

CONNECTED HEALTH SUPPORTING **HOME STAY IN DEMENTIA** **(CHESS)**

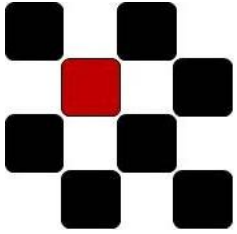
Dr Estefanía Guisado Fernández
Early Stage Researcher at Insight Data Analytics Centre
(UCD)
Physical Medicine and Rehabilitation Medical Doctor



www.chessitn.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 676201

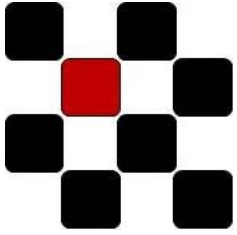




TEAM

- Dr Estefanía Guisado Fernández, MD, PhD Candidate UCD School of Public Health, Physiotherapy and Sport Science
- Dr Laura Mackey, B Physio, PhD, PostDoc Investigator, Applied Research Centre for Connected Health (ARCH), UCD
- Mr David Singleton, Systems Engineer, ARCH Centre, UCD
- Prof Catherine Blake, Deputy Head & Assoc Professor, UCD School of Public Health, Physiotherapy and Sport Science
- Prof Dermot Power, Consultant Geriatrician, Mater Hospital, Dublin
- Prof Brian Caulfield, Director, Insight Centre for Data Analytics, UCD



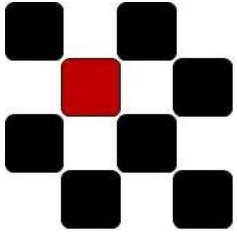


What is **CONNECTED HEALTH (CH)**?

“Connected Health encompasses terms such as wireless, digital, electronic, mobile, and tele-health and refers to a conceptual model for health management where devices, services or interventions are designed around the patient’s needs, and health related data is shared, in such a way that the patient can receive care in the most proactive and efficient manner possible. All stakeholders in the process are ‘connected’ by means of timely sharing and presentation of accurate and pertinent information regarding patient status through smarter use of data, devices, communication platforms and people. “

Caulfield, B. M., & Donnelly, S. C. (2013). What is Connected Health and why will it change your practice? QJM, 106(8), 703–707.

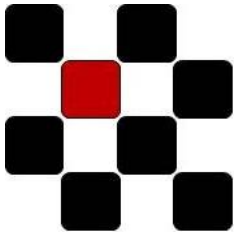




What is **CONNECTED HEALTH (CH)**?

- New model of health management: eHealth, Digital Health, mHealth, Telehealth, Telecare, remote care, assisted living
- Patient is the centre of the health care system
- Clinicians: tool for making decisions and communication
- Stakeholders 'connected' for a proactive and efficient care through health related data sharing





CHESS (Connected HHealth Supporting home Stay in dementia)

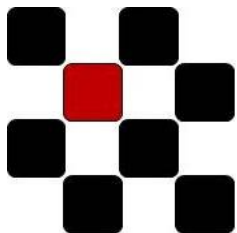
- Why this project?
 - Demographic aging of the world population
 - Increasing multi-morbid chronic disease population
 - Caregivers (non professional) play the main role in their care
 - The need of a well coordinated care plan



