

The use of at home vision testing apps as an adjunct to telemedicine in children

The British & Irish Orthoptic Society (BIOS) and The Royal College of Ophthalmologists have developed this advice in response to the increasing interest in the use of novel technology, such as apps. Some units are exploring the use of apps to test vision in children, for example to manage amblyopia.

Telemedicine and, in some cases, apps which test vision, are being increasingly used during the pandemic as a way to maintain care for patients and minimise the risks to patients and their families of contracting COVID19 through attendance at health care facilities.

The reliability of apps when used by a parent or guardian in the home setting to test visual acuity in children is not yet proven. Active research in the use of apps is taking place at present and results of clinical trials and validation exercises should be available soon to provide evidence-based guidance on their use.

Recommendations

The RCOphth Paediatric Subcommittee and BIOS recommend a cautious approach to the use of these apps to manage amblyopia or to monitor vision in children.

During the pandemic, clinicians may be required to make clinical decisions in less than ideal circumstances. The following recommendations provide reassurance for professionals making clinical decisions based on the app usage and help balance the risks and benefits of app use against the gold standard face-to-face tests or no tests at all for some children.

- It is recommended that before any use of apps are implemented, the ophthalmology or orthoptic department undertakes an appropriate risk assessment
- This should be carried out assessing specific apps in specific groups of children against the risk of no assessment where there is a potential for unmonitored visual loss
- Departments should seek formal support through local service and trust /health board governance structures
- The use of these apps should be under the guidance of a trained healthcare professional
- Parents should be made aware that these apps are not yet proven to be as clinically effective as face-to-face assessments
- The use of these apps should be subject to regular review and audit

All COVID-19 guidance is subject to change. Please visit the [RCOphth COVID-19 web page](#) for regular updates.

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