

# Can digital health counseling reduce sick leave?

<b>Submission date</b> 02/05/2025	<b>Recruitment status</b> Recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 06/05/2025	<b>Overall study status</b> Ongoing	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 30/06/2025	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Many people are off work due to common health problems such as muscle and joint pain, mental health challenges like stress or anxiety, and illnesses linked to lifestyle, such as poor diet or lack of exercise. This causes big costs for both businesses and society. The aim of this study is to find out whether regular support from a digital health coach can help people improve their health and reduce how often they are off work due to sickness.

### Who can participate?

Employees aged 18 years or over who work at a company taking part in the study and are in the highest 20% with the most sick leave in the company (and have at least 10% sick leave in the last year) can take part. Their time off work must be linked to muscle and joint problems, mental health issues, or lifestyle-related conditions. Participants must also be able to use digital tools and have access to the internet.

### What does the study involve?

Companies will be randomly divided into two groups. In one group, employees will begin receiving digital health coaching right away. The other group will wait for 12 months before they get the same support. The coaching is done through weekly video calls with a trained health advisor who helps each person set goals and make changes to improve sleep, stress, physical activity, eating habits, and daily routines. All participants will wear an activity watch for short periods during the study and answer online questionnaires about their health and wellbeing. Their employer will also share data on sick leave if the participant agrees.

### What are the possible benefits and risks of participating?

Taking part may help improve health, reduce stress, increase energy, and reduce sick leave. There are no known risks, but participants will need to set aside some time and be open to making changes to their daily habits. It is completely voluntary to take part, and people can leave the study at any time without giving a reason.

### Where is the study run from?

The study is led by SINTEF Digital, an independent research organisation based in Norway. It involves workplaces across different regions of the country.

When is the study starting and how long is it expected to run for?

March 2024 to January 2028

Who is funding the study?

The study is fully funded by ABEL Technologies AS, a Norwegian health technology company

Who is the main contact?

Dr Torstein Dalen-Lorentsen, [torstein.dalen@sintef.no](mailto:torstein.dalen@sintef.no)

## Contact information

### Type(s)

Public, Scientific, Principal Investigator

### Contact name

Dr Torstein Dalen-Lorentsen

### ORCID ID

<https://orcid.org/0000-0003-4062-7601>

### Contact details

SINTEF, Pb. 124 Blindern

Oslo

Norway

0314

+47 (0)93 84 18 44

[torstein.dalen@sintef.no](mailto:torstein.dalen@sintef.no)

## Additional identifiers

### EudraCT/CTIS number

Nil known

### IRAS number

### ClinicalTrials.gov number

Nil known

### Secondary identifying numbers

102031693

## Study information

### Scientific Title

Can digital health counseling reduce sick leave? A cluster-randomized controlled trial

### Study objectives

The principal hypothesis is that personalized digital health counseling, delivered weekly via a digital platform by certified health coaches, will lead to a statistically significant reduction in sick

leave at the individual level compared to a waitlist control group. The intervention is also expected to positively affect secondary outcomes, including mental and physical health, sleep, physical activity, and workplace productivity indicators such as turnover.

### **Ethics approval required**

Ethics approval required

### **Ethics approval(s)**

Approved 29/04/2025, Regionale komiteer for medisinsk og helsefaglig forskningsetikk (REK) - Regional committees for medical and health research ethics (NTNU/REK midt, Det medisinske fakultet, Postboks 8905, Trondheim, 7491, Norway; +47 (0)73597511; rek-midt@mh.ntnu.no), ref: 776139

### **Study design**

Interventional cluster randomized controlled trial

### **Primary study design**

Interventional

### **Secondary study design**

Cluster randomised trial

### **Study setting(s)**

Workplace

### **Study type(s)**

Prevention

### **Participant information sheet**

Not available in web format, please use contact details to request a participant information sheet.

### **Health condition(s) or problem(s) studied**

Reduction of sick leave related to musculoskeletal disorders, mental health conditions, and lifestyle diseases among employees with a history of high sick leave

### **Interventions**

Current interventions of 30/06/2025:

This study is a cluster-randomized controlled trial evaluating the effect of digital health counseling on sick leave. Clusters within the participating companies are randomised using an online service like random.org into either an intervention group or a waitlist control group. The intervention group receives personalised digital health counseling over a 12-month period, consisting of weekly video consultations with certified health coaches via the ABEL digital platform. The counseling includes support on physical activity, mental health, sleep, nutrition, and lifestyle changes, and is tailored to each participant's needs. The control group receives no treatment during the first 12 months but will receive the same intervention after the initial study period. Both groups wear activity trackers (Garmin) to objectively measure physical activity and sleep, and complete patient-reported outcome measures (PROMs) every 4 months. Sick leave data is collected from employers and supplemented by self-reported measures.

