ISRCTN15074822 https://doi.org/10.1186/ISRCTN15074822

Can digital health counseling reduce sick leave?

Submission date 02/05/2025	**Recruitment status** Recruiting	[X] Prospectively registered [_] Protocol [_] Statistical analysis plan [_] Results [_] Individual participant data [X] Record updated in last year
Registration date 06/05/2025	**Overall study status** Ongoing	
Last Edited 06/03/2026	**Condition category** Other	

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 2029

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

Contact information

Type(s)
Public, Scientific, Principal investigator

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Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

Protocol serial number
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

Study type(s)
Prevention

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

Key secondary outcome(s))
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

Completion date
01/01/2029

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

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit

18 years

Upper age limit
75 years

Sex
All

Total final enrolment
1000

Key exclusion criteria
Does not meet the inclusion criteria

Date of first enrolment
07/05/2025

Date of final enrolment
31/10/2026

Locations

Countries of recruitment
Norway

Study participating centre
SINTEF Digital
Forskningsveien 1
Oslo
Norway
0373

Sponsor information

Organisation
SINTEF Digital

ROR
https://ror.org/028m52w57

Funder(s)

Funder type

Industry

Funder Name
ABEL Technologies AS

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Data sharing statement to be made available at a later date