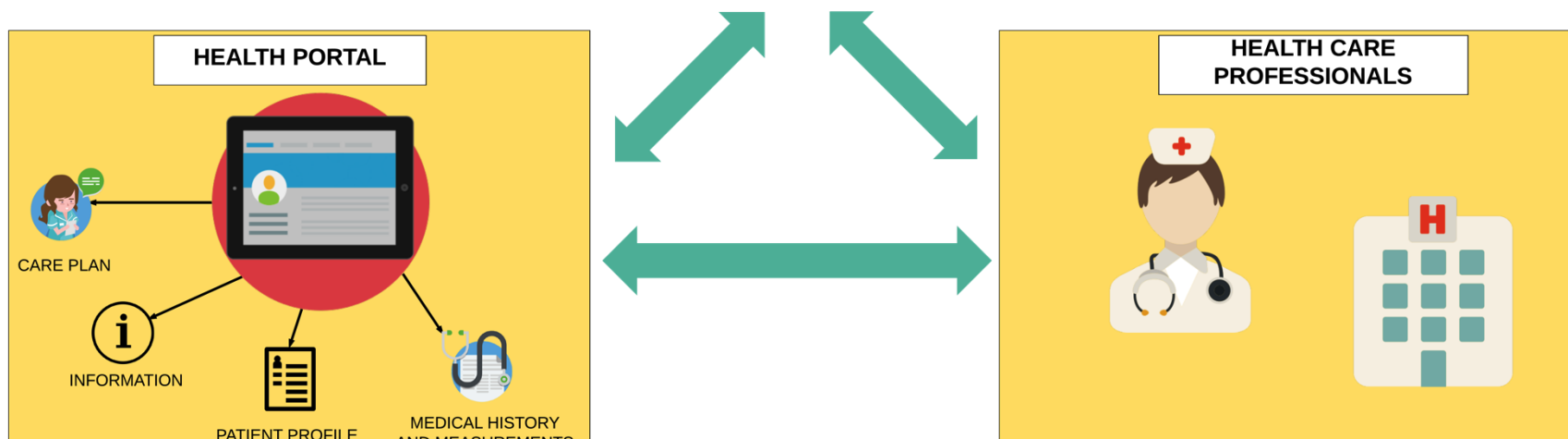
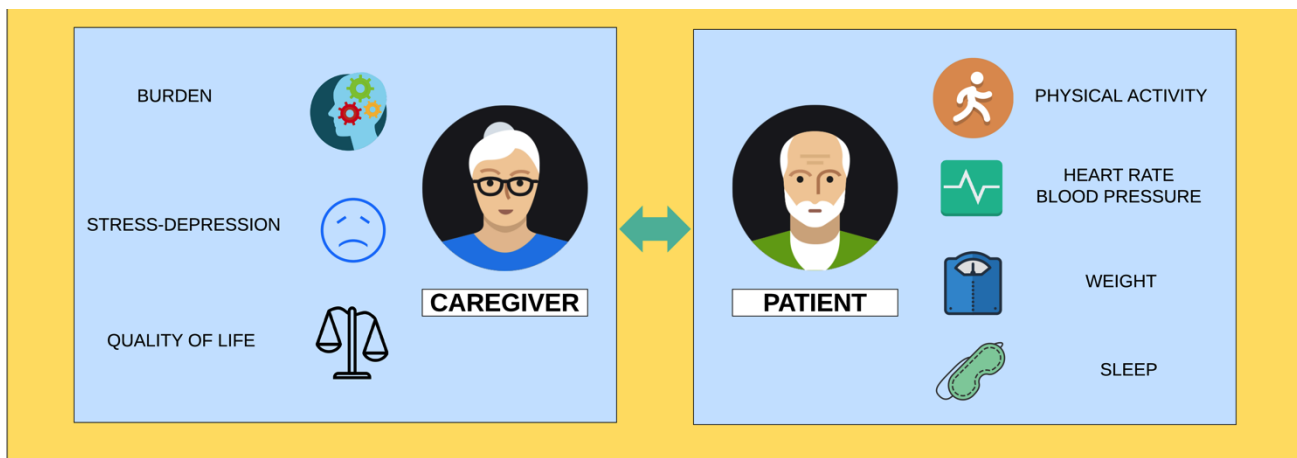
www.chessitn.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 676201





