Eye Screen

A training app to improve confidence and competency in trainees carrying out newborn infant eye examinations.

a.r.u. | Anglia Ruskin University

Cambridge Digital Health

About Eye Screen

Eye Screen is a valuable tool for student midwives to develop competency in screening for neonatal eye conditions and to supplement the teaching received by institutions. Confidence and competency in midwives reduce the incidence of unnecessary clinic referrals, and ensures that those who need treatment, get it.

Student midwives must develop their eye examination skills and increase their confidence through practice once qualified. However, as some conditions are relatively rare (according to Public Health England, just 2 or 3 babies in every 10,000 require treatment), it can take months before a midwife encounters a condition in practice. Eye Screen places several examples of multiple conditions at the student's fingertips. The Covid-19 pandemic has only made it harder for students to gain first-hand experience of these eye conditions in a clinical environment as more teaching is delivered remotely. Tools such as Eye Screen, it's anticipated, will become the normal for some modules.

Eye Screen was created by Lindsey Rose, Senior Midwifery Lecturer at Anglia Ruskin University (ARU) in collaboration with Cambridge Digital Health (CDH). Images for the app have been provided by Louise Allen MD FRCOphth, Consultant paediatric ophthalmologist at Cambridge University Hospitals NHS Foundation Trust.
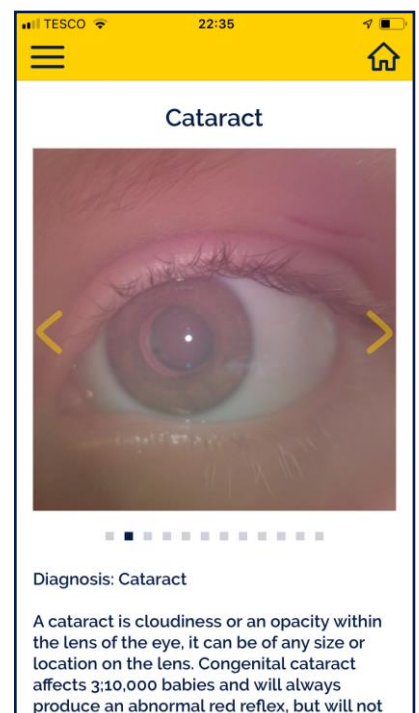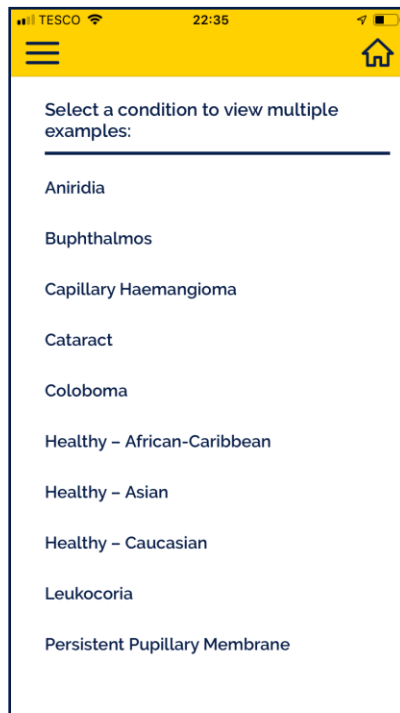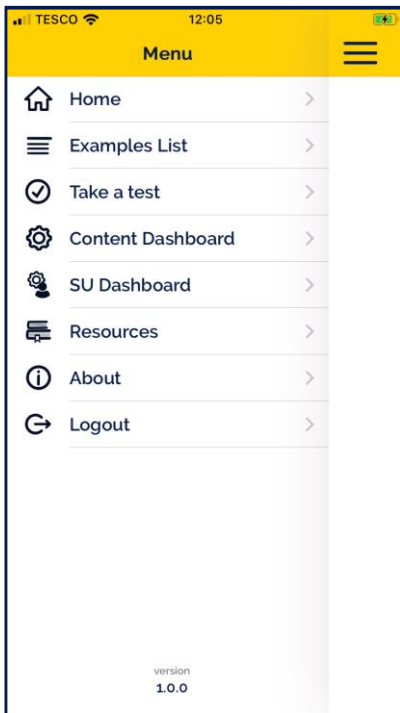
The Eye Screen app uses a library of clinical ophthalmoscopic images to familiarise the student with a variety of conditions. When the user feels confident in recognising conditions, the app lets them test their screening skills. Eye Screen presents 20 images of conditions at random and the student must decide whether what they are seeing is normal or abnormal.

