Visual Field Testing using the Humphrey Visual Field Analyser

V3.0

13/07/16
Summary.

Referral received from GP, Optician via GP or Ophthalmologist for glaucoma, suspect glaucoma, raised intraocular pressure, headache

24-2 visual field performed each eye separately

Ensure patient has an appointment with the Dr (or equivalent) within the Ophthalmology Department

Referral received from neurology or endocrinology department for assessment of visual field defect

30-2 or 24-2 visual field performed each eye separately - check what is requested on referral letter

Notes to Faye Gibson for report back to referrer (leave in red tray in Orthoptic clinic room)

Referral received from Stroke team for assessment of visual field

81 point screening or Binocular Estermann performed – check what is requested on referral letter

Notes to Faye Gibson for report back to referrer (leave in red tray in Orthoptic clinic room)
Table of Contents

Summary. .................................................................................................................................... 2
1. Introduction .......................................................................................................................... 4
2. Purpose of this Policy/Procedure ....................................................................................... 4
3. Scope .................................................................................................................................. 4
4. Ownership and Responsibilities ......................................................................................... 4
   4.2. Role of the Managers .................................................................................................. 4
   4.3. Role of the Surgical Divisional Governance Management Board .......................... 4
   4.4. Role of Individual Staff ......................................................................................... 4
5. Standards and Practice ........................................................................................................ 5
6. Dissemination and Implementation .................................................................................... 7
7. Monitoring compliance and effectiveness ........................................................................ 7
8. Updating and Review .......................................................................................................... 7
9. Equality and Diversity ........................................................................................................ 7
   9.2. Equality Impact Assessment .................................................................................... 7
Appendix 1. Calculation of Glasses or Trial Frames to use for the Visual Field Test .......... 8
Appendix 2. Governance Information ..................................................................................... 9
Appendix 3. Initial Equality Impact Assessment Form .......................................................... 11
1. **Introduction**
1.1. This policy acts as guidance for the visual field technicians, health care assistants and Orthoptists, employed by RCH NHS Trust, who undertake visual field testing using the Humphrey Visual Field Analyser.

1.2. This version supersedes any previous versions of this document.

2. **Purpose of this Policy/Procedure**
2.1. The purpose of this policy is to ensure that all the practitioners carrying out visual field testing using the Humphrey Visual Field Analyser are performing the test in accordance with a standardized method.

3. **Scope**
3.1. This policy applies to

- Visual Field Technicians
- Health Care Assistants
- Orthoptists

4. **Ownership and Responsibilities**
4.1. The strategic and operational roles responsible for the development, management and implementation of the policy are shown below.

4.2. **Role of the Managers**
4.2.1. Line managers are responsible for:

- Ensuring the appropriate training in available and up to date.
- Any changes in practice are conveyed to staff in a timely fashion.
- Ensuring the machine is maintained and in good working order.

4.3. **Role of the Surgical Divisional Governance Management Board**
4.3.1. The Surgical Divisional Governance Management Board is responsible for the development, approval and communication of this policy and monitoring compliance with it.

4.4. **Role of Individual Staff**
4.4.1. All staff members are responsible for:

- Ensuring they are competent to undertake the procedure.
- Being aware of this policy and any documents referred to within it.
- Remaining up to date with policies and training.
- Reporting any faults with the machine/equipment to the Medical Physics Department and Head Orthoptist.
5. **Standards and Practice**

5.1. Ensure the machine has been switched on in a darken room to allow it to calibrate.

5.2. Clean chin rest and buzzer ready for use.

5.3. Select the test program that has been requested for the patient (most commonly 24-2 Sita Fast, 30-2 Sita Fast or 10-2 Sita Fast).

5.4. Enter the patient details by using the recall patient button and entering the patient's hospital number.

5.5. Escort the patient into the clinical room used for testing visual fields, introduce yourself and confirm patient identity as per the RCHT Positive Patient Identification Policy and procedures.

5.6. Identify the correct spectacles for use during testing or correct spectacle prescription to obtain the trial lenses for use during testing, see appendix 1 for Trial Lens Calculation.

