ISRCTN10237475 https://doi.org/10.1186/ISRCTN10237475

eTHOS: Enhancing the health of NHS Staff. A trial to assess an employee health screening clinic for NHS staff

Submission date
03/06/2019

Recruitment status
No longer recruiting

Registration date
09/12/2019

Overall study status
Completed

Last Edited
09/06/2026

Condition category
Other

[X] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims

The National Health Service (NHS) is the 5th largest employer globally. Absenteeism (time off from work due to ill health) and presenteeism (attendance at work whilst ill, resulting in poor work performance) are major problems and affect NHS employees more than those working in other organisations. Absenteeism costs the NHS around £2.4b/yr. (£1 in every £40 of the NHS budget), money that could be spent on caring for patients.

Poor NHS staff health is associated with poor work performance and worse patient healthcare. This includes higher patient death rates, longer stays and a greater chance of catching an infection in hospital. The main causes of NHS staff absenteeism/ presenteeism include muscular complaints (e.g. back injuries) & mental ill-health. Lifestyle factors such as smoking, obesity and low levels of exercise are also important.

Improving NHS staff health will improve NHS patient care and reduce the costs of replacing staff on sick leave, but there are no studies to tell us the most effective way to achieve this. University Hospitals Birmingham NHS Foundation Trust is one of the largest NHS Trusts in the UK and employs >9000 people. Studies suggest the health of the workforce is poor. 44% said they had a health problem which impacted on work. 12% had taken over 2 weeks' sick leave in the past year. Studies have shown that you can reduce the impact of muscular problems, mental ill-health and lifestyle related problems by detecting problems early using specialised screening and then referral for appropriate treatment. However, combined screening for these major health issues in NHS staff in a workplace setting has not been tried before, and we do not know if it will work to reduce absenteeism and presenteeism.

Studies have also shown that NHS staff on lower wages and working night shifts tend to have the poorest health. However these groups often do not take part in screening programmes and it is unclear if they would attend a staff health clinic.

We propose offering a health check to NHS staff which has been designed to screen and then treat the most common causes of ill health in NHS staff. Since we do not know if this will be effective, we aim to carry out a randomised controlled trial. NHS staff will be randomly allocated to receive this health check (intervention group) or usual care (control group) visiting their GP or Occupational Health service as normal. This will help us to investigate if it is effective and cost-effective in improving health and reducing absenteeism and presenteeism. This would be of

huge importance to the NHS. Even small average improvements could lead to a significant cost savings.
Although there may be no direct benefits to NHS staff taking part in this study, the results of the trial may lead to an employee health screening clinic being made available for all NHS staff. This will help reduce unexpected absence from work due to illness and staff attending work whilst they are feeling unwell. NHS staff may also learn more about their general health as part of the study, which they might find beneficial.
Because so little is known about how a health check for NHS staff might work, and whether it is possible to test the intervention in a randomised trial, we wish to firstly carry out a pilot study in 4 hospitals (Queen Elizabeth Hospital, Birmingham, Heartlands Hospital, the Children's Hospital, Birmingham, Hereford Hospital) to work out whether such a study is feasible.

Who can participate?
To be eligible, NHS staff must be an employee of one of the participating NHS Trusts (an employee is defined as any individual employed (i.e. undertaking work for payment) by the participating Trust). NHS staff will not be eligible if they have previously attended the current Queen Elizabeth Hospital Birmingham pilot screening clinic. In addition, paramedics, community NHS staff and volunteers will not be eligible.
We will assess whether we can recruit staff to the study, whether a broad range of NHS staff would use a health screen, including lower paid and shift-working staff, and whether referrals are taken up. We will also test all the processes of gathering data and ask the opinions of the staff attending and providing the clinic. If the study proves feasible, we will design a full trial and recruit new hospitals to take part. We hope to recruit 480 staff members over 24 weeks to this pilot study in total.

What does the study involve?
All those randomised to the intervention arm will attend a staff health screening clinic. It will consist of two stages: (1) a screening assessment for musculoskeletal, mental and the NHS health check to eligible staff as per NHS Health check guidelines or a lifestyle check (BMI, exercise levels, smoking, alcohol) to those who are not, followed by (2) appropriate advice and /or referral of screen positives to appropriate services for management as per NHS/NICE recommendations.
All those randomised to the control arm will not attend a health screening clinic. Instead, if these participants have any health concerns they will be advised to see their GP or Occupational health department which is current usual care.

What are the possible benefits and risks of participating?
When taking part in this study, we may identify a health condition that a participant might not know that they had. This includes both physical and mental health conditions. Finding this out will allow any health problem to be treated (if needed). The doctors and nurses involved in the study will talk to he participant about all of the results of the screening clinic. Participants may also be asked to have a blood test. This can involve a small amount of discomfort but will be taken by trained staff.

Where is the study run from?
1. University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK
2. Birmingham Women's and Children's NHS Foundation Trust, Birmingham, UK
3. Wye Valley NHS Trust, Hereford, UK

When is the study starting and how long is it expected to run for?
September 2019 to March 2020

Who is funding the study?
eTHOS is funded by the National Institute for Health Research Health Technology Assessment Programme (Project Number: 17/42/42). It is sponsored by the University of Birmingham and is being organised and run on their behalf by the Birmingham Clinical Trials Unit. No member of the research team is being paid for including participants in this study.

