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

Version 1.1

Short Title	upSTANDing GP – Work package two
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SIGNATURE PAGE

The undersigned confirms that the following protocol has been agreed and accepted and that the Chief Investigator agrees to conduct the study in compliance with the approved protocol and will adhere to the principles outlined in the Declaration of Helsinki, the Sponsor's SOPs, and other regulatory requirements.

I agree to ensure that the confidential information contained in this document will not be used for any other purpose other than the evaluation or conduct of the investigation without the prior written consent of the Sponsor.

I also confirm that I will make the findings of the study publicly available through publication or other dissemination tools without any unnecessary delay and that an honest accurate and transparent account of the study will be given; and that any discrepancies from the study as planned in this protocol will be explained.

Chief Investigator:

Signature: ..... Date: ...../...../.....

Name: (please print):

.....

Abbreviations

AE	Adverse Event
AR	Adverse Reaction
CI	Chief Investigator
CRF	Case Report Form
GCP	Good Clinical Practice
GDPR	General Data Protection Regulation
GP	General Practitioner
HRA	Health Research Authority
NHS	National Health Service
NIHR	National Institute for Health Research
PI	Principal Investigator
REC	Research Ethics Committee
SAE	Serious Adverse Event
SAR	Serious Adverse Reaction
UK	United Kingdom
WP2a	Work package 2a
WP2b	Work package 2b
WP2c	Work package 2c

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2 Lay Summary

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 suggests 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. Here we aim 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. We also aim to examine whether having a desks 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. We are also interested in whether GP's standing has any impact on the relationship between GPs and patients. To do this, we will give GPs a desk that allows them to sit and stand and ask them to use this during consultations with adult patients and during any other time of their day working. We will encourage GPs to stand during as many consultations with their patients as possible and to stand during other working tasks such as administration and doing phone calls. We will measure GPs sitting time and physical activity before getting the workstation and then again when they have the workstation. We will ask patients to complete a brief questionnaire immediately following a consultation where their GP was standing which will explore how they felt about their GP standing. Patients will be asked if they are willing to be contacted at a later date to

take part in a telephone interview which will explore their experiences of standing up with their GP during their consultation. GPs will also be asked to take part in an interview after they have experienced standing consultations to explore their thought and experiences about this and if it had any impact on their relationships with their patients

3 Study background and rationale

Sedentary behaviour accumulated in occupational settings has been specifically associated with an increased risk of type 2 diabetes and all-cause mortality (1), as well as increased risk of musculoskeletal disorders (2), and detrimental work-related engagement and presenteeism (3,4). Furthermore, sedentary behaviour has also been shown to be associated with reduced cognitive function (5), poor mental health (6,7), and a lower quality of life (8). Sedentary behaviour is defined as "any waking behaviour characterized by an energy expenditure ≤1.5 metabolic equivalents, while in a sitting, reclining or lying posture" (9). It has been well documented that office workers spend a large proportion of their working day sitting (10,11), yet data on clinical staff, such as general practitioners (GPs) who are assumed to sit for large proportions of the day, is lacking.

Recent experimental research has shown that breaking prolonged sitting time with regular breaks of standing or movement improves markers of cardiometabolic health (12–14), as well as measures of fatigue and vigour (15,16). Considering this evidence, reducing sedentary behaviour in the workplace may be an important step in improving health, wellbeing and work-related outcomes.

By the nature of their work it is likely that GPs spend large proportions of their working day sitting. This is largely due to their work demands (i.e., consultation time with patients) and their working environment. Unlike other health care workers, GPs work fundamentally revolves around them spending large amounts of time in one place. Therefore, it is important to explore ways in which GPs might be provided with opportunities during their working day to be less sedentary, potentially through the use of height-adjustable workstation in their consultations. Height-adjustable workstations allow the user to alternate between a sitting and standing position to do their work. Not only may this enable GPs to become less sedentary and more physically active, the use of height-adjustable workstations may also help GPs to routinely have conversations with patients about reducing time spent sitting and increasing physical activity levels to improve their health. This is particularly important as large proportions of the general population are insufficiently active and spend long periods of time sitting, typically between 9 and 10 hours per day (17). This issue is compounded by the fact that GPs do not regularly discuss physical activity with patients (18).
For most people, their GP is the first port of call for health advice, so primary care is an ideal place in which to promote physical activity and discourage high levels of sitting in the population.

