The use of sit-stand desks by GPs during consultations with adult patients

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
17/03/2021		[X] Protocol		
Registration date	Overall study status Completed	Statistical analysis plan		
17/03/2021		[X] Results		
Last Edited	Condition category	Individual participant data		
25/06/2024	Other			

Plain English summary of protocol

Background and study aims

There is strong evidence that sitting for long periods of time can contribute to poor health and wellbeing. In the UK, there are about 51,000 GPs most of whom are likely to sit for long periods of the day. A typical GP's welcome to a patient is "please take a seat", which has long been seen as an important part of having a good doctor-patient relationship. Studies also suggest that doctors often neglect their own health, and often report low levels of physical activity. Identifying ways to get GPs on their feet and moving more often may be important for their health and to enable them to model good behaviour to their patients. Giving GPs access to a desk that allows them to both sit and stand, whilst working, may help reduce the time they spend sitting during the day, as well as lead to them acting as positive role models in this regard to their patients. Studies have also shown GPs do not regularly have conversations with patients about physical activity; changing to standing consultations may prompt more conversations like this.

This study aims to investigate the practicalities of GPs standing during consultations with their adult patients and look at whether this is acceptable to both GPs and their patients. The study also aims to examine whether having a desk that allows GP to sit or stand changes the amount of time GPs spend sitting each day and whether this has an impact on the amount of physical activity GPs do each day. The study team is also interested in whether GP's standing has any impact on the relationship between GPs and their patients.

Who can participate?

GPs currently working in the UK, and their patients if they experience a standing consultation.

What does the study involve?

This study team will collect some data from GPs about their work and their physical behaviours (physical activity, sitting time, etc.) before giving them access to a sit-stand desk for four weeks. During this time, GPs will be asked to try and use the desk in a standing position during some face-to-face consultations with adult patients. When they do stand during these consultations, GPs will be asked to give their patients a questionnaire asking about their experience of their standing consultation. Patients who choose to complete this questionnaire will also be able to consent to be followed up for an interview to explore their experience of their consultation

further. After four weeks, the study team will collect similar data from the GPs as before the intervention and ask if they take part in an interview exploring their experiences of using a sit-stand desk within general practice.

What are the possible benefits and risks of participating?

GPs may benefit as they may be able to keep the sit-stand desk following the four-week intervention period. Reducing sitting time at work has shown multiple benefits from reduced musculoskeletal complaints to improved work productivity. There are no risks anticipated in taking part in the study.

Where is the study run from? Loughborough University (UK)

When is the study starting and how long is it expected to run for? From September 2020 to February 2022

Who is funding the study?
The National Institute for Health Research (UK)

Who is the main contact?
Dr Greg Biddle, gjhb2@leicester.ac.uk

Contact information

Type(s)

Scientific

Contact name

Dr Gregory Biddle

ORCID ID

http://orcid.org/0000-0002-4394-0655

Contact details

School of Sport
Exercise and Health Sciences
Loughborough University
Epinal Way
Loughborough
United Kingdom
LE11 3TU
+44 (0)1509228483
gjhb2@leicester.ac.uk

Additional identifiers

EudraCT/CTIS number
Nil Known

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

CPMS 48662, IRAS 288859

Study information

Scientific Title

The feasibility and acceptability of using height-adjustable workstations to facilitate standing during GP consultations with adult patients

Acronym

upSTANDing GP

Study objectives

Height-adjustable workstations (standing desks) will be a feasible and acceptable intervention for GPs within general practice.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 12/03/2021, Wales Research Ethics Committee 2 (Health and Care Research Wales, Castlebridge 4, 15-19 Cowbridge Road East, Cardiff, CF11 9AB; +44 (0)7970422139; wales. rec5@wales.nhs.uk), ref: 21/WA/0082

Study design

Non-randomized cross-sectional study

Primary study design

Interventional

Secondary study design

Non randomised study

Study setting(s)

GP practice

Study type(s)

Treatment

Participant information sheet

See additional files ISRCTN76982860_PIS_GPs_v1.1_12March2021, ISRCTN76982860_PIS_patient questionnaire_v1.0_10Feb2021, and ISRCTN76982860_PIS_patient interview_v1.1_12March2021

Health condition(s) or problem(s) studied

Sedentary general practitioners (GPs)

Interventions

GPs will be identified through the West Midlands Clinical Research Network. Practices will be contacted and interested GPs within each practice will be able to contact the research team if they are interested in taking part. Each identified practice will receive participant information sheets to be shared with GPs. Interested GPs will be screened using the inclusion and exclusion criteria via telephone, email, or a face-to-face meeting. A baseline assessment will be arranged with those deemed to have met the criteria.

