

Sunnaas Rehabilitation Hospital

- A Way Forward

- 
- Company facts
 - Our patients

- Treatment and working method;
 - Multidisciplinary
 - Patients from all of Norway
 - Life-long follow-up
 - Research department
 - Competence building and dissemination of knowledge

Examples technology projects

- Virtual rehabilitation (VR-lab)
- Robot assisted rehabilitation
- Tele-rehabilitation
- Mobile workflow
- Patient safety
- Subcutaneous pressure sensor system



Center for Technological Intervention in Rehabilitation



What is a test bed?

*“A test bed is a physical or virtual environment where enterprises together with stakeholders within health care providers, i.e. hospitals, primary and elderly care can test, develop and implement new products, services, processes and organisational solutions”
(Oslo Medtech 2012).*

Core competence:

- Movement
- Cognition
- Patient safety
- Gamification/VR/Robotics
- Technology & e-health

Services offered:

- Consulting
- Lab testing
- Clinical evaluation
- Clinical trials





Danderyds Sjukhus
IT-ENHETEN, SÄKERHETEN

HUS 

 Oslo
University Hospital
The Intervention Centre

 SUNNAAS SYKEHUS | 

**NORDIC
MEDTEST** 
For safer IT in Health Care

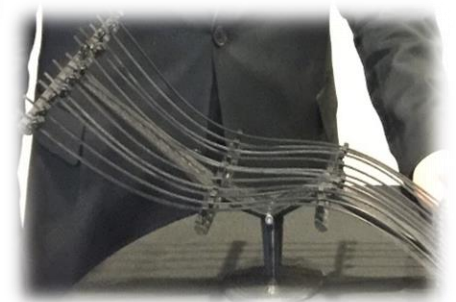
REGION H VihTek
Research and Test Center for
Health Technologies

**OULU
HEALTH
LABS** 

 Norwegian
Smart Care
Cluster



MERZ
Pharma



“The right equipment in the right place at the right time”



Oppgaver personalet ikke ønsker å utføre

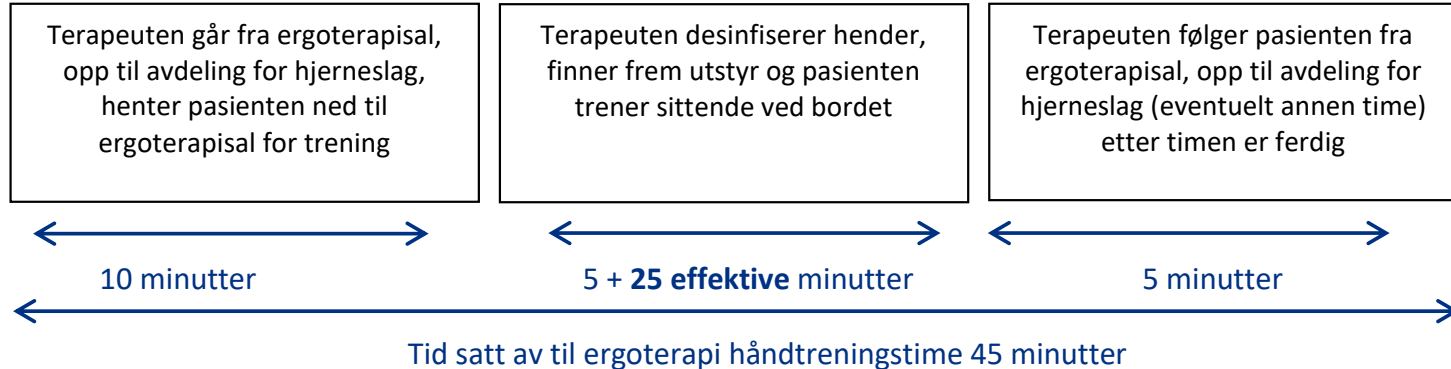


Robotic lab



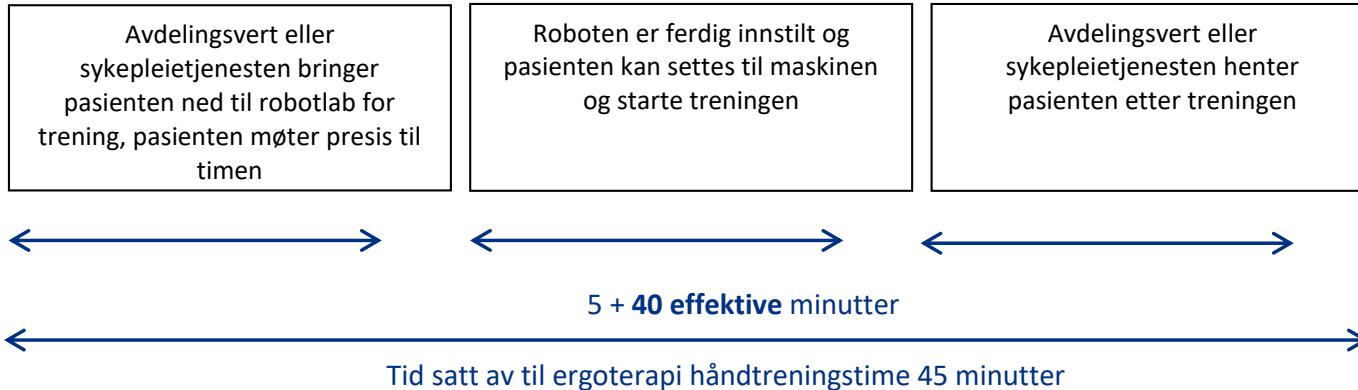
Opened March 22

1.1.1 Håndtrening før



En håndtreningstime varer 45 minutter. Ergoterapeuten må hente pasienten på avdelingen. Dersom pasienten er klar når terapeuten kommer tar dette ca. 10 minutter. Ofte er det forsinkelser i forbindelse med stell eller forflytning, da går det mer tid av treningstiden. Vel nede på ergoterapisal desinfiserer terapeuten hender og finner frem egnet håndtreningstutstyr, det tar ca. 5 minutter. Håndtreningstimen kan starte. For å rekke sin neste terapitime må terapeuten avslutte fem minutter før timen er over, og frakte pasienten tilbake. **Total aktiv treningstid av 45 minutter blir 25 minutter.**

1.1.1 Håndtrening ved bruk av Robotlab



Pasienten møter presis til timen. De ansatte i Robotlab har gjort klart det aktuelle utstyret med pasientens eget treningsprogram, og da tar det ca fem minutter å feste apparaturen til pasienten og sørge for optimal sittedstilling. Treningen kan begynne. Pasienten kan avslutte når timen er ferdig, aktiv treningstid er 40 minutter. På denne tiden kan pasienten komme opp i hele 450 repetisjoner.

Department	Average number of hand training hours per week for nine full-time positions
Spinal cord injury	21
Multiple trauma	25,5
Stroke	38
Total	84,5

Avdeling	Average number of hand training hours per week for a full-time position in Robotlab
Robotic lab	62
Total	62

Sunnaas rehabilitation hospital

Digital innovation in collaboration with

Diffia AS

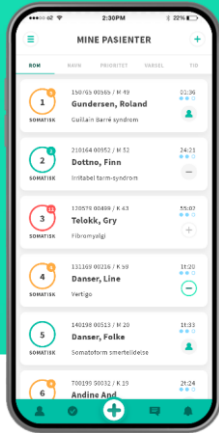
Despite great advancements in enterprise productivity tools, this is how information and communication needs in healthcare are solved today!



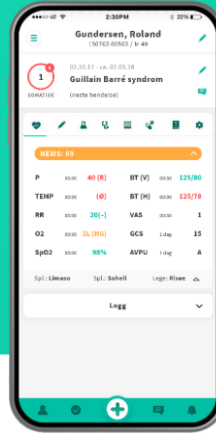
Health IT and digitizations of hospitals leave more to be desired



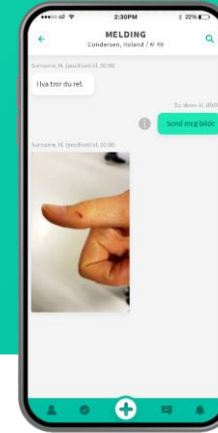
Mobile efficacy in the clinician's pocket



Easy **mobile** access to patient management for care team

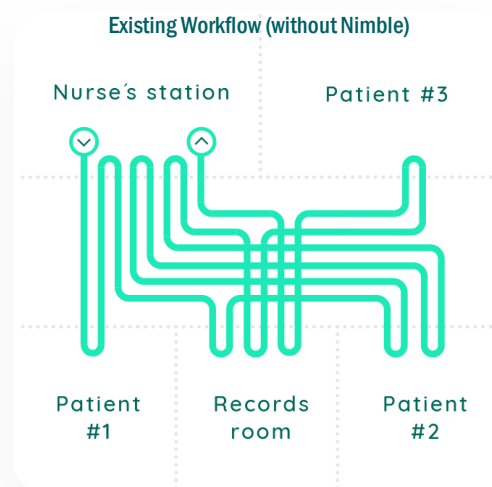


Efficient **documentation** at point of care & Information **Instantly** shared in care team