Whilst standing in healthcare settings is not new, for example, ward rounds in hospital are typically conducted with doctors standing and patients sitting, this is not currently the case in primary care. GP consultations historically have been conducted sitting down. Introducing standing in consultations

would be a large cultural and environmental shift/change for patients and GPs. However, current evidence puts particular prominence on the use of environmental restructuring as a behaviour change technique in interventions aiming to reduce occupational sitting time (19), with 50% of interventions designed to reduced sitting time in adults having added objects to the environment (19). Environmental restructuring in this instance is the introduction of height-adjustable workstations. Due to the nature of GPs work, this is a setting that, in theory, height-adjustable workstations could be of benefit to both GPs and patients.

A recent study that investigated the effect of implementing height-adjustable workstations among office workers within the National Health Service (NHS), alongside other behaviour change techniques such as education and self-monitoring, reduced occupational sitting by over 80 minutes per day when compared with the control group (20). Along with this large reduction in sitting, significant improvements were also observed for job performance, work engagement, occupational fatigue, sickness presenteeism, daily anxiety, and quality of life (20). It is now of interest to examine different clinical/work settings that may benefit from sitting less and standing more, using height-adjustable workstations to facilitate this. Due to the nature of GPs work, this is a setting that, in theory, height-adjustable workstations could facilitate this change and be of benefit to both GPs and patients. However, before implementing height-adjustable workstations widely within general practice, it is important to consider how feasible and acceptable this form of intervention may be to GPs and patients alike.

4 Aims and objectives

4.1 Primary objective

To investigate the feasibility and acceptability to GPs and patients of GPs standing during consultations in primary care.

4.2 Secondary objectives

1. Assess the doctor-patient relationship when GPs stand during consultations.
2. Assess patients views of standing during their GP consultation.
3. Assess GPs self-reported use of standing workstations during a variety of working tasks.
4. Assess device-based measurement of GPs use of the workstation.
5. Derive preliminary estimates of the effect of the intervention on GPs total daily sitting time and physical activity, both in work and outside of work.
6. Establish and refine a study recruitment strategy for GPs and patients.
7. Determine attrition in the trial (GPs).
8. If possible, assess whether there are any differences in trial recruitment, retention and acceptability between ethnic groups, gender and practice location for GPs.

9. Assess the 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.
10. Assess intervention fidelity.
11. Estimate the standard deviation of sitting time to inform a sample size calculation for a potential phase III RCT.

5 Study design and population

The study forms part of a wider programme of research where work package 1 involved a survey to assess GPs views of using height-adjustable workstations during their working day. Preliminary results from this study showed 61% of GPs wanted to have a height-adjustable workstation in their consultation room, and 64% of GPs thought these workstations could be used during face-to-face consultations. The current study adopts a pre-post single group mixed methods design and is divided into three work packages; work package 2a (WP2a: experimental study to test the feasibility and acceptable of GPs standing during consultations), work package 2b (WP2b: patient consultation exit questionnaires) and work package 2c (WP2c: patient interviews about their experiences of their GP standing during consultations). Each work package will be outlined below, with specific reference to the relevant work package when applicable. This study will include GPs and their patients and both have their own participation inclusion and exclusion criteria. These are as follows.

5.1 Inclusion criteria

GPs will be considered eligible if they meet the following criteria:

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

Patients will be considered eligible if they meet the following criteria:

- ≥ 18 years of age.
- Attended a consultation with a GP who was standing as part of their participation in the upSTANDing *GP* study.

5.2 Exclusion criteria

GPs may not enter the study if ANY of the following apply:

- Medical student who is not yet qualified as a GP and any other health care professional.
- Pre-existing condition that inhibits an individual's ability to stand or to be physically activity.

Patients may not enter the study if ANY of the following apply:

- Unable to communicate in English and unable to provide written informed consent.

5.3 Sample size

As this is a feasibility trial a formal sample size calculation has not been conducted. The research has not been designed or powered to detect a statistically significant difference in efficacy between time

points. Sample sizes of between 24 and at least 70 participants have been recommended (21,22). A recruitment target of between 30 and 40 GPs, of between 200 and 300 patients (completing the exit questionnaire) has been set. It is anticipated that between 20-25 patients will participate in a semi-structured interview (WP2c).

6 Participant Flow

In this study, participants will be classified into two categories (GPs and patients and as described above in section 5). Here, the respective timelines for both GPs and patients progression through the study are outlined.

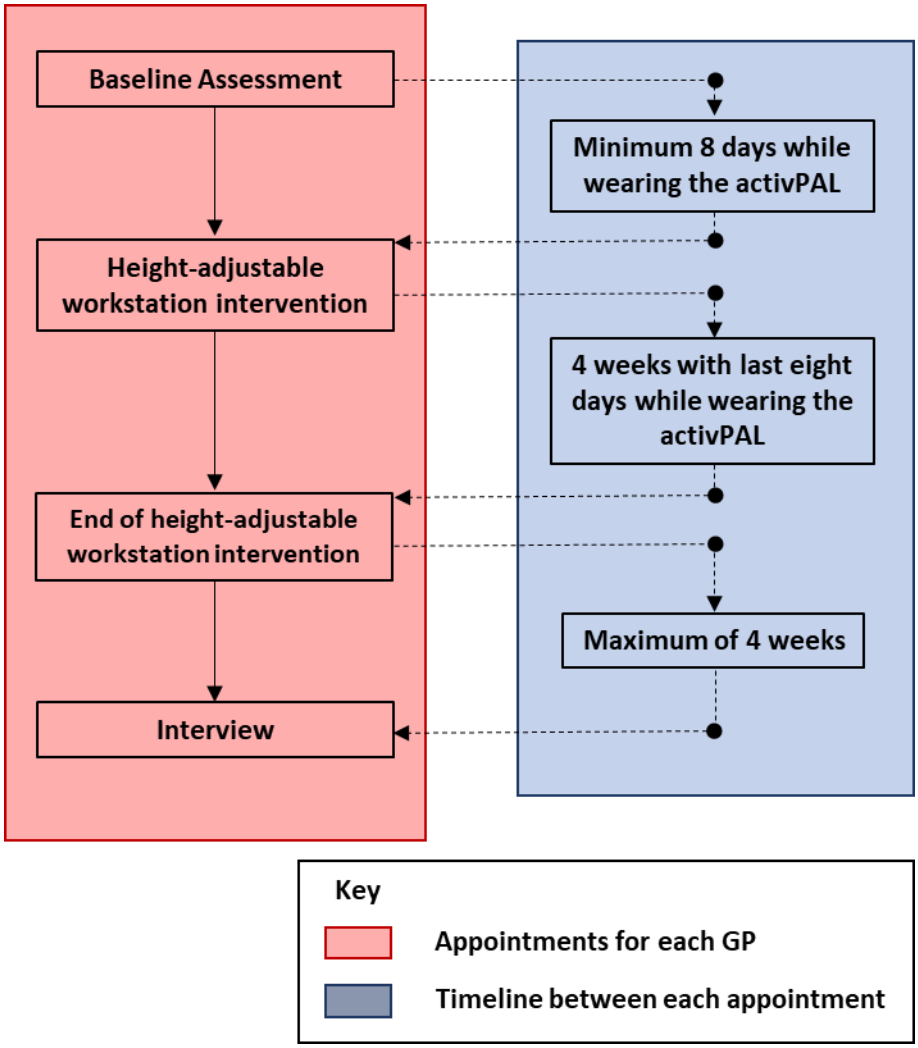

Figure One: Flow diagram for GP study (WP2a)

