

**PARTICIPATION INFORMATION SHEET – For adult participants ≥16 years of age**

**Universal remote visual acuity testing**

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**Why are we asking you for your help?**

Vision testing is an essential part of diagnosing eye problems. Traditionally, vision testing is conducted in the clinic and involves naming letters or symbols from a chart. The size of the smallest symbol you can name is the measure of your “visual acuity”. The COVID-19 pandemic and resulting physical distancing requirements has increased the need for remote vision testing (out of the clinic). In this study we will compare how good these three home-based remote vision tests are compared to tests done in the clinic. The remote tests are:

1. The MyAcuity online test (<http://myacuity.org>) which is run with the help of a friend or family member.
2. A paper-based test chart (<http://homeacuitytest.org>), developed with Moorfields Eye Hospital London.
3. The Freiburg Acuity Test, an established, self-administered online test (<https://michaelbach.de/fract/>).

**Who can take part?**

You are eligible to take part in this study if you are 16 years of age or older, have a web-enabled tablet or computer, can complete all three visual acuity tests at home, and can send us your results via email.

**What should you expect?**

If you take part in the study, we will ask you to complete the three visual acuity tests at home. *Each test will take about 10 minutes* (including setting up time and sending the results). *All of the tests will be done at a distance of 3 metres, so you will need to make sure that you have enough space at home. An indoor area with good lighting is recommended. You will also want to have someone in your household who can help you record your answers during the tests, as you will need to be 3 metres away from your tablet/computer/the paper chart during the tests.*

To start your participation, please contact the study researchers at: [remoteacuitystudy@gmail.com](mailto:remoteacuitystudy@gmail.com) to express your interest. We will send you a unique link to the online consent form. After the consent process, you will receive an email with detailed instructions on how to complete the three visual acuity tests at home.

Test 1 and Test 3 are both web-based and can be done on most tablets or computers. Please do not use a smartphone as the screen will not be large enough for these two tests. Test 2 uses paper-based charts. If you live in New Zealand, you can ask us to post you the charts by supplying us with a valid New Zealand postal address. If you do not live in New Zealand or if you do not want to give us your postal address, then you can print the paper charts at home using any normal printer and complete the test that way. After completing each of the tests, we ask that you email us the results to the specific address that will be included in your instruction email.

Each person that takes part in the study needs to use a unique email address to register for the study and for sending in results, as this helps us keep track. If you have a friend or family member who also wants to take part in the study, please ask them to use a different email address from you.

Within the online consent form, you will be asked if we can contact your eye-care provider (e.g. optometrist, ophthalmologist, hospital-based eye clinic) to obtain some results from your most recent examination. If you agree to this, you will need to fill in the contact details of your eye-care provider so that we can request the information.

We will ask the eye-care provider about the visual acuity tests you did at your last visit to their clinic, and will be comparing those results with the remote testing results from the study.

### **Benefits of taking part:**

No compensation or koha is available but your contribution will help us develop better remote vision testing and vision screening methods. These testing methods are likely to be useful even after this pandemic as there is growing demand for telemedicine, for example for use in rural areas, for people with mobility issues, and for checking children's vision.

### **Costs and risks of taking part:**

There are no costs for taking part other than your time. It is possible that you may discover some changes to your vision while completing the tests that you were previously unaware of. If you give us permission to contact your eye-care provider, it is possible that we will discover that your vision has worsened compared since your last test in the clinic. If you have noticed a change to your vision or if we find that your vision appears to have deteriorated, we recommend that you contact your eye-care provider for an examination as soon as practical.

***Please note that the home-based tests in this study are new, and are not replicas of clinical tests, so we cannot tell if your results are "normal" or "not normal".*** Any differences in results may be due purely to the test design. ***Please also note that a "good" result on any acuity test does not exclude vision problems or eye diseases.*** If you are concerned about your vision or eyes in any way, please seek a consultation with your local eye-care provider.

### **Data storage/retention/destruction/future use**

All data collected as part of this study will be in digital form. The data will be stored securely on password-protected computers. Potentially identifying data such as your name, date of birth, email address, and postal address will be deleted permanently within 6 years of study completion. De-identified digital data such as the visual acuity results will not be destroyed, as these data will be useful for improving future acuity tests.

### **Confidentiality**

At the end of the study we hope to publish and present our findings at conferences. These presentations will only include aggregate data and will not identify you.

### **Participation is your choice**

Please take your time to read this document and to decide whether you wish to take part, and feel free to discuss your decision with your current eye-care provider and your whānau, family or other support people. Taking part is completely voluntary (your choice). We want to make sure that you are happy to participate before we start.

If you are currently under the care of any eye-care professional either at the University of Auckland Eye Clinic or elsewhere, your decision to participate in this study, or not, will not impact on the standard of care you receive. If you are a student or colleague of the researchers, your participation or non-participation will likewise have no bearing on your grades or relationship with the University. If you are concerned about these issues, please contact Dr Joanna Black (Deputy Head of School, Optometry & Vision Science; details at the end of this document).

### **Right to withdraw**

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 also have the right to withdraw any data you sent to the study up to three months from when you sent it to us.

### **What information will you receive?**

You can choose to receive a summary of study findings, which will be sent after the study has finished. Note that this study will be run over a long period of time and there is often quite a delay between when the data is collected and when results are analysed, so there may be a gap in time between when you participate and when you receive the summary. This summary will contain only aggregate information such as how many results we received for each of the 3 tests, and will not contain any identifying details for any participants.

### **Who should I contact about this study?**

If you would like to take part in this study, please email us at: [remoteacuitystudy@gmail.com](mailto:remoteacuitystudy@gmail.com)

If you have further questions about this study, please contact one of the staff members below:

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Approved by the University of Auckland Human Participants Ethics Committee on 11 June 2020 for three years. Reference Number 024709.

For any concerns regarding ethical issues you may contact the Chair, the University of Auckland Human Participants Ethics Committee, at the University of Auckland, Research Office, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 ext. 83711. Email: [humanethics@auckland.ac.nz](mailto:humanethics@auckland.ac.nz)