

PARTICIPANT INFORMATION SHEET

UTS APPROVAL NUMBER ETH23-8083 - People with mobility-impairing neurological conditions perspectives about graduated compression stockings to prevent deep vein thrombosis

WHO IS CONDUCTING THIS RESEARCH?

The research project is conducted by a team of academics at UTS. We are Dr Nga Wun (Doris) Li (Senior lecturer in the School of Design), Dr Deborah Debono (Associate Professor in Health Services Management), Dr Adam Berry (Associate Professor and Deputy Director at The Data Science Institute), and Dr Camila Quel De Oliveira (Senior Lecturer in neurological physiotherapy).

WHAT IS THE RESEARCH ABOUT?

This research aims to acquire information on the users' needs around graduated compression stockings (GCS) and identify the drawbacks of current available GCS designs. Their difficulties in wearing, daily use, and the factors affecting the selection of the compression stockings, will be identified in the online survey and focus group using Zoom. To identify the performance of GCS as currently worn in everyday settings, the pressure provided by the participants' GCS will be measured by the non-intrusive pressure sensor, and the dimensions of their legs will be scanned by an Artec LEO handheld visual scanner and direct measured by hand with soft rulers.

WHY HAVE I BEEN INVITED?

We are looking to develop new forms of compression stockings that are effective for people with neurological conditions. Before you decide to participate in this research study, please check the selection criteria. The research study is looking to recruit people who meet the following criteria:

1. 18 years of age or older
2. With neurological condition such as stroke, spinal cord injury, etc.
3. Currently wearing compression stockings.
4. Ability to speak and understand English.

WHAT DOES MY PARTICIPATION INVOLVE?

If you decide to participate, we will invite you to complete an online survey, join a focus group and to consent to us measuring your leg dimensions and the pressure provided by your current GCS.

Part 1: Online survey (30 mins) and focus groups (45 mins)

Researchers will contact you for your availability to do the focus groups, and the online survey link will be sent to you after you sign the consent form. You need to fill in an online survey before the focus group. In the survey, you will ask to score the difficulty level in wearing, comfort and fit, and the factors affecting your selection of compression stockings.

In an online focus group with approximately 4 other users of GCS with a neurological condition, we will ask your opinion on the positives and drawbacks of current available GCS designs and your needs regarding the GCS. The perspective on today's donning and doffing techniques (Taking on and off) of the GCS will

also be discussed. The focus group will be conducted via Zoom and audio-recorded for later transcription and data analysis.

Part 2: Measure your legs' circumference (1 hour 15 mins) and pressure from your current GCS (30 mins) Depending on your availability, you will be invited to visit UTS Central Campus to conduct the measurement section after you finish the part 1 activities. You are required to bring along your current GCS. A handheld visual scanner (Artec LEO) will scan your legs. Then, hand measurements with soft rulers will be conducted to acquire the dimension of the legs. Then, we will compare the measurement on the 3D scanned images for constructing GCS prototypes that are intended to make a better fit for people with mobility-impairing neurological conditions. The pressure sensor will measure the pressure provided by your GCS to investigate if the amount of pressure exerted on your leg is appropriate and consistent with the value provided by suppliers. The results will be shared with individual participants after the measurement. Photos of your leg during the experiment will be recorded for report and publication. The transportation fares for participants who attend this activity to UTS Central Campus will be supported, and each participant will get an Uber gift card of \$50 after the completion of activity 2.

We sincerely hope you can join all the activities in parts 1 and 2. If you only join part of the activity, you are also welcome. A \$50 supermarket gift voucher will be given to the participants who finished all activities in parts 1 and 2 as thanks for your participation and time.

ARE THERE ANY RISKS/INCONVENIENCE?

In part 1, you might be embarrassed or distressed when sharing some of your experiences wearing GCS. In part 2, the First aid Tape may cause skin irritation and the light from the 3D scanner may cause eye irritation. If you feel uncomfortable answering a question, you can tell the researcher immediately and skip it. You can stop or withdraw anytime if you feel uncomfortable. However, we might be unable to exclude the information you have already provided.

The researcher will constantly monitor any signs of emotional or psychological distress during the focus group (e.g. if you look uneasy, disoriented, impatient, etc.) and may suggest pausing or stopping the focus group.

DO I HAVE TO TAKE PART IN THIS RESEARCH PROJECT?

