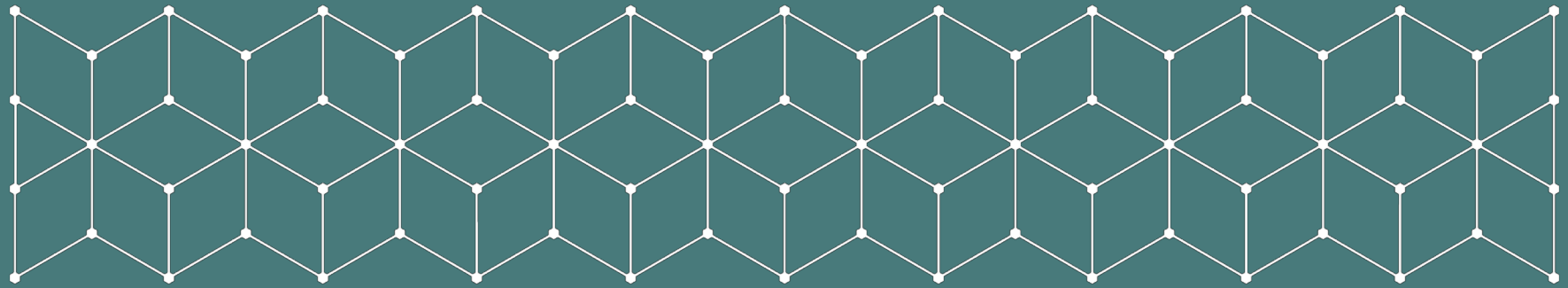
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Co-designing technology for patient's empowerment in cognitive rehabilitation

Klaudia Çarçani



Østfold University College

Patient Empowerment

- Meaningful Involvement
- Health Literacy
- Shared Decision Making
- Self-Management

Technology has a high potential to enhance patient empowerment



"You have to learn about thousands of diseases, but I only have to focus on fixing what's wrong with ME! Now which one of us do you think is the expert?"