5.7. Darken the room appropriately.

5.8. Prepare patient for the test:

   - Suggest the removal of a coat/jacket.
   - Occlude patients left eye, in order to test the right eye first.
   - Hand the patient the buzzer they will need to press throughout the test, ensuring they know where to press.
   - Ask the patient to place their chin on the left hand chin rest and ensure their forehead is resting against the forehead rest.
   - Ensure the machine is at the correct height for them, it is important that they are comfortable as they will be sat for a while.
   - Adjust the chin rest to ensure the cross on the eye monitor is in the centre of the patient’s pupil.
   - Ensure the patient’s lid or glasses does not occlude their visual field by occluding part of their pupil. This is a common problem in older patients. If this is the case the patient’s lids may require taping up or you might have to use trial lenses instead of the patient’s reading glasses for the test.
   - Ensure the patient can see the fixation light, if they cannot see it then use the change parameter button to change the fixation light to the small diamond, if they cannot see the lights of the small diamond then increase to the large diamond. If they cannot see the lights of the large diamond then abandon the test.
5.9. Explain the test to the patient. They need to look straight ahead at the fixation light, this light will remain on throughout the test and it is important that they are looking at it for the duration of the test. The machine will then present a different light anywhere in the test area, some lights will be brighter than others. The patient needs to press their buzzer every time they see the light flash on (it does not matter how bright or feint it is). It is particularly important to ensure they understand the test and that they keep both their head and eye still, focusing straight ahead at the fixation light. If they are moving their eye around then the test results will become inaccurate. They will not be expected to see all the lights, there may be some gaps when there are no lights being presented.

5.10. Ensure the patient remains in the correct position throughout the test. They may require encouragement and reassurance during the test, particularly in keeping looking straight ahead.

5.11. The machine will monitor the patient’s fixation and assess their reliability but you should also observe the eye monitor throughout the test. If necessary you will need to re-fixate the patient either by adjusting the position of the chin rest or by getting the machine to adjust the position of the blind spot.

5.12. After completing the right eye the machine will prompt you to save the test, which you should do.

5.13. Then test the left eye. You will need to swap the occluder to the right eye and the patient will need their chin on the right hand chin rest. Please note you may need to change the trial lenses if a different strength is required.

5.14. Ensure the patient hospital notes are documented accurately and completely.

- Record which test program was performed and which eye(s) were tested
- Record whether the test was performed with reading glasses or record the strength of any trial lenses used for the test and how they were calculated.
- Record any other adjustments necessary, for example; having to tape lids up.
- Any other comments regarding the patient’s performance of the test, for example if you think their fixation was poor.
- Sign, date and time of test must be recorded in accordance to the RCHT Documentation Policy

5.15. Print the tests and file them in the red visual field folder in the patient’s hospital record. The RIGHT eye should be filed on the RIGHT side and the LEFT eye on the LEFT side on top of any previous field tests.

5.16. Ensure the chin-rest, forehead rest and buzzer are cleaned with the appropriate sterile wipes between patients.
5.17. A poor or unreliable visual field test may be due to:

- Patient does not understand what is expected of them.
- Patient is anxious and needs reassurance.
- Patient is uncomfortable and positioned incorrectly. Ensure the patient is not too hot or too cold. Check if the patient has any particular problems with their back and neck that may make the test difficult to perform.
- Incorrect lens/glasses used.

6. Dissemination and Implementation

6.1 The document will be placed on the Cornwall & Isles of Scilly Health Community Documents Library with notification of all users via email. It will also appear on the Pathology and Clinical Imaging A-Z of Services Intranet pages.

7. Monitoring compliance and effectiveness

<table>
<thead>
<tr>
<th>Element to be monitored</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Faye Gibson, Head Orthoptist</td>
</tr>
<tr>
<td>Tool</td>
<td>It would be an review of the hospital case note records, performed on an individual basis</td>
</tr>
<tr>
<td>Frequency</td>
<td>It would be performed on an ad hoc basis when a case appears in the system and is highlighted by the clinician</td>
</tr>
<tr>
<td>Reporting arrangements</td>
<td>It would be reported to the staff members performing visual field testing using the Humphrey Visual Field Analyser</td>
</tr>
<tr>
<td>Acting on recommendations and Lead(s)</td>
<td>Any findings would be discussed with the individual(s) and would be reviewed against the current policy. Any changes to the policy would be made by the Head Orthoptist.</td>
</tr>
<tr>
<td>Change in practice and lessons to be shared</td>
<td>Required changes to practice will be identified and actioned within 2 months. Faye Gibson, Head Orthoptist will take each change forward where appropriate. Lessons will be shared with all staff performing visual field testing using Humphrey Visual Field Analyser.</td>
</tr>
</tbody>
</table>

8. Updating and Review

8.1. This policy will be reviewed every two years or sooner if circumstances suggest this may be necessary.

9. Equality and Diversity

9.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Diversity & Human Rights Policy' or the Equality and Diversity website.

9.2. Equality Impact Assessment

9.3. The Initial Equality Impact Assessment Screening Form is at Appendix 2.
Appendix 1. Calculation of Glasses or Trial Frames to use for the Visual Field Test

Patients that have glasses for **READING ONLY** can wear these for the test providing the frames are not too small.

If the patient has forgotten their reading glasses or the frames are very narrow (occluding part of their view) you should use a trial lens, calculated following the instructions below.