Participation in this study is voluntary. It is entirely up to you whether you decide to participate. If you decide not to participate, or to withdraw from the study, it will not affect your relationship with the researchers or the University of Technology Sydney.

WHAT IF I WITHDRAW FROM THIS RESEARCH PROJECT?

If you wish to withdraw from the study once it has started, you can do so at any time without giving a reason, by contacting Mr Alexei.Roudnitski (Research Assistant) via Alexei.Roudnitski@uts.edu.au or Dr Doris Li (Chief investigator) via ngawun.li@uts.edu.au

If you decide to leave the research project, we will not collect additional personal information from you (e.g. name, address, date of birth etc.). However, personal information already collected will be retained

to ensure that the results of the research project can be measured properly and to comply with the law. You should be aware that data collected up to the time you withdraw will form part of the research project results. If you do not want us to do this, you must tell us before you join the research project.

WHAT WILL HAPPEN TO INFORMATION ABOUT ME?

By signing the consent form, you consent to the research team collecting and using personal information about you for the research project. All this information will be treated confidentially. All the information collected and the audio recordings will be de-identified in the transcripts and only be accessible to the approved research investigators.

We would like to store your information for future use in research projects that are an extension of this research project. In all instances, your information and photos taken during the experiment will be treated as confidential and stored securely. Your photo may be used to develop and/or test artificial intelligence algorithms designed to estimate leg measurements and compression stocking fit automatically.

It is anticipated that the results, 3D scanned images and photos of this research project will be published and/or presented in various forums. In any publication and/or presentation, you cannot be identified except with your permission.

In accordance with relevant Australian and/or NSW Privacy laws, you have the right to request access to the information about you that is collected and stored by the research team. You also have the right to request that any information with which you disagree be corrected. Please inform the research team member named at the end of this document if you would like to access your information.

The results of this research may also be shared through open-access (public) scientific databases, including Internet databases. This will enable other researchers to use the data to investigate other important research questions. Results and photos shared this way will always be de-identified by removing all personal information (e.g. name, address, date of birth, face etc.).

WHAT IF I HAVE ANY QUERIES OR CONCERNS?

If you have queries or concerns about the research that you think we can help you with, please feel free to contact Mr Alexei.Roudnitski (Research Assistant) via Alexei.Roudnitski@uts.edu.au or Dr Doris Li (Chief investigator) via ngawun.li@uts.edu.au. You will be given a copy of this form to keep.

NOTE:

This study has been approved in line with the University of Technology Sydney Human Research Ethics Committee [UTS HREC] guidelines. If you have any concerns or complaints about any aspect of the conduct of this research that you wish to raise independently of the research team, please contact the Ethics Secretariat on ph.: +61 2 9514 2478 or email: Research.Ethics@uts.edu.au], and quote the UTS HREC reference number. Any matter raised will be treated confidentially, investigated and you will be informed of the outcome.

CONSENT FORM**UTS APPROVAL NUMBER ETH23-8083 People with mobility-impairing neurological conditions perspectives about graduated compression stockings to prevent deep vein thrombosis**

I _____ [*participant's name*] agree to participate in the research project being conducted by Dr Nga Wun (Doris) Li, Room 35, Level 6, Building 6, Broadway NSW 2007 Australia, Tel: (02) 9514 8941.

I have read the Participant Information Sheet, or someone has read it to me in language that I understand. I agree that the audio of the focus group is recorded and transcribed.

I understand the purposes, procedures and risks of the research as described in the Participant Information Sheet.

I have had an opportunity to ask questions, and I am satisfied with the answers I have received.

I freely agree to participate in this research project as described and understand that I am free to withdraw at any time without affecting my relationship with the researchers or the University of Technology Sydney.

I give my permission for photographs of my legs and audio recordings to be taken and used in this research for journal publication.

I agree that Dr Doris Li can store my details in relation to the photographs but that these will be stored separately from the photographs and will not be provided to any third party without my consent.

I understand that the results of this research may be produced as a book, website or other electronic publication, research article or conference presentation which may be made available to the public.

I understand that I will be given a signed copy of this document to keep.

I am aware that I can contact Mr Alexei Roudnitski (Alexei.Roudnitski@uts.edu.au) or Dr Doris Li (NgaWun.Li@uts.edu.au) if I have any concerns about the research.

Name and Signature [participant]

___/___/___
Date (dd/mm/yy)

Doris Dr Nga Wun Li (Doris)

Name and Signature [researcher or delegate]

27/9/2023
Date (dd/mm/yy)