All activities here will be conducted by the research team

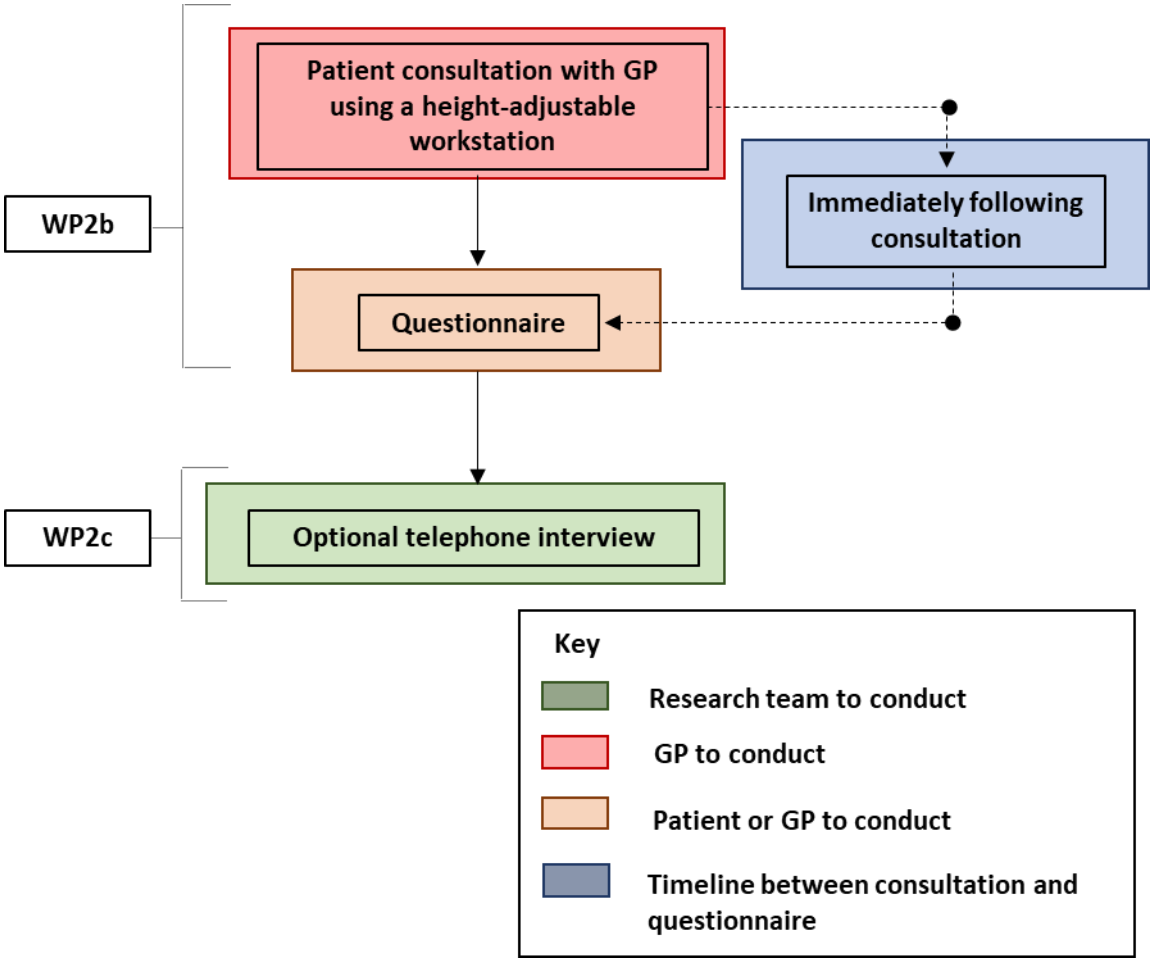

Figure Two. Flow diagram of patient participants (WP2b and WP2c)

7 Purpose, Context and Rationale

We plan to implement height-adjustable workstations (also known as a sit-stand desks or standing desks), which allow GPs to switch, within a few seconds, between sitting and standing positions during their working day. Height-adjustable workstations have formed a major role in interventions to reduce occupational sitting (20), and given the sedentary nature of GPs working lives and the role they play in modelling positive behaviour to their patients, it is of interest to test whether using height-adjustable workstation to facilitate less sitting and more standing, is feasible and acceptable within general practice.

7.1 Height-adjustable workstations

Height-adjustable workstations allow the user to switch, in a few seconds, between a sitting and standing position by adjusting the high of the workstation. All GPs will be shown how to use the workstation correctly (they will also receive a leaflet explaining how to use the workstation) and will be asked to use the workstation during consultations (face-to-face, online and telephone) and whenever else they wish to do so (i.e. whilst doing administrative duties). It will be GPs and patient's

decision when to use the workstation in the standing position. Patients will not be forced to stand if they do not wish to, even if the GP is standing.

8 Procedures for GPs (WP2a)

8.1 Recruitment

GPs will be recruited through the West Midlands CRN and through existing partnerships and links. Where possible, GPs will be recruited from a diverse range of practices (i.e. those serving geographical areas of high a low deprivation), to ensure where possible that a broad sample of GPs in terms of sex, age and ethnicity participate in this research.

8.2 Screening

GPs will be screened using the inclusion and exclusion criteria outlined above in Section 5 via telephone, email or a face-to-face meeting.

