progress status
- Positive messages
- Diversity of activities
- Understandable graphics
- A practice community
- A human touch

- Fragmented experience within the system
- Not to see real-time data
- Much information is less
- Lack of adaptation to my previous activities
- Coercitive or inquisitor coach style
- Repetitive activities
- Not applying communication strategies

WHAT DID WE LEARN?
In conclusion

In relation to the pilot study…

- To confront the difficulties of creating a heterogeneous sample applying the TiBAR model for recruitment and retention

- To manage expectancies during the pilot study and continuous follow-up

- To apply the community concept before and after

In relation to the intervention…

- To reduce the fragmentation in the use experience.

- Several aspects influencing technological adherence: simplicity, expectancies, diversify tasks, manage tasks overload, constant positive stimuli, personalized follow-up with proximity, etc.

- To be aware of the risk that incidences take a center stage in users' experience

- The role of the virtual trainer is key to generate bonding, acceptance and adherence as a compass

- Communication, positive messages and gamification are very important

Thank you very much companions!

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