### Previous interventions:

This study is a cluster-randomized controlled trial evaluating the effect of digital health counseling on sick leave. Participating companies are randomised using an online service like random.org into either an intervention group or a waitlist control group. The intervention group receives personalised digital health counseling over a 12-month period, consisting of weekly video consultations with certified health coaches via the ABEL digital platform. The counseling includes support on physical activity, mental health, sleep, nutrition, and lifestyle changes, and is tailored to each participant's needs. The control group receives no treatment during the first 12 months but will receive the same intervention after the initial study period. Both groups wear activity trackers (Garmin) to objectively measure physical activity and sleep, and complete patient-reported outcome measures (PROMs) every 4 months. Sick leave data is collected from employers and supplemented by self-reported measures.

### Intervention Type

Behavioural

### Primary outcome measure

Sick leave is measured in days using employer-reported absence records at baseline, and at 4, 8, and 12 months

### Secondary outcome measures

1. Self-reported sick leave (including self-certified leave) measured using a digital questionnaire at baseline and 4, 8, and 12 months
2. Receipt of work assessment allowance (AAP) or disability benefits measured using employer records at baseline and 4, 8, and 12 months
3. Company-level sick leave and turnover measured using aggregated employer reports at baseline and 4, 8, and 12 months
4. Physical health and mental health measured using patient-reported outcome measures (PROMs) via a digital questionnaire at baseline and 4, 8, and 12 months:
  - 4.1. Questions from Statistics Norway and in-house questions on work time and sick leave
  - 4.2. RAND 36-Item Short Form Health Survey for health-related quality of life
  - 4.3. Bergen Insomnia Scale for sleep
  - 4.4. Questions concerning diet, tobacco, alcohol and physical activity from the questionnaires used in the HUNT study - a longitudinal population health study in Norway of 250,000 people since 1984
5. Physical activity and sleep measured using activity trackers at baseline and 4, 8, and 12 months
6. Intervention adherence measured using activity logs and coach reports in the ABEL digital platform throughout the 12-month intervention period

### Overall study start date

01/03/2024

### Completion date

01/01/2028

## Eligibility

### Key inclusion criteria

1. Aged 18 years or older
2. Employed at a participating company

3. Employers in the highest 20% of sick leave in the company over the last year (and minimum 10% sick leave on average)
4. Sick leave related to musculoskeletal disorders, mental health conditions, or lifestyle-related diseases
5. Able to provide informed consent
6. Sufficient language proficiency to understand and respond to study materials and counseling sessions
7. Access to a smartphone or computer with an internet connection for digital participation

**Participant type(s)**

Employee

**Age group**

Adult

**Lower age limit**

18 Years

**Upper age limit**

75 Years

**Sex**

Both

**Target number of participants**

1000 (number of clusters will be decided based on the number of employees the participating companies have)

**Total final enrolment**

1000

**Key exclusion criteria**

Does not meet the inclusion criteria

**Date of first enrolment**

07/05/2025

**Date of final enrolment**

31/12/2025

**Locations****Countries of recruitment**

Norway

**Study participating centre**

SINTEF Digital

Forskningsveien 1

Oslo

Norway  
0373

## Sponsor information

### Organisation

SINTEF Digital

### Sponsor details

SINTEF, Pb. 124 Blindern  
Oslo  
Norway  
0314  
+47 (0)40 00 51 00  
info@sintef.no

### Sponsor type

Research organisation

### Website

<https://www.sintef.no/digital/>

### ROR

<https://ror.org/028m52w57>

## Funder(s)

### Funder type

Industry

### Funder Name

ABEL Technologies AS

## Results and Publications

### Publication and dissemination plan

Planned publication in a peer-reviewed journal

### Intention to publish date

01/07/2027

### Individual participant data (IPD) sharing plan

The data-sharing plans for the current study are unknown and will be made available at a later date.

**IPD sharing plan summary**

Data sharing statement to be made available at a later date