8.3 Informed consent (GPs)

GPs written or verbal informed consent will be obtained at the start of the baseline assessment. It may be necessary to conduct the baseline assessment remotely due to COVID-19, in this event verbal informed consent will be obtained. Verbal informed consent will be audio recorded on an encrypted dictaphone and stored in accordance with the procedures outline in Section 10. Where verbal consent it 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. 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. Each GP will have been provided with a participant information sheet and the activPAL instructions at least 24 hours prior to providing consent to participate. Where verbal consent is taken it will be documented on the consent form and stored as defined in Section 10.

8.4 Baseline assessment (GPs)

Once GPs have provided written or verbal informed consent, data collection will commence. Details in relation to this are outlined below in *Baseline and follow-up data collection (Section 8.6)*. It is from the point of the baseline assessment that all other study related activities are outlined and the timings are set.

8.5 Height-adjustable desk Intervention

Figure Three shows a logic model that explains how the activities of the intervention are expected to contribute to particular results. The workstation will be delivered to the GP practice by a member of the research team no less than eight days after baseline. Once there, the workstation will be installed in GPs consultation room. The researcher will explain to the GP how to correctly use the workstation and will remind the GP of the purpose of the workstation (to reduce sitting time at work and role model

good behaviour for patients). GPs will be reminded that the height-adjustable workstation should not be used with patients under 18 years and should only be used during consultations with adults, telephone/video consultations and during administration tasks. The height-adjustable workstation will be removed four weeks after installation. Any time taken as holiday or leave of absence will be added at the end to ensure four weeks use of the workstation. See Appendix A for an example of the height-adjustable workstation that will be used in this study.

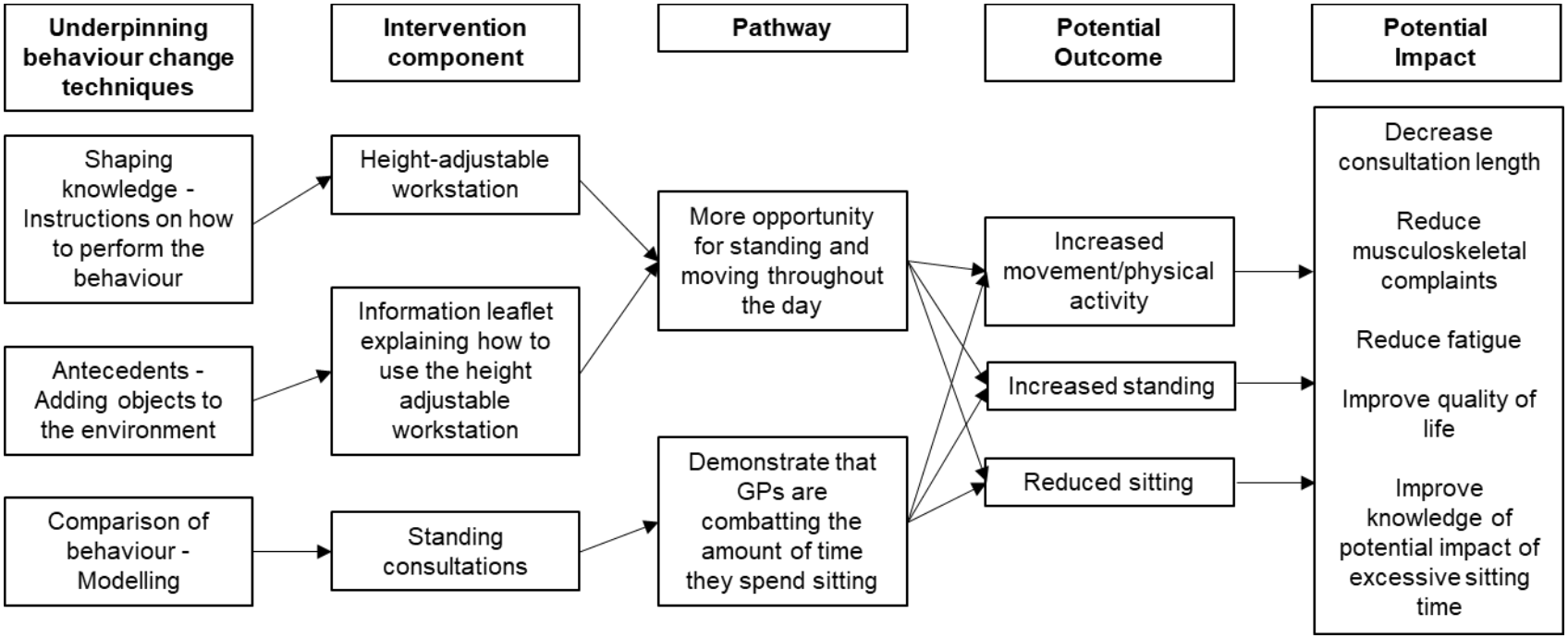

Figure Three: Logic Model

8.6 Baseline and follow-up data collection

8.6.1 activPAL (sitting time)

GPs will be asked to wear an activPAL micro monitor on their thigh for 24 hours a day for up to eight days at two different time periods; from baseline for up to eight days (baseline period) and for the last eight days of the four week height-adjustable workstation intervention (follow-up). The activPAL device, which is about 4cm by 2cm, will be attached to the thigh using a hypoallergenic waterproof dressing (Hypafix Transparent). The device is waterproofed by a nitrile sleeve and wrapped in a waterproof dressing (Hypafix Transparent). GPs will be asked to complete a wear log on each day that they are wearing the activPAL detailing the time they woke up and the time they fell asleep. GPs will also record the time they started and finished work on a given day which will allow data to examined for work and out of work respectively. The activPAL has been found to be a valid and reliable device for measuring time spent sitting, standing and stepping, as well as number of postural transitions in adult populations (23).

8.6.2 GP questionnaires (experiences of using the height-adjustable worstation at work)

GPs will be asked to complete two sets of questionnaires, one at baseline (or at workstation installation) and one at workstation removal (follow up). These questionnaires will examine the following at baseline:

- How often GPs discussed physical activity/exercise, sedentary behaviour/sitting, standing and sleep with their patients.
- Their views on using height-adjustable workstations for face-to-face consultations with able-bodied adults, telephone consultations with adults, video consultations with adults and administration tasks.
- How their patients are alerted that they are ready to be seen by them for a face-to-face consultation.
- What their preferred posture (sitting, standing or don't mind) is during face-to-face consultations with able-bodied adults also standing, during face-to-face consultations with able-bodied adults sitting, video consultations with adult patients, telephone consultations with adult patients and during administration tasks.

The follow-up questionnaire will include the same questions as baseline, with the following additions:

- Has the workstation been used in the past four weeks, if no why not?
- How often the workstation has been used.
- What prompted its use.
- Did the desk make the GP feel self-conscious?
- Was the desk obtrusive?
- How often they stood for face-to-face consultations.

- Did standing prompt conversations with patients about physical activity/exercise, sedentary behaviour/sitting, standing or sleep.
- Was the doctor-patient relationship affected by standing during consultations.
- Was the GPs ability to listen to patients affected by standing during consultations.
- Were patients understanding of the issues discussed affected by standing during the consultation.
- Were there any consultations where it was always better to sit or better to stand?
- Whether the GP explained, or the patient asked by they were standing.
- Did standing impact the length of consultations.
- Did they use the desk more often during different periods of the day?
- What tasks was the desk used for?
- Did the workstation make the GP think more about the time they spend sitting at work and at home?

These questionnaires can be completed online or on paper. Online questionnaires will be completed via Qualtrics.

8.6.3 Device measurement of workstation use

Each workstation will be fitted with a device that measures the GPs use of the desk. The measures include; frequency of position change (from sitting to standing and vice versa), time the workstation is in the sitting position and standing position and maximum time the desk was in a certain position before a change.

8.7 Interviews with GPs

GPs will be invited to take part in an interview, which will take place after the removal of the height-adjustable workstation. Interviews can take place face-to-face or remotely via telephone or online conferencing software. Interviews with GPs will be semi-structured and they will be asked 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 on 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). Data from the interviews will be audio-recorded using an encrypted dictaphone and transcribed, summarised and coded by a Loughborough University approved commercial company (JC Porter, using the methods described and outlined in *Data Management* below).

9 Procedures for Patients (WP2b and WP2c)

Here, procedures are described for WP2b (exit questionnaire) and WP2c (patient interviews). When procedures differ between WP2b and WP2c, this is made clear in the headings and in text where appropriate.

9.1 Recruitment

Patients will be recruited for both WP2b and WP2c following exit from their GP consultation.