During the baseline assessment informed consent will be sought. This may be written or verbal depending on if the baseline assessment is conducted in person (written) or conducted remotely (verbal). Where verbal consent is taken, each of the statements on the written consent form will be read out and GPs will be asked to verbally indicate their agreement (or not) with each statement and this will be audio recorded. The researcher will then sign and date the written consent form and then provide the GP with a copy after the assessment. Once consent has been obtained, basic personal information and demographics will be recorded. These include: date of birth; sex; work address; ethnicity; year qualified as a GP; location of current working practice (City, Town, Rural); current job role; number of clinical sessions worked per week; number of patients registered at their practice; and whether their practice is accredited by the RCGP active practice charter, the workplace wellbeing charter, or are a registered parkrun practice. GPs will then be asked to complete a short questionnaire about some of their current working practices and their views on using height-adjustable workstations. Then, GPs will be asked to wear an activPAL accelerometer for at least the next eight days, while completing a wear diary. The device and the diary will be explained to the GP, including how to wear it and when to wear it. Once this has been completed, that would signal the end of the baseline assessment for GPs.

A minimum of 8 days after the baseline assessment, the height-adjustable workstations can be delivered to the GPs. Upon delivery, the workstation will be installed in the GPs consultation room. Once installed, the GP will be given an instruction leaflet outlining how best to use the workstation. The researcher will also discuss when they may use the workstation, paying particular attention to face-to-face consultations. GPs will also be issued a number of consultation exit questionnaires and asked to give these out to patients following consultations in which they (the GP) have been standing. The activPAL device worn following the baseline assessment will be collected at this time. Once the workstation has been installed, the GPs will then have access to it for up to four weeks. With at least eight days remaining of the four-week intervention, a member of the research team will again provide the GP with an activPAL device and wear diary. They will be asked to wear the device and complete the diary as they did following the baseline assessment.

GPs will be asked to give patients a questionnaire after their consultation if the GP was standing. The inclusion and exclusion criteria of the patients will be outlined to the GP at the start of the intervention. A method for collecting these questionnaires securely will be arranged with each practice individually. There is no limit on how many questionnaires the GP can give out and they can continue to give out questionnaires for the duration of the four-week intervention. The research team also plan to have provision for researchers to approach patients at the end of the consultation to administer exit questionnaire outside of the consultation room; where the GP will give the patients either a red card or a green card to indicate to the researcher whether it is appropriate for the researcher to approach the patients. If no card is issued the researcher will not approach the patient. These questionnaires are only for patients who experienced a standing consultation.

Once the GP has had access to the workstation for four weeks, a member of the research team will remove this from the GPs consultation room. The activPAL device worn at the end of the intervention period will be collected at this time, as will the consultation exit questionnaires which have been completed by patients.

Follow-up interviews for GPs will take place either in person or remotely and will ask about their experiences using a height-adjustable workstation during consultations, and during other work-related tasks. They will be asked about the impact using the workstation had on the doctor-patient relationship, how acceptable they found the workstation, their perception of the long-term feasibility of implementing such workstations, and their perception of patients' views of the height-adjustable workstation. GPs will also be asked if they felt using the workstation had any effect on their own behaviour in both work and home settings (time spent sitting, standing, moving, and sleeping), their own health (mental and physical), and their own work-related outcomes (productivity, efficiency etc). These will be conducted no more than 4 weeks after the end of the intervention.