SUNNAAS SYKEHUS | Østfold University College

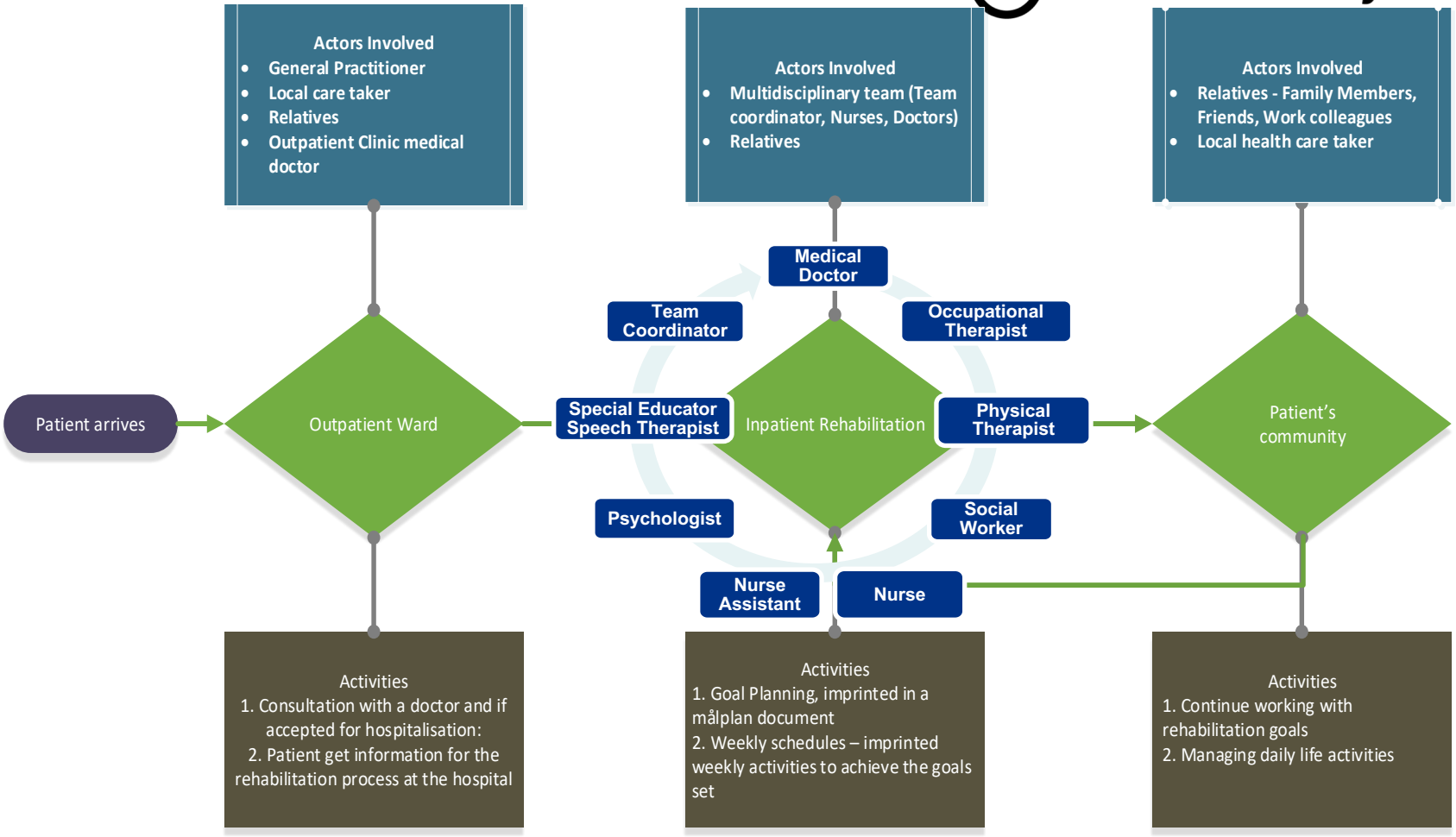


This research project will focus only on the cognitive rehabilitation process (CRP).

CRP includes rehabilitation programs for patients with acquired brain injury, mainly stroke or traumatic brain injury.

Patient Journey in Cognitive Rehabilitation

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Research aim

This research project aims:

To investigate how technology can support patient empowerment in cognitive rehabilitation

and

Co-design together with patients, and the other involved in the rehabilitation, a tool that would support the patient throughout the rehabilitation process.

Scientific Background

Computer Supported Cooperative Work (CSCW)

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"an endeavour to understand the nature and characteristics of cooperative work with the objective of designing adequate computer-based technologies" **(Schmidt and Bannon, 1992)**



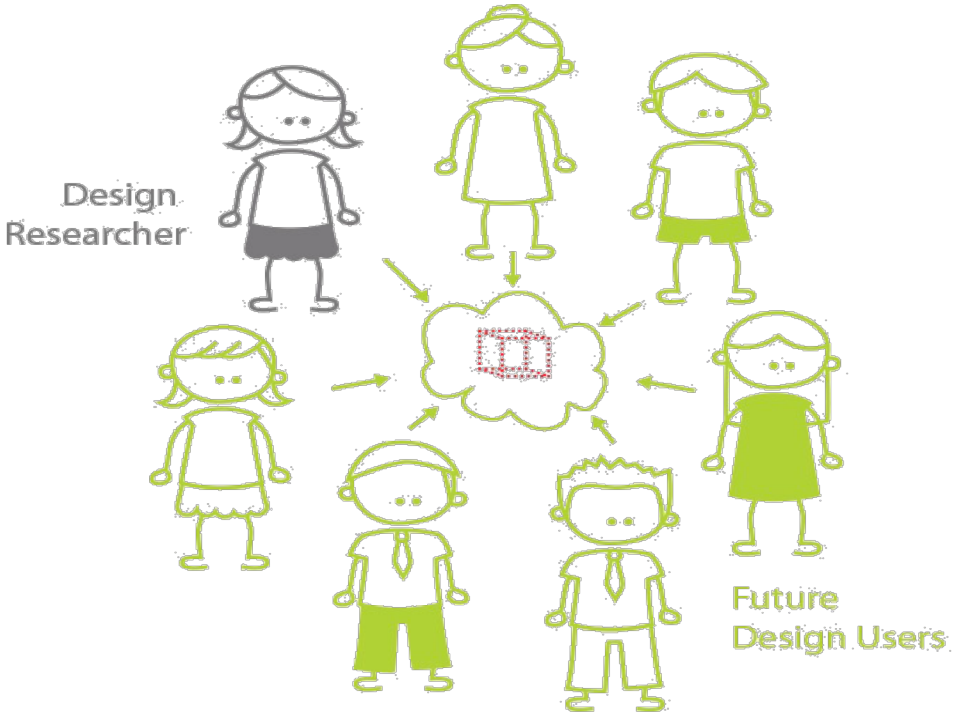
Understand the cooperative work among the multidisciplinary team throughout the rehabilitation process