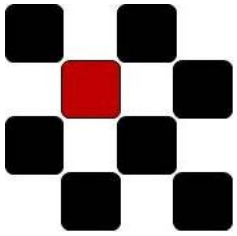
THE PROJECT



www.chessitn.eu

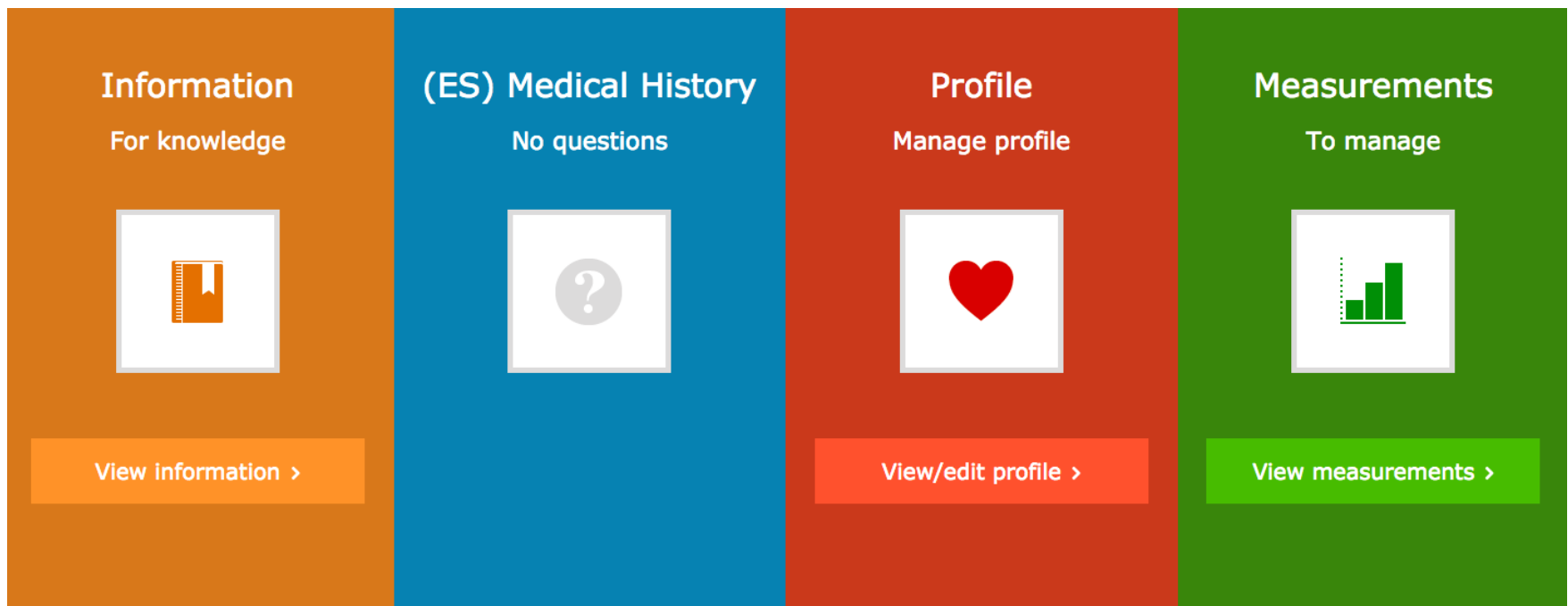
This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 676201





THE TECHNOLOGY

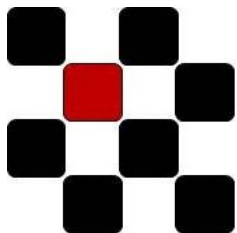
- Tablet application: health portal



www.chessitn.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 676201





TABLET HEALTH PORTAL

[Information >](#)[\(ES\) Medical History >](#)[Profile ▾](#)[Measurements >](#)

My biography

Today I started biography feeling good looking forward to taking part in the research.

[Edit biography >](#)

My journal

13
May

Thursday Diary

Today I learned how to use the equipment.

15
May

May 15th

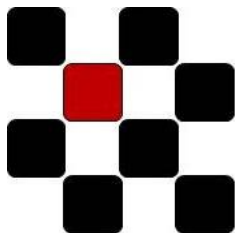
This is a test

[Add journal >](#)

www.chessitn.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 676201





TABLET HEALTH PORTAL

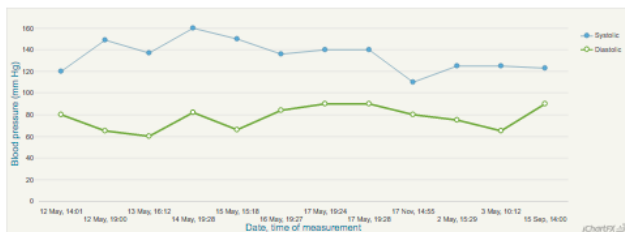
[Information >](#)[\(ES\) Medical History >](#)[Profile >](#)[Measurements ▾](#)

