ISRCTN16978984 https://doi.org/10.1186/ISRCTN16978984

EyeFocus: Testing an app for improving attention in brain injury survivors

Submission date
12/03/2026

Recruitment status
Recruiting

Registration date
23/03/2026

Overall study status
Ongoing

Last Edited
25/03/2026

Condition category
Circulatory System

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[X] Record updated in last year

Plain English summary of protocol

Background and study aims
While physical and language impairments after acquired brain injury (ABI) are seen easily, cognitive effects are often hidden and considered an unmet need. The innovative digital health technology, “EyeFocus”, is directed at one of the most frequent and disabling cognitive impairments in ABI: neglect. Neglect affects 1 in 3 ABI survivors and is an inability to attend to stimuli, including one's own body parts, people, and objects, on the most affected side of the body. This study aims to determine whether it’s feasible to use EyeFocus with stroke survivors with neglect when delivered by a therapist within-hospital settings.

Who can participate?
Stroke survivors from age 18 onwards with signs of neglect, as assessed by two standardised neglect measures, who can sit in front of a table for 30 minutes and can follow a one-stage command.

What does the study involve?
The EyeFocus intervention consists of 5 daily 30-minute sessions over 7 days within acute or community hospitals. The patient will complete the EyeFocus exercises using the tablet app provided.

What are the possible benefits and risks of participating?
Even though it is not possible to assure the patient that they will show differences in their neglect measures or symptoms, participating in the study will help obtain information on future therapies for stroke survivors. There are no known risks in participating in the protocol.

Where is the study run from?
This research is being carried out by researchers at the Neuropsychology Lab at the University of East Anglia, and two Clinical Occupational Therapists in the Norfolk and Norwich University Hospitals NHS Foundation Trust, and it is run in two different participating NHS Partner Sites in the East of England area.

When is the study starting and how long is it expected to run for?
February 2026 to July 2026.

Who is funding the study?
National Institute for Health and Care Research (NIHR), UK.

Who is the main contact?
Dr Stephanie Rossit (Principal Investigator), S.Rossit@uea.ac.uk

Contact information

Type(s)
Public, Scientific, Principal investigator

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Additional identifiers

Central Portfolio Management System (CPMS)
64959

National Institute for Health and Care Research (NIHR)
208955

Study information

Scientific Title
Assessing the clinical feasibility of the EyeFocus app for attention rehabilitation in ABI

Acronym
EyeFocus

Study objectives
To investigate the clinical feasibility of EyeFocus on post-stroke neglect when delivered by a therapist in tightly controlled within-hospital settings.

The primary research aims are to:
(1) Determine whether it’s feasible to use EyeFocus in clinical settings with stroke survivors with neglect
(2) Determine whether a larger trial could be run in the future
(3) Explore patients' and clinicians' perspectives on using EyeFocus; this is paramount in understanding whether the app is usable and accepted by stroke survivors and clinicians
(4) Explore potential effects and effect sizes of EyeFocus compared to usual care to inform future Phase II trial.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 02/12/2025, Health and Care Research Wales (Floor Four, North Welsh Government Offices, Cathays Park, King Edward VII Avenue, Cardiff, CF10 3NQ, United Kingdom; +44 02920 230457; healthandcareresearch@wales.nhs.uk), ref: 25/WA/0319

Primary study design
Interventional

Allocation
Randomized controlled trial

Masking
Blinded (masking used)

Control
Active

Assignment
Parallel

Purpose
Treatment

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Specialty: Stroke, Primary sub-specialty: Rehabilitation; Health Category: Neurological, Stroke; Disease/Condition: Cerebrovascular diseases

Interventions

This is a feasibility pilot study consisting of a mixed-methods, randomised, concurrent, assessor-blind, multiple-baseline,
single-case experimental design (SCED or N-of-1 trial). Randomisation will be implemented by the UEA research team before the trial starts by creating a randomised list. The team will use freely available software (randomizer.org) to randomise participants to one of the three different baseline lengths. The risk of bias in N-of-1 Trials Scale and the Single-Case Reporting guideline in Behavioural interventions were used to inform the design of this study and will be reported in a published paper to inform methodological quality in design and reporting. The three baseline lengths will differ in the number of data points that will be collected per participant (i.e., three, four, or five data points), thus meeting the SCED multiple baseline criteria. In the intervention and postintervention phases, outcome measures will be taken three times per phase as per the minimum recommendation of the SCRIBE.

INITIAL SCREENING
Initial screening of potentially eligible participants will include a review of patient notes to confirm:
Evidence of stroke, including review of radiology reports to ensure the stroke lesion is visible on a clinical scan.
Confirmation that the patient meets the remaining eligibility criteria, where information is available.
Potentially eligible participants will be provided with a participant information sheet. All patients pre-screened will be recorded in the screening log.