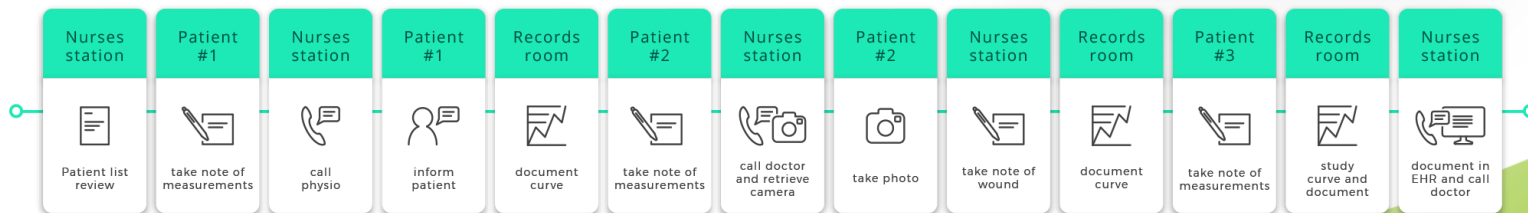


Secure, fast, and instant **communication** (incl. pictures)

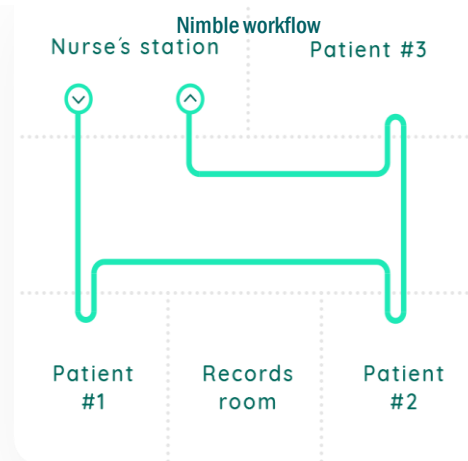
To validate; nurses first performed the tasks with existing workflow and tools to establish a baseline



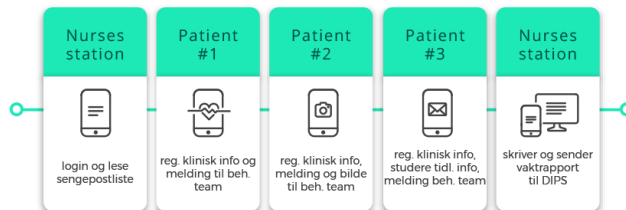
Simulation with existing clinical workflow using tasks common to department



Then nurses performed the same tasks - only with the Nimble app

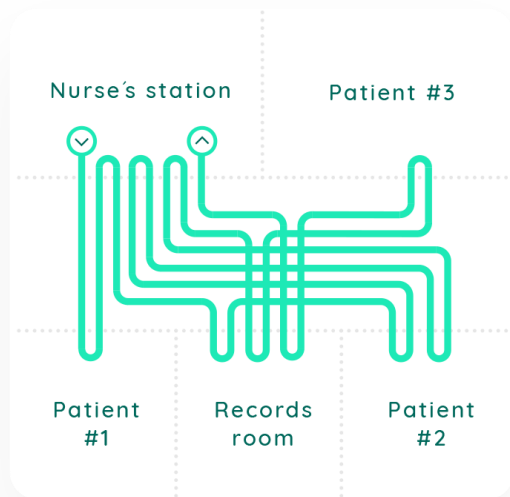


Same tasks solved using Nimble for documentation, information retrieval and communication



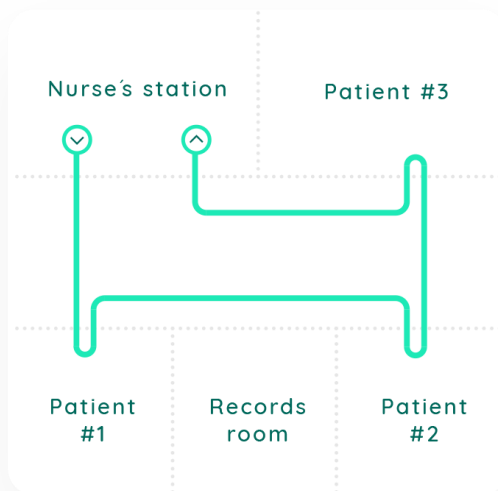
Over 50% more efficient and simpler workflow results in more hours for more patients

Current workflow



Average time = 29 min

Nimble workflow



Average time = 14 min

5,475+
est. hours saved
per ward per year*
(~ 2.5 work years)

Some experiences so far.....

«Industry wants in»

- What door?
- The hospitals contribution?
- Finance?
- Knowledge of health care?
- Business plan?
- Rules and regulations?



«Hospital wants out»

- User and research driven innovation
- Many ideas, few entrepreneur's
- Little knowledge of business
- Resources

Thank you