Design adequate computer-based technologies, which support the dynamics of the rehabilitation process by enhancing patient empowerment

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Participatory Design (PD)



- Users should have a say
- Users as ‘”domain experts”
- Genuine participation

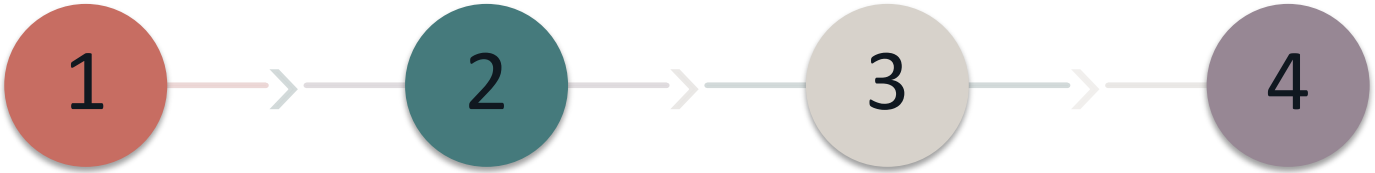
Understand how to actively involve those suffering from cognitive impairments in co-design sessions within the group and with other actors involved in the rehabilitation process.

Project Operationalization

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Ethnographic Study - Observations

August 2018– February 2019



Map all the transitions that the patient goes through during his rehabilitation;

Map the main actors involved in each phase and how they cooperate and coordinate their activities;

Understand the role of the patient in each of the phases of the rehabilitation process and how patient empowerment is implemented

Use CSCW concepts and theories to describe the rehabilitation process.

The conclusion of the ethnography study will be a list of recommendation for design interventions that can support patient empowerment in the cognitive rehabilitation process.


Schmidt Puzzle 1000
SHUFFLEBORD
Hvor: Lekeplasse
og barneavd.
Utstyr: utenfor k
STOLPEJAKT
Kart lånes i resepsj
Pocket Mask
Personalet
er på
rom D 170
Vet du hvor akuttmedisinsk beredskapslager er?
28/8
29/8
30/8
31/8

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Participatory Design



Involve patients, relatives and healthcare personnel in the design process of a new technological solution

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Participatory Design - Operationalizing



Codesign workshops to discuss with patients' and other actors their needs for technological solution

Based on the needs defined co-creation of a technological solution together with the patient and the other actors assisting the patient in rehabilitation

The decision regarding workshops organised will be made after the first phase of ethnographic study has been completed. Once we have a rich picture of the situation we can design better workshops.

Ergoterapeut: Psykolog: Sosionom.

Redesign the “goal plan”: A patient’s perspective.

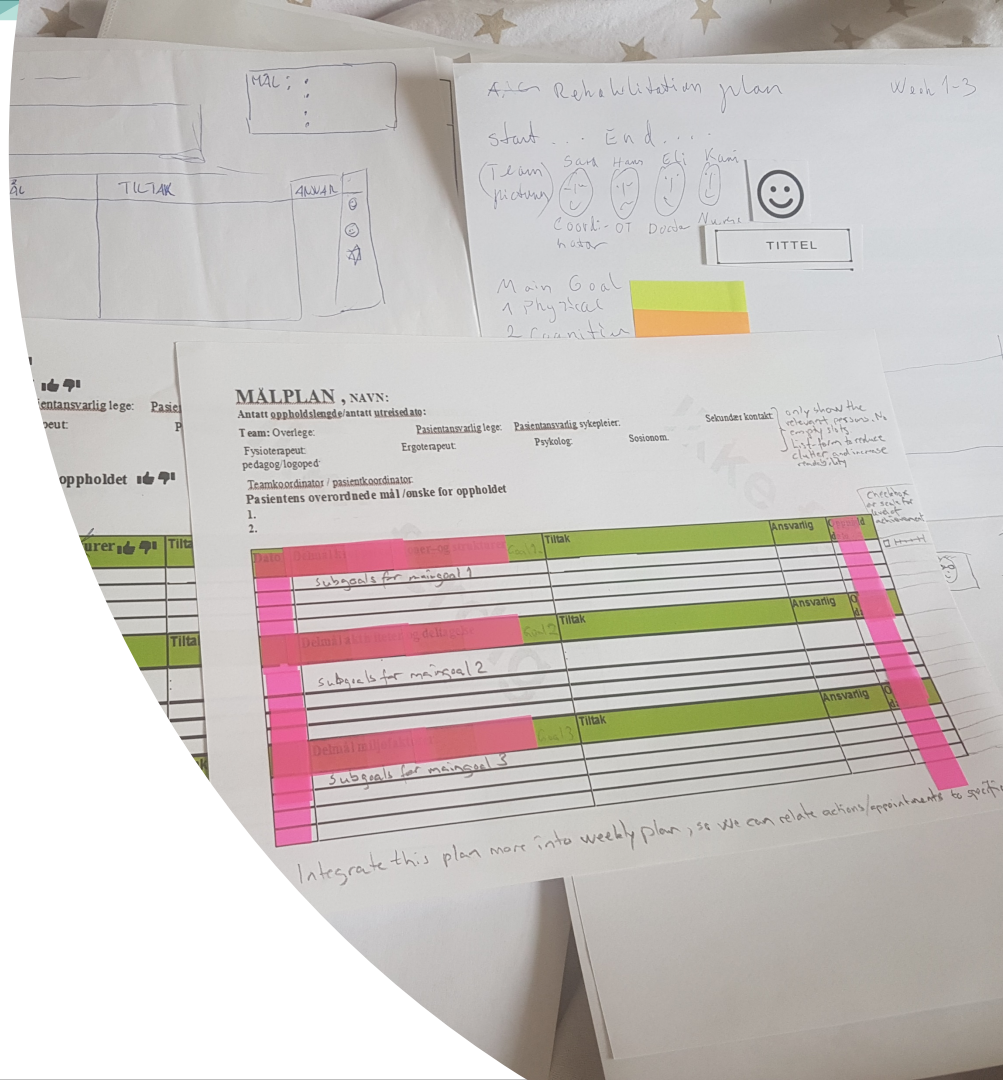
Dato	oner–og strukturer	Tiltak	Ansvarlig	Oppnådd dato