Blood pressure

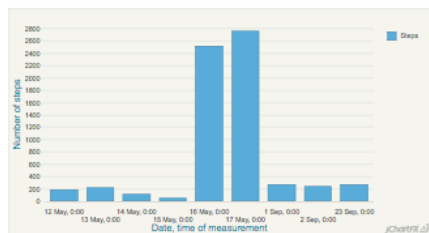
✓ Measurement date: 15 Sep, 14:00

Your blood pressure is within the limits that were set for you by your doctor.

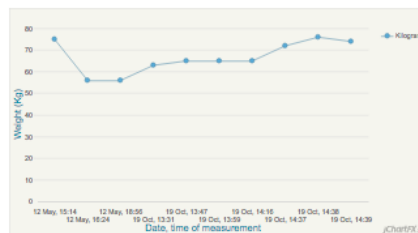
Thank you for checking your blood pressure!

[Add blood pressure >](#)

Activity



Weight



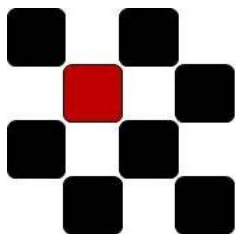
Sleep

[Synch sleepminder >](#)

www.chessitn.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 676201





MONITORING MEDICAL DEVICES

BLOOD PRESSURE DEVICE



BESIDE SLEEP MONITOR



WIFI WEIGHING SCALES



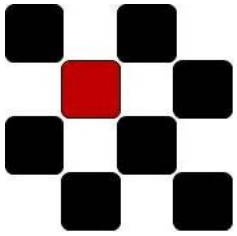
ACTIVITY TRACKER



www.chessitn.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 676201





OBJECTIVES OF THE PROJECT

To evaluate the utility of this care model in supporting people with dementia and their caregivers in sustaining the patient at home

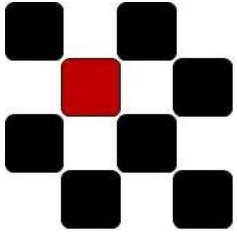
1. Longitudinal monitoring:

- Cognitive status
- Physical activities
- Social activities
- Quality of life

2. Evaluate in comparison with traditional care (non technology group)

3. Usability and user experience

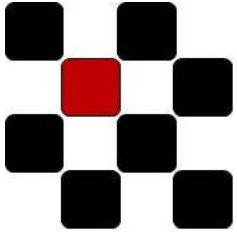




OBJECTIVES OF THE PROJECT

- To evaluate benefits over usual care for the caregiver:
 - Stress
 - Burden
 - Anxiety/depression
 - Quality of life
- To evaluate the perceptions of health professionals (GPs, consultant, nurses)

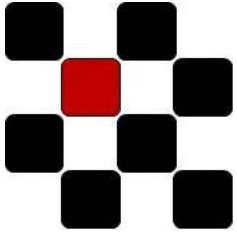




STUDY DESIGN

- 2 groups:
 - Technology group
 - Non-technology group (traditional care plan)
- 12-month period follow-up
- 6 months of deployment
- Daily and weekly ‘unobtrusive’ monitoring with formal assessments every 3 months: questionnaires related with physical and social activities and quality of life.





WHERE WE ARE NOW

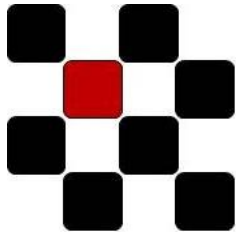
- Development phase of the health portal
- User experience and usability testing
- Waiting for the ethics committee approval
- Recruiting suitable participants



www.chessitn.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 676201





THANKS SO MUCH FOR YOUR ATTENTION

Email: estefania.guisadofernandez@ucd.ie



www.chessitn.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 676201