Who is the main contact?
1. Mrs Sheriden Bevan, Senior Trial Manager, Birmingham Clinical Trials Unit, s.bevan@bham.ac.uk
eTHOS Co Chief-Investigators
2. Dr Rachel Jordan, University of Birmingham, r.e.jordan@bham.ac.uk
3. Dr Liz Sapey, Queen Elizabeth Hospital, Birmingham, E.Sapey@bham.ac.uk

Contact information

Type(s)
Public

Contact name
Mrs Sheriden Bevan

Contact details
Birmingham Clinical Trials Unit
University of Birmingham
Edgbaston
Birmingham
United Kingdom
B15 2TT
+44 (0)121 414 8137
s.bevan@bham.ac.uk

Type(s)
Scientific

Contact name
Dr Rachel Jordan

ORCID ID
https://orcid.org/0000-0002-0747-6883

Contact details
University of Birmingham
Birmingham
United Kingdom
B15 2TT
+44 (0)121 414 6775
r.e.jordan@bham.ac.uk

Additional identifiers

Central Portfolio Management System (CPMS)
42206

Protocol serial number
NIHR 17/42/42

Study information

Scientific Title
eTHOS: Enhancing the Health of NHS Staff: A randomised controlled pilot trial of an employee health screening clinic for NHS staff.

Acronym
eTHOS

Study objectives
The aim of this pilot trial is to test the feasibility of a definitive RCT to evaluate the effectiveness and cost-effectiveness of a complex intervention in reducing absenteeism and presenteeism in NHS staff, comparing a hospital-based staff health screening and referral clinic with usual care

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 13/01/2020, West Midlands – Edgbaston REC (The Old Chapel, Royal Standard Place, Nottingham, NG1 6FS; +44 (0)207 1048089; edgbaston.rec@hra.nhs.uk), ref: 19/WM/0378

Primary study design
Interventional

Study design
Multicentre 2-arm parallel group open-label randomised controlled pilot trial

Study type(s)
Screening

Health condition(s) or problem(s) studied
NHS Staff are the participants in this trial and are considered healthy, although unknown conditions may be diagnosed as a result of the intervention screening

Interventions
All those randomised to the intervention arm will attend a staff health screening clinic. It will consist of two stages: (1) a screening assessment for musculoskeletal, mental and the NHS health check to eligible staff as per NHS Health check guidelines or a lifestyle check (BMI, exercise levels, smoking, alcohol) to those who are not, followed by (2) appropriate advice and /or referral of screen positives to appropriate services for management as per NHS/NICE recommendations.

All those randomised to the control arm will not attend a health screening clinic. Instead, if these participants have any health concerns they will be advised to see their GP or Occupational health department which is current usual care.

Attendance at the screening clinic to complete intervention screening, and review of results and recommended action/referrals will approximately 40 minutes. The health screening is the intervention.

Participants will be individually randomised by computer to either attendance at a health screening and referral clinic or usual care.

Intervention Type
Other

Primary outcome(s)
1. Recruitment rate at 26 weeks
2. Referral to recommended services at 26 weeks (intervention arm only)
3. Uptake of recommended services at 26 weeks (self-report) (intervention arm only)

Key secondary outcome(s)
Feasibility outcomes:
1. Referrals to recommended services at 52 weeks
2. Acceptability of intervention to participants and health clinic staff measured using face to face interviews and focus groups. These will take place from randomisation to the end of 52 week follow up
3. Feasibility of trial processes measured using completeness of relevant data items, interviews at 52 weeks
4. Indication of intervention contamination measured using resource usage collected at baseline, 26 & 52 weeks
Outcomes related to the definitive RCT:
6. Absenteeism with reasons at 26 & 52 weeks (including self-report and employee records)
7. Presenteeism measured using WHO-HPQ questionnaire at 26 & 52 weeks (self-complete)
8. HRQoL measured using EuroQol EQ5D 5-level at 26 & 52 weeks (self-complete)
9. Healthcare and occupational health service utilisation at 26 & 52 weeks (self-reported)
10. Resource use/costs (questionnaire to patients & trial data) at 26 & 52 weeks

Completion date
30/11/2021

Eligibility

Key inclusion criteria
Must be an employee of one of the participating NHS Trusts (an employee is defined as any individual employed (i.e. undertaking work for payment) by the participating Trust)

Participant type(s)
Health professional

Healthy volunteers allowed
No

Age group
Adult

Sex
All

Total final enrolment
314

Key exclusion criteria
1. Previous attendees of the current Queen Elizabeth Hospital Birmingham pilot screening clinic
2. Paramedics, community NHS staff and volunteers

Date of first enrolment
02/12/2020

Date of final enrolment
30/04/2021

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
University Hospitals Birmingham NHS Foundation Trust
Mindelsohn Way
Edgbaston
Birmingham
England
B15 2GW

Study participating centre
Birmingham Women's and Children's NHS Foundation Trust
Steelhouse Lane
Birmingham
England
B4 6NH

Study participating centre
Wye Valley NHS Trust
Union Walk
Hereford

England
HR1 2ER

Sponsor information

Organisation
University of Birmingham

Funder(s)

Funder type
Government

Funder Name
Health Services and Delivery Research Programme

Alternative Name(s)
Health Services and Delivery Research Programme, Health Services and Delivery Research, Health Services & Delivery Research, Health Services and Delivery Research (HS&DR) Programme, NIHR Health Services and Delivery Research (HS&DR) Programme, NIHR Health Services and Delivery Research Programme, HS&DR Programme, The Health and Social Care Delivery Research (HSDR), Health and Social Care Delivery Research (HSDR), HS&DR

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Funder Name
NIHR Evaluation, Trials and Studies Co-ordinating Centre (NETSCC); Grant Codes: 17/42/42

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are/will be available upon request from Birmingham Clinical Trials Unit (bctudatashare@contacts.bham.ac.uk)

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		01/08/2024	29/08/2024	Yes	No
Results article		09/06/2026	09/06/2026	Yes	No
Protocol article		27/07/2022	28/07/2022	Yes	No
HRA research summary			28/06/2023	No	No
Participant information sheet	version 4.0	19/03/2021	19/11/2021	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes