The St. Olavs Study - New Technology and Health (STUNTH)

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The 5th Nordic Seminar on Technical Measurements of Physical Activity and Sedentary Behaviour, Trondheim, June 2nd – 3rd, 2022
The STUNTH study

- A cohort study of hospital employees

Overall aim to investigate and produce new knowledge about the relationship between work related factors and occupational health among hospital care workers in a time of digital and demographic change.
Demographic changes

From 2030:

More people are retiring
+ Less people are entering the work force
= System ERROR

• More people that need health care services and less people to provide these services
• Needs to make changes to the existing health care services to secure sustainability in the future
New technology and digitalization

*New technology may contribute to close the gap between the expected shortage of staff in the near future and the increased work demands*

- New electronic health record system - Helseplattformen
- Implementation in Mid Norway fall 2022
- Delivered by Epic

- One common solution for the patient’s health record across specialist health services, general practitioners, and the municipalities in Mid-Norway.

The European bureau for Safety and Health in Work suggest that new technology can pose a risk on workers’ occupational health.
International research, …but no Norwegian cohort study of hospital employees
Long term goals

1) To identify factors that promote
   • a favorable work environment
   • sustainable workability after implementing Helseplattformen.

2) Develop interventions that promote
   • a healthy and engaged healthcare workforce
   • quality of care for the patients.
Timeline

Baseline 2021/22

Helseplattformen 2022

Follow-up 1 2023/24

Follow-up 2 2027/28

Follow-up 3 2031/32
Arbeid

Helse
Methods

Questionnaires
• Work related factors
• Self-reported health

Registry data
• Medical registries
• HR data

Objective measurements
• Physical activity and sleep
• Body composition
Objective measurements of physical activity (and sleep)

- HUNT4
- Axivity AX3
  - Low back
  - Mid thigh
- 50 Hz, ± 8g
- All participants offered to wear activity sensors (AX3) for 7 days
Mobile research station
St. Olavs hospital HF

Østmarka

Lian

Øya

Nidelv DPS

Tiller

Orkdal Hospital

Røros Hospital
Status - June 2022

Completed baseline 20th of May!!

Key numbers

- Conseted to participate: 3 697
- Completed quesitionaire - Work related factors: 3 440
- Participated objective measures: 2 214
- Completed questionaire – Health:
Thank you!