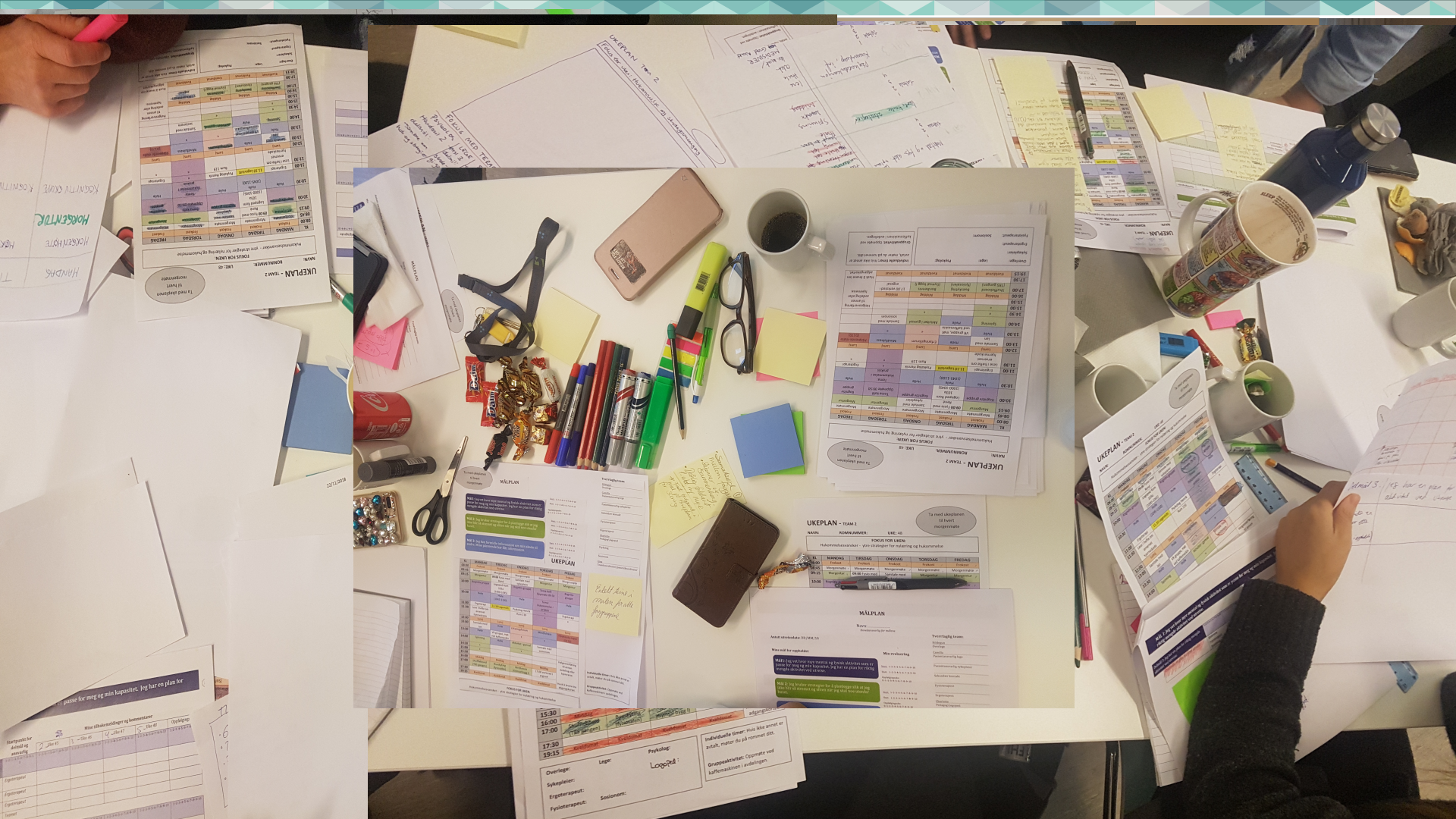
	Delmål aktiviteter og deltagelse	Tiltak	Ansvarlig	Oppnådd dato

	Delmål miljøfaktorer	Tiltak	Ansvarlig	Oppnådd dato

Co-design activities

- Three patients' workshops
- Two staff workshops
- A redesigned paper document
- Actually, we are testing it out and using cultural probes to gather patient feedback
- A third workshop with the staff to redesign procedures
- There is an ongoing discussion with DIPS to consider the possibilities for implementation of this document for the Cognitive Unit at Sunnaas




UKEPLAN – TEAM 2
NAVN:
KOMMUNUMMER:
UKE: 48
FOKUS FOR UKEN:
Ta med ukeplanen til hvert morgenmøte
MÅLPLAN
Navn:
Tverrfaglig team:
Mine mål for ukeplanen
Min evaluering
Overlege:
Lege:
Psykolog:
Sykepleier:
Ergoterapeut:
Sosionom:
Fysioterapeut:
Individuelle timer: Hvis ikke annet er avtalt, møter du på rommet ditt.
Gruppeaktivitet: Oppmøte ved kaffemaskinen i avdelingen.

Patient empowerment through technology

- There is a need for computer coordination mechanisms among patients and their health careers.
  - Involving patient, health care professionals and relatives as partners in the design of these computer coordination mechanisms.

Co-designing with patients with cognitive impairments

- Mutual learning among the designers/researchers and domain experts, to prepare better workshops for the patients
- Knowledgeable third-party facilitators in PD workshops

Conclusions

- Multidisciplinary research
- Bottom-down approach of technological interventions in the healthcare sector.
- PD and CSCW ask for mutual learning in cross – domains. Only in this way we can explore the best that technology can offer.

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Relevant Publications

- *Boundary Objects or Coordination Mechanisms?*

  K.Carcani, H. Holone - AIS Journal as IRIS 2018 selected papers

- *A Participatory Design "Method Story": The Case of Patients Living With Mild Acquired Cognitive Impairments*

  K.Carcani, H. Holone – ACHI 2019

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Thank you!