9.2 Consultation exit questionnaires with patients (WP2b)

GPs will consider the inclusion and exclusion criteria outlined above in Section 5.1 and 5.2, and if the patient is considered to have met the study criteria the GP will give the patient an exit questionnaire to complete at the end of the consultation. GPs will only ask patients to complete the exit questionnaire if it is appropriate to so do. We 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 this is the case the GP will give the patients a green card to indicate to the researcher it is appropriate for the researcher to approach the patients. If no card is issued the researcher will not approach the patient. We are only interested in patients who experienced a standing consultation.

Patient written informed consent will be obtained at the start of the exit questionnaire and prior to them completing the exit questionnaire detailed above. This process is the same regardless of whether the questionnaires are patient completed or researcher administered. Additional written consent will be sought from patients who are willing to be contacted to take part in a later follow-up interview study (WP2c) about their views on the GP using a height adjustable desk during their consultation. Patients do not need to provide and identifiable data on the exit questionnaire unless they wish to take part in a follow-up interview about their views of standing during their GP consultation.

Once patients have given their written informed consent, they will be able to complete the questionnaire relating to the consultation they have just had with their GP. The questionnaire will focus on the experience of patients during these consultations and the potential impact of their GPs standing during their consultations on the doctor-patient relationship, GPs listening skills and patients' ability to understand the issues discussed. Questions will ask about what posture the patient adopted during the consultation (sitting, standing or a combination), what preference, if any the patient has regarding their GPs adopted posture, whether the GP discussed physical activity, exercise, sitting/sedentary behaviour, standing or sleep with them, and whether the consultation made them think more about the time they spend sitting. Patients will also be asked brief questions about themselves (age group, gender, ethnicity and employment status), how often they visit their GP per year and whether their consultation was for a few specific medical conditions which GPs are more likely to discuss physical activity (weight management/maintenance, type 2 diabetes, cardiovascular

disease, high blood pressure, mental health or musculoskeletal health). There will also be time for the patient to make additional comments about their experience of the standing during their consultation.

Completed questionnaires will either be placed in a secure box at the practice reception, handed to a member of practice reception staff, handed back to the researcher if present or returned to the research team using a freepost envelope. The method of returning the questionnaires will be discussed with each practice and a decision will be made to ensure the needs of that practice are met. If questionnaires are left at the practice, a member of the research team will collect these when convenient. If response rates are poor, these questionnaires can be asked in person immediately following the patients consultation by a member of the research team. If conducted in person, all necessary COVID-19 protocols will be adopted to ensure safety for the patient and researcher.

9.3 Patient Interviews (WP2c)

Those who consent to be followed up further after completing the consultation exit questionnaire will be contacted to arrange a telephone interview. We expect the interviews to take 15-30 minutes to complete.

Participants will be asked to provide verbal informed consent to take part in the interviews. Verbal informed consent will be audio recorded on an encrypted dictaphone and stored in accordance with the procedures outline in Section 10. Each of the statements on the consent form will be read out and patients will be asked to verbally indicate their agreement (or not) with each statement. This will be audio recorded. The researcher will then sign and date the written consent form and then provide the patient with a copy after the assessment. Each patient will have been provided with a participant information sheet and the activPAL instructions at least 24 hours prior to providing consent to participate.

Interviews will be semi-structured. 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). Data from the interviews will be audio-recorded using an encrypted dictaphone and transcribed, summarised and coded by a Loughborough University approved commercial company (JC Porter, using the methods described and outlined in *Data Management* below).

10 Data Management

10.1.1 Participant Contact Detail

GPs contact details will be recorded at baseline in the case report form. Patients will be asked to provide their contact details when consenting to the follow-up telephone interviews. Patients who complete the exit questionnaire but do not wish to take part in a follow-up interview do not need to provide their name or contact details. Any contact details obtained for GPs or patients will be retained and kept separate from their research data to enable anonymous research data collection. Any patient identifiable information recorded on the questionnaire will be logged and then removed. GPs and patients who consent for interviews will be given an identification number and their contact details will be stored on a separate study excel password protected study spreadsheet on the Loughborough University secure study server. Consent to participate in the study will be stored with raw data. Anonymous research data will be stored on the University's secure server for 10 years after the completion of the study.

10.1.2 Questionnaire and activPAL data

All questionnaire and activPAL data for GPs will not contain identifiable information but will be allocated an identification number which will be stored securely at Loughborough University. Patient exit questionnaires may contain identifiable information if they consent to provide contact information for the interviews. Anonymous research data will be stored on the University's secure server for 10 years after the completion.