The explanations that accompany the results can be downloaded as a PDF for the student's records and shared with their tutor as evidence of competency.
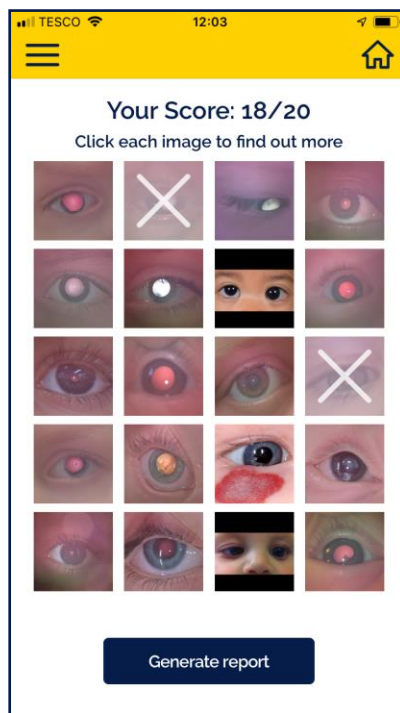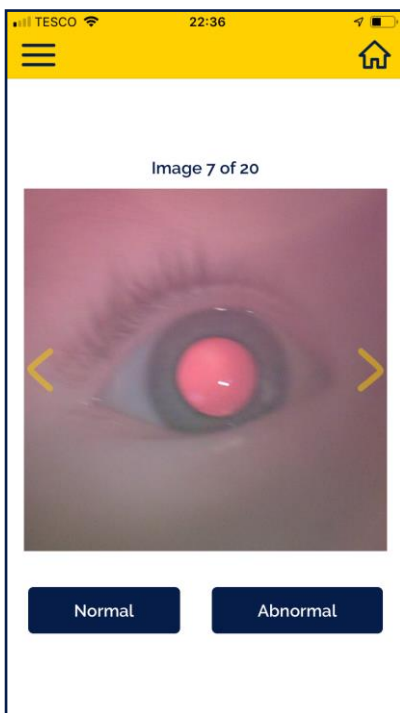
Eye Screen is available for download on both iOS and Android devices. Web-based administration makes it easy for managers to grant access for their students, while a simple, intuitive interface makes for a smart training experience.

App Screen Examples

Exploring conditions and information:

Menu (Screen 1)
- Home
- Examples List
- Take a test
- Content Dashboard
- SU Dashboard
- Resources
- About
- Logout

version 1.0.0

Screen 2
Select a condition to view multiple examples:

- Aniridia
- Buphthalmos
- Capillary Haemangioma
- Cataract
- Coloboma
- Healthy – African-Caribbean
- Healthy – Asian
- Healthy – Caucasian
- Leukocoria
- Persistent Pupillary Membrane

Screen 3
Cataract

Diagnosis: Cataract

A cataract is cloudiness or an opacity within the lens of the eye, it can be of any size or location on the lens. Congenital cataract affects 3:10,000 babies and will always produce an abnormal red reflex, but will not

Taking a test and reviewing results:

Screen 4
Image 7 of 20

Normal   Abnormal

Screen 5
Your Score: 18/20
Click each image to find out more

Generate report

Screen 6
Done EyeScreen_super_user_31_10_...

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Test Results Report

super user   31/10/2019

Your score: 95% (19/20)

Image #	Condition	Your result
1.	Healthy – Caucasian	⊘
2.	Cataract	⊘
3.	Aniridia	⊘
4.	Buphthalmos	⊘
5.	Leukocoria	⊗
6.	Healthy – Asian	⊘
7.	Healthy – African-Caribbean	⊘
8.	Healthy – Asian	⊘
9.	Buphthalmos	⊘
10.	Persistent Pupillary Membrane	⊘
11.	Healthy – African-Caribbean	⊘
12.	Capillary Haemangioma	⊘
13.	Aniridia	⊘
14.	Cataract	⊘
15.	Healthy – Caucasian	⊘
16.	Coloboma	⊘
17.	Coloboma	⊘
18.	Lens Subluxation	⊘
19.	Leukocoria	⊘
20.	Persistent Pupillary Membrane	⊘

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Test Results Report

Licence Costs

We are currently, until the end of January 2021, offering a free trial of the app. Anyone can get access to the app, in exchange for giving us their feedback.

Universities and other institutions can purchase an annual licence for as many students as need access to Eye Screen – don't worry, the free trial time will be added on to their licence period so they don't lose out.

Annual licence is dependent on the number of students:

£8/head for less than 40
£7/head for 40+

Minimum price of £200 (which equates to 25 students)

VAT is not included but as the app is an educational tool many institutions will be able to provide a VAT exemption certificates.

To find out more information about the app, including what would be in involved in licensing it for your institution, email info@camdm.com.

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CDH are a team of experienced app developers, medical professionals and regulatory experts who deliver tailored, innovative app solutions for the healthcare industry. For more information visit our website at the address below, or email info@camdm.com.