Once initial screening is complete, the following activities will be undertaken:
Obtain written informed consent or consultee assent to participate.
Administer the Line Bisection sub-test of the Behavioural Inattention Test (BIT).
Administer the Cancellation Task of the Oxford Cognitive Screen (OCS).

Patients providing consent and meeting all inclusion criteria, including the minimum definition for spatial neglect (BIT line-bisection score ≤ 7, or OCS Cancellation accuracy score < 42 and either OCS Cancellation Object score > 1 or < -1, or OCS Cancellation Space score > 3 or < -2)-will complete baseline measures and have the following data collected:
Clinical and demographic data.

If baseline measures are not undertaken on the same day as eligibility screening, repeat:
Line Bisection sub-test of the BIT
OCS Cancellation Task (CT-OCS)
Endpoint Weightings Line Bisection task.
Oxford Cognitive Screen (full OCS). If a full OCS was conducted as part of usual care within 1 week of Baseline (TO), this measure can be used without repeating it for the trial.
NIH Stroke Scale/Score (NIHSS) extracted from the most recent clinical records.
Pseudonymised clinical brain imaging reports (CT and/or MRI).
Pseudonymised clinical brain imaging scans (CT and/or MRI) saved to password-protected CDs /DVDs for the UEA research team.

BASELINE PHASE
Every patient will complete EyeFocus in addition to treatment as usual (TAU) following varying baseline assessment durations of 3, 4, or 5 consecutive days. These repeated baseline outcome assessments will include only the neglect measures: CT-OCS and Endpoint Weightings Line Bisection task.

INTERVENTION PHASE
After the baseline phase, trained staff will deliver the EyeFocus intervention, consisting of five 30-minute sessions over 7 days. Treatment as usual will be recorded during this time for all trial participants. Following the final intervention session, patients will complete a semi-structured interview and a System Usability Scale. Therapists will also be invited to an interview led by the UEA research team. During the intervention phase, neglect outcome measures (CT-OCS and Endpoint Weightings Line Bisection task) will be repeated after sessions 2, 3, and 5 of EyeFocus. Fidelity checklists and photographs will be taken on the 1st and last sessions of EyeFocus.

POST-INTERVENTION PHASE
All participants will receive a visit from a blinded assessor to repeat the neglect outcome measures on three separate days within 7 days.

Participants are expected to be in the trial for approximately 3 weeks post-randomisation (3-5 days maximum baseline
phase ; 7 days intervention phase; 7 days post-intervention phase).

Intervention Type
Behavioural

Primary outcome(s)
1. Feasibility measured using the system usability scale (SUS) at day 5 of intervention

2. Feasibility measured using the total rates of participant recruitment, total rates of clinician's blinding success and total rates of participant adherence to intervention sessions, at post-intervention

3. Feasibility measured using the total time needed to collect and analyse all participant's data at post-intervention

Key secondary outcome(s)
1. Potential effects of the EyeFocus App on neglect scores measured using the Oxford Cognitive Screen (OCS) cancellation task and the Endpoint Weightings Line Bisection task at post-intervention

Completion date
31/07/2026

Eligibility

Key inclusion criteria
1. Aged at least 18 years at the time of consent
2. Stroke confirmed with clinical brain imaging (CT and/or MRI), not neck or brain vessel imaging (CTA, MRA, DSA)
3. Signs of neglect on at least one of the following:
4. BIT Line Bisection score < = 7, or
5. Oxford Cognitive Screen cancellation accuracy score < 42 and either Oxford Cognitive Screen Cancellation Object score > 1 or < -1, or Oxford Cognitive Screen Cancellation Space score > 3 or < -2
6. Able to follow a one-stage command "point to an object with your less affected arm" as

demonstrated by another
7. Able to sit with or without support in front of a table for 30 continuous minutes

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
18 Years

Upper age limit
100 Years

Sex
All

Total final enrolment
0

Key exclusion criteria
1. Being discharged from an in-patient hospital facility to home, or to an in-patient hospital facility that is not part of the NHS site, within the next 15 days
2. Enrolled on another interventional study targeting neglect

Date of first enrolment
04/02/2026

Date of final enrolment
31/07/2026

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Norwich Community Hospital
Bowthorpe Road
Norwich
England
NR2 3TU

Study participating centre

Barts Health NHS Trust
The Royal London Hospital
80 Newark Street
London
England
E1 2ES

Sponsor information

Organisation
University of East Anglia

ROR
https://ror.org/026k5mg93

Funder(s)

Funder type
Government

Funder Name
National Institute for Health and Care Research

Alternative Name(s)
National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
The final data (fully anonymised) will be made available on open data repositories (e.g. International Stroke Trials, Association of Medical Research Charities Open Research Platform, Open Science Framework).

IPD sharing plan summary

Stored in publicly available repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Study website			18/03/2026	No	No