10.1.3 Interviews

The interviews (both with GPs and patients) will be recorded using an encrypted dictaphone. All audio data collected will be transferred from the recording device to Loughborough University researcher's computer before being transferred onto the University's secure server as soon as connectivity is made. The original recording will then be deleted from the device.

Audio recordings will be transcribed by a commercial company who will have a confidentiality agreement in place with Loughborough University. The commercial company will remove and destroy all personally identifiable data from the transcripts and participants will be coded and referred to in study documents using a unique identification number. Anonymous research data will be stored on the University's secure server for 10 years after the completion. Consent forms will be stored for 10 years after the completion of the project in a locked filing cabinet at Loughborough in a separate office to anonymised data.

10.2 Data Analysis

Interviews will be recorded, transcribed and analysed. Overall, these will be compiled to help answer the research objectives stated previously.

Quantitative data, collected in the GP questionnaires, patient exit questionnaires and activPAL, will be analysed to help answer the research objectives stated previously. All quantitative data collected from patients will be collected at one time point. Quantitative data collected from GPs will be collected at two time points, baseline and during the intervention. This will allow us to analyse change in numerous variables for GPs, but not for patients. Analyses will mainly be descriptive as the study is not powered to determine effectives given the feasibility nature of this work.

11 Adverse events and serious adverse events

There is no reason to assume that this study will lead to an excess of adverse events. The intervention consists of GPs and their patients standing during their routine consultation, and GPs having conversations with their patients about physical activity and reducing sedentary behaviours. GPs promote physical activity within everyday life, which is not likely to create harm. Furthermore, the promotion of physical activity by health professionals is already part of standard care and has been demonstrated as being low risk for all citizens in England as per the NHS Making Every Contact Count Campaign (ref) without specific follow-up for adverse events. Therefore, no adverse events will be collected for this research. Given the low risk nature of the intervention, no formal evaluation of serious adverse events will be included either.

12 Research Governance

The University has an Information Protection Unit that provides support and information to staff in ensuring they are fully compliant with all Information Governance requirements. All investigators are aware of and will work in line with the UK Policy Framework for Health and Social Care Research and have completed GCP training in line with NIHR requirements. A Favourable Ethical Opinion will be obtained from the Health Research Authority Research Ethics Service and Health Research Authority (HRA) Approval. No potential participants will be contacted until all ethical and R&D approvals are in place.

12.1 Data Management

All research data relating to WP2b will be anonymous unless participants wish to disclose their personal details. All personal data gathered will be detached from research data and will be stored separately at Loughborough University. Continued consent to store contact details for future research will be taken from participants prior to research activities. Loughborough University is the custodian of the data and therefore both electronic and paper-based data will be stored on the University's Secure Servers in line with the University's Privacy Statement. Loughborough University are the data controllers for the study and have completed a Data Protection Impact Assessment. The transcription company are data processors, are compliant with General Data Protection Regulations (GDPR) guidance and have a confidentiality agreement in place with Loughborough University.

12.2 Ethical Considerations

12.2.1 Risks

Participation in the proposed research has very limited risks. Consenting to participate will require GPs to wear an activPAL accelerometer for ~16 days in total. There are minimal risks associated with wearing an activPAL for this length of time. It is possible to have a small amount of skin irritation caused by the waterproof dressing attaching the device to the thigh. To prevent this, GPs are encouraged to remove the device to clean the skin on a regular basis and can switch thighs if required. Other risks associated with other study related activities are in line with normal everyday risk and participants who agree to take part will be asked to provide written informed consent and will be informed of their right to withdraw from the study at any time. All data will be handled in accordance with the latest data protection legislation and anonymised for the purposes of data analysis and reporting. No sensitive data will be collected as part of the study.

12.2.2 Potential benefits

GPs may benefit in the short term from using a height-adjustable workstation at work, although this is not likely to provide benefits beyond the short term due to the limited time frame in which the workstation will be used. There are no expected benefits to patients taking part in this research, but it may encourage them to become more physically active and sit less during the day.

13 Funding

This research is funded via an NIHR Research Professorship award to Professor Amanda Daley (Reference number: NIHR300026). As NIHR funded research this work is eligible for adoption on the NIHR Portfolio where the excess treatment costs will be funded via the Primary Care Research Network – West Midlands.

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15 Appendix A

Example of height-adjustable workstation to be used in WP2a