Participant Information Sheet

Study title: Testing sensors in smartphone for analyzing walking patterns in older people

Locality: Auckland

Lead investigator: Professor Ngaire Kerse

Ethics committee ref.: 14/NTA/201/AM02

Contact phone number:
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You are invited to take part in a study that tests the accuracy of a movement sensor in smartphone for analysing gait patterns in people. This study is a part of Nethra Chigateri’s PhD at the University of Auckland whose research is based on developing an algorithm using smartphone for gait analysis of people with Dementia.

Whether or not you take part is your choice. If you don’t want to take part, you don’t have to give a reason, and it won’t affect the care you receive. If you do want to take part now, but change your mind later, you can pull out of the study at any time.

This Participant Information Sheet will help you decide if you’d like to take part. It sets out why we are doing the study, what your participation would involve, what the benefits and risks to you might be, and what would happen after the study ends. We will go through this information with you and answer any questions you may have. We expect this will take about 5 minutes. You may also want to talk about the study with other people, such as family, whānau, friends, or healthcare providers. Feel free to do this.

If you agree to take part in this study, you will be asked to sign the Consent Form on the last page of this document. You will be given a copy of both the Participant Information Sheet and the Consent Form to keep.

This document is four pages long, including the Consent Form. Please make sure you have all the pages.

Why are we doing the study?

The sensor we are testing is in a mobile phone and will be used to analyse the gait patterns and potentially identify risk factors for falling in older people. But first we need to test its accuracy. The purpose of this study is to test its accuracy in a range of people, older and younger and with mild memory problems and without.

The sensor we are using is in a mobile phone, is secured on the lower leg with a strap, and records movement when it is worn.

What would your participation involve?

- To test the sensor in smartphone, you will be asked to do 3 walking trials: walk a bit (around 6 meters), on Gaitrite mat in a laboratory set-up as follows:
  - 1 trial walking slow
• 1 trial walking at usual preferred speed as you would normally do
• 1 trial walking fast

  Then you will be asked to walk in the lab on the 50m track twice.

**To take part in the study, you need to be able to:**

  - Communicate in English
  - Stand and walk short distances (20 m) with or without a walking frame or walking stick.

**What are the possible benefits and risks to you of participating?**

  - There are no immediate benefits to you
  - The risks are only those associated with doing normal activity i.e. a trip or a fall while walking.

    We will be close by you for the entire test to make sure you are safe.

  - Adjustable strap secures the smartphone to the lower leg as shown in the image below

![Image of smartphone secured to leg](image)

**What would happen if you were injured in the study?**

  - If you were injured in this study, which is unlikely, you would be eligible for compensation from ACC just as you would be if you were injured in an accident at work or at home.

  - If you have private health or life insurance, you may wish to check with your insurer that taking part in this study won’t affect your cover.

**What are the rights of participants in the study?**

  - Participation in the study is voluntary (your choice).

  - If you do agree to take part, you are free to withdraw from the study at any time, without having to give a reason.

  - You may ask to have all results withdrawn for up to 7 days after completion of the study.
A summary of the results from this study will be sent to all participants who would like to receive it.

What will happen after the study ends?

- All personal details collected for the study will be treated confidentially and will be available only to the researchers. Your details and results of the physical measures will be coded with a number instead of names and will be stored in locked files. All computer records will be password-protected and stored on secure servers at the University of Auckland.

- The data from this study will be stored for 6 years in locked cabinets in the School of Population Health, University of Auckland; and then destroyed by electronic destruction techniques or paper shredding.

Source of Funding

The University of Auckland has granted funding to support this study

Where can you go for more information about the study, or to raise concerns or complaints?

If you have any questions, concerns or complaints about the study at any stage, you can contact:

Name, position: Dr. Ngaire Kerse, Professor at University of Auckland  
Telephone number: +64(0)274 393 788  
Email: n.kerse@auckland.ac.nz

If you want to talk to someone who isn't involved with the study, you can contact an independent health and disability advocate on:

Phone: 0800 555 050  
Fax: 0800 2 SUPPORT (0800 2787 7678)  
Email: advocacy@hdc.org.nz

You can also contact the Health and Disability Ethics Committee (HDEC) that approved this study on:

Phone: 0800 4 ETHICS  
Email: hdecs@moh.govt.nz
Consent Form

Declaration by participant:

I have read, or have had read to me in my first language, and I understand the Participant Information Sheet. I have had the opportunity to ask questions and I am satisfied with the answers I have received.

I freely agree to participate in this study.

I have been given a copy of the Participant Information Sheet and Consent Form to keep.

Participant's name: ____________________________

Signature: ____________________________ Date: ________

Declaration by member of research team:

I have given a verbal explanation of the research project to the participant, and have answered the participant’s questions about it.

I believe that the participant understands the study and has given informed consent to participate.

Researcher's name: ____________________________

Signature: ____________________________ Date: ________