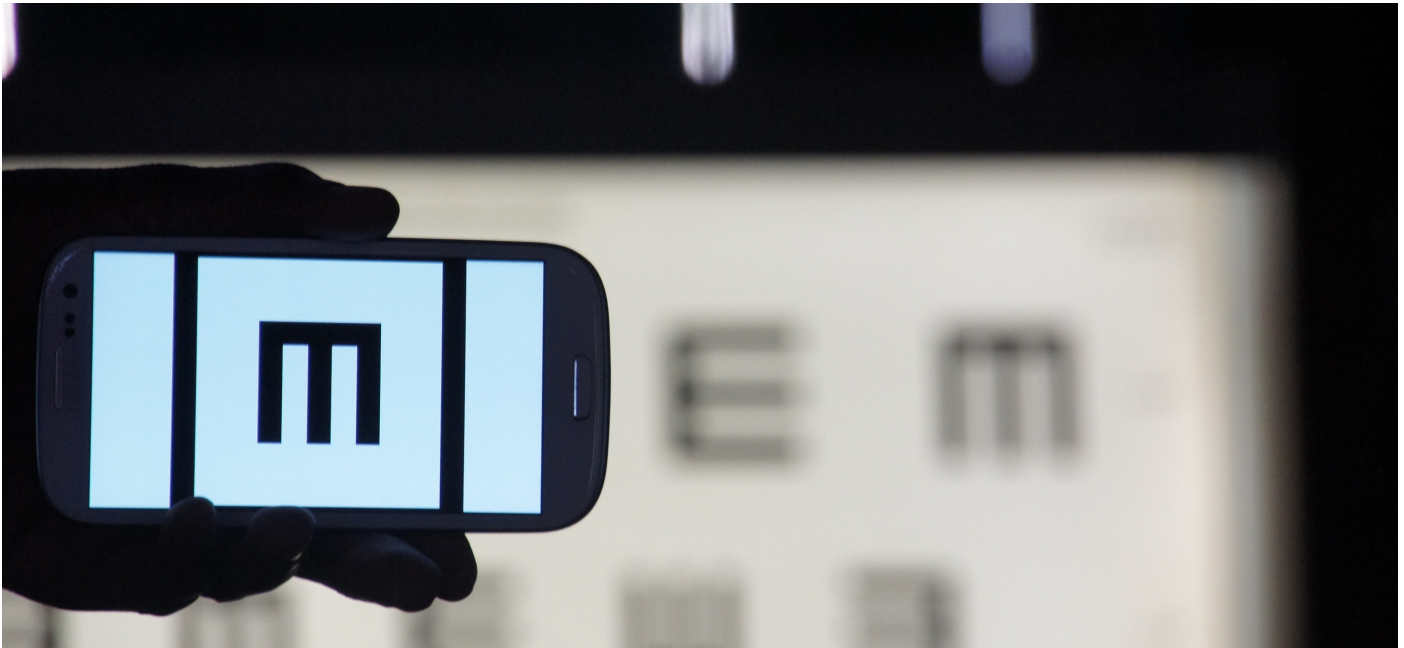


PEEK ACUITY

Uses and limitations for remote healthcare:
information for eye health practitioners



Peek Acuity held in front of a standard illuminated "tumbling E" chart © Peek Vision / Andrew Bastawrous

IN BRIEF

Used correctly, Peek Acuity enables users to conduct accurate distance visual acuity tests, using an Android smartphone or tablet.

It cannot be used for self-testing. Somebody will need to help the patient by using the app to conduct the test.

The app is available for Android devices only, not iOS (iphone).

This document explains the use and limitations of Peek Acuity for eye health practitioners who are exploring ways to assess vision remotely.

What is Peek Acuity?

Peek Acuity is a clinically-validated app to test distance visual acuity. It is brought to you by Peek Vision, a social enterprise which develops technology to help eye health services deploy limited resources more effectively. Peek works with partners to deliver large-scale eye health programmes in low- and middle-income countries. In these programmes, our smartphone vision check is incorporated into wider systems that capture and analyse health eye health programme data.

Peek Acuity provides just the visual acuity testing element of our technology in a standalone Android app. It is available for free on Google Play store.



Peek Acuity being used by a teacher in Kenya
© Peek Vision / Andrew Bastawrous

Can Peek Acuity assess visual acuity remotely?

If used correctly, Peek Acuity enables a non-specialist to provide accurate measurements of right and left eye distance visual acuity. This information can be used by qualified eye health practitioners to assess whether an individual requires further examination of their distance vision.

This app does not test near vision, however, our team are evaluating the potential for developing a similar app to test near vision for use alongside Peek Acuity in future.

Because the app only measures distance visual acuity, we do not recommend that glasses are prescribed on the basis of a Peek Acuity test.

Peek Acuity is currently available in English language only. We have tried to make the app as simple to use as possible, but users who do not speak any English may struggle to navigate and use it.

The app works reliably for adults and children aged six and over. Our data show it is moderately reliable for children aged four to six. We do not recommend it for children younger than four years old.

Peek Acuity features

- Allows non-specialist users to accurately measure visual acuity using just a smartphone.
- Accurate and repeatable results: proven to be as accurate as conventional vision tests in [peer-reviewed research](#)
- Fast and easy to use with step-by-step tutorial built into the app
- Creates a visual representation of results for easy explanation to patients
- Includes equivalents of “count fingers”, “hand movement” and “light perception”
- Does NOT collect any personally identifiable data
- Scores can be provided in standard units of LogMAR or Snellen (metric and imperial)

Can Peek Acuity be used to self-test?

No. For accurate results, the app must be used by another person standing two or three metres from the person being tested.

There are clear instructions provided in the app. If followed correctly, a user should be able to accurately measure the visual acuity of another person and provide results to an eye health practitioner who is not present.

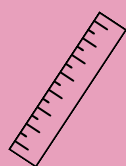
HINTS AND TIPS FOR USING PEEK ACUITY



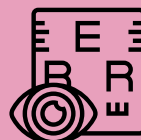
Non-specialist users often test both eyes at the same time by default. Remind your patients to test each eye separately and cover the other eye completely unless you are intending to deliver a binocular vision test.



This [two minute video tutorial](#) for Peek Acuity provides further guidance on how to use the app.



The app prompts users to [manually calibrate their device](#) before the first test. If the user's device fails the calibration check, they will not be able to use the app (though this is a rare issue affecting a very small number of devices). Users will need to have a ruler with millimetre grading to hand when they install the app for first use.



Our research shows that infrequent users of the app are less reliable at producing accurate test results. Once people have done 30-50 consecutive tests they tend to be at the level of a clinician. This does not preclude irregular users from doing an accurate test, but it may affect your decision on how to use the results and whether to supervise the test.

How can I get Peek Acuity?

Two versions of Peek Acuity are available for free on Google Play store. Both versions have identical functions and interfaces.



[Peek Acuity Pro](#) is registered in the European Union (EU) as a Class 1 medical device.

[Peek Acuity](#) is available for use outside the EU.

Peek Acuity works on smartphones or tablets with Android operating systems only. It is not available for iOS (iPhone) operating systems.



For more information, visit our website

www.peekvision.org/acuity

or email enquiries@peekvision.org