Patients, who consented in their consultation exit questionnaire to be followed up, will be contacted to arrange a telephone interview. Patients will be asked about their experience of their consultation with their GP using a height-adjustable workstation. They will be asked about the impact using the workstation had on the doctor-patient relationship and on their perception of the effectiveness of the consultation, particularly whether they believe the workstation impacted on this. They will also be asked if they felt their GP using the height-adjustable workstation had any effect on their own behaviour (time spent sitting, standing, moving, and sleeping).

Intervention Type

Behavioural

Primary outcome measure

1. Feasibility and acceptability of using height-adjustable workstations measured using GP questionnaires at baseline and between 4 weeks, and a patient questionnaire immediately after the consultation

Secondary outcome measures

- 1. GP view of the doctor-patient relationship measured using questionnaires at baseline and 4 weeks
- 2. Patient view of the doctor-patient relationship measured using a patient questionnaire immediately after the consultation
- 3. Patient views of standing during their GP consultation measured using a patient questionnaire immediately after the consultation
- 4. Patient views of standing during their GP consultation measured during an optional patient follow-up telephone interview
- 5. Desk use measured using a GP questionnaire atv4 weeks and via a limpet device between baseline and 4 weeks
- 6. Sitting time and physical activity measured using the activPAL for an 8 day period at baseline and for the last 8 days of the 4-week intervention
- 7. Establish and refine a study recruitment strategy for GPs and patients measured using trial records collected during the recruitment period
- 8. Attrition in the trial GPs measured using trial records collected throughout the study
- 9. GP views of the feasibility and acceptability of using sit-stand desks within General Practice measured using a GP interview between 4 and 8 weeks

- 10. Trial recruitment, retention, and acceptability between ethnic groups, gender, and practice location for GPs measured using demographic data collected at baseline and trial records collected throughout the study
- 11. Acceptability of measurement instruments to GPs and patients, including the activPAL inclinometer as the tool for the measurement of sitting time and physical activity in GPs measured using an optional patient follow-up telephone interview and GP interview between 4 and 8 weeks
- 12. Intervention fidelity measured using trial records collected throughout the study
- 13. Standard deviation of sitting time to inform a sample size calculation for a potential phase III RCT calculated from activPAL data collected for an 8 day period at baseline and for the last 8 days of the 4-week intervention

Overall study start date

22/09/2020

Completion date

01/02/2022

Eligibility

Key inclusion criteria

GPs:

- 1. Currently working as a GP in the UK
- 2. Working at least five clinical sessions a week

Patients:

- 1. Aged ≥18 years
- 2. Attended a consultation with a GP who was standing as part of their participation in the study

Participant type(s)

Mixed

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

Planned Sample Size: 340; UK Sample Size: 340

Total final enrolment

343

Key exclusion criteria

GPs:

1. Medical student who is not yet qualified as a GP

- 2. Any other health care professional
- 3. Pre-existing condition that inhibits the ability to stand or to be physically active

Patients:

- 1. Unable to communicate in English
- 2. Unable to provide written informed consent

Date of first enrolment

01/04/2021

Date of final enrolment

01/09/2021

Locations

Countries of recruitment

England

United Kingdom

Study participating centre Loughborough University

School of Sport, Exercise and Health Sciences National Centre for Sport and Exercise Medicine Loughborough United Kingdom LE11 3TU

Study participating centre NIHR CRN: West Midlands

James House Newport Road Albrighton Wolverhampton United Kingdom WV7 3FA

Sponsor information

Organisation

Loughborough University

Sponsor details

Research and Enterprise Office Loughborough England United Kingdom LE11 3TU +44 (0)1509228693 j.fensome@lboro.ac.uk

Sponsor type

Hospital/treatment centre

Website

http://www.lboro.ac.uk/

ROR

https://ror.org/04vg4w365

Funder(s)

Funder type

Government

Funder Name

National Institute for Health Research

Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal and presentations at national and international conferences

Intention to publish date

01/04/2022

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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	version v1.1	12/03/2021	17/03/2021	No	Yes
Participant information sheet	version v1.0	10/02/2021	17/03/2021	No	Yes
Participant information sheet	version v1.1	12/03/2021	17/03/2021	No	Yes
Protocol file	version v1.1	12/03/2021	17/03/2021	No	No
HRA research summary			20/09/2023	No	No
Results article		25/06/2024	25/06/2024	Yes	No