**DO NOT USE VARIFOCALS OR BIFOCALS**

**Trial lens calculation**

You can determine the strength of trial lens required by using the ‘calculate trial lens’ button.

If the patient does not wear glasses for distance or if they are wearing contact lenses, they can leave the contact lenses in.

Press sphere and enter 0.00 then press the calculate button.

The machine will then work out what lenses are required, this is what you need to put in the trial lens holder.

If you have a copy of the most up to date optometrist’s prescription then enter the distance prescription into the machine and then press the calculate trial lens button.

The machine will then work out what lenses are required, this is what you need to put into the trial lens holder.

Ignore any prism.

I have highlighted in red the information you need to enter into the machine

<table>
<thead>
<tr>
<th>Right eye</th>
<th>Sphere</th>
<th>cyl</th>
<th>axis</th>
<th>prism</th>
<th>Left eye</th>
<th>Sphere</th>
<th>cyl</th>
<th>axis</th>
<th>prism</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+3.50</td>
<td>-0.50</td>
<td>90</td>
<td>1BD</td>
<td>+2.75</td>
<td>-0.75</td>
<td>65</td>
<td>1 BU</td>
<td></td>
</tr>
<tr>
<td>add</td>
<td>+3.00</td>
<td></td>
<td></td>
<td></td>
<td>Add</td>
<td>+3.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If the patient does not have their reading glasses or a copy of their distance prescription then please either

- Ask the Orthoptist or Glaucoma Practitioner to focimeter the glasses
- Telephone the patients Optician to request the distance prescription, then enter it as above or
- Ask a Doctor in the clinic what lenses to use.

Document what you have done.
## Appendix 2. Governance Information

<table>
<thead>
<tr>
<th>Document Title</th>
<th>Visual Field Testing Using the Humphrey Visual Field Analyser</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Issued/Approved:</td>
<td>29/07/16</td>
</tr>
<tr>
<td>Date Valid From:</td>
<td>13/07/16</td>
</tr>
<tr>
<td>Date Valid To:</td>
<td>13/07/18</td>
</tr>
<tr>
<td>Directorate / Department responsible (author/owner):</td>
<td>Faye Gibson, Head Orthoptist</td>
</tr>
<tr>
<td>Contact details:</td>
<td>01872 253287</td>
</tr>
<tr>
<td>Brief summary of contents</td>
<td>This policy sets out an approved documented process for the undertaking of visual field testing using the Humphrey Visual Field Analyser.</td>
</tr>
<tr>
<td>Suggested Keywords:</td>
<td>Visual Field Testing, Humphrey Visual Field Analyser</td>
</tr>
<tr>
<td>Target Audience</td>
<td>RCHT</td>
</tr>
<tr>
<td>Executive Director responsible for Policy:</td>
<td></td>
</tr>
<tr>
<td>Date revised:</td>
<td></td>
</tr>
<tr>
<td>This document replaces (exact title of previous version):</td>
<td>Visual Field Testing using the Humphrey Visual Field Analyser v2</td>
</tr>
<tr>
<td>Approval route (names of committees)/consultation:</td>
<td></td>
</tr>
<tr>
<td>Divisional Manager confirming approval processes</td>
<td>Duncan Bliss</td>
</tr>
<tr>
<td>Name and Post Title of additional signatories</td>
<td>Not Required</td>
</tr>
<tr>
<td>Name and Signature of Divisional/Directorate Governance Lead confirming approval by specialty and divisional management meetings</td>
<td>{Original Copy Signed}</td>
</tr>
<tr>
<td>Name:</td>
<td></td>
</tr>
<tr>
<td>Signature of Executive Director giving approval</td>
<td>{Original Copy Signed}</td>
</tr>
<tr>
<td>Publication Location (refer to Policy on Policies – Approvals and Ratification):</td>
<td>Internet &amp; Intranet</td>
</tr>
<tr>
<td>Document Library Folder/Sub Folder</td>
<td>Clinical / Ophthalmology</td>
</tr>
<tr>
<td>Links to key external standards</td>
<td></td>
</tr>
<tr>
<td>Related Documents:</td>
<td>Visual Field Testing using the Humphrey Visual Field Analyser Training Document</td>
</tr>
<tr>
<td></td>
<td>Visual Field Lens Selection Document</td>
</tr>
<tr>
<td></td>
<td>Visual Field Test Selection Flow Diagram</td>
</tr>
<tr>
<td></td>
<td>Visual Field testing using the Humphrey Visual Field Analyser Competencies</td>
</tr>
<tr>
<td>Training Need Identified?</td>
<td>No</td>
</tr>
</tbody>
</table>
## Version Control Table

<table>
<thead>
<tr>
<th>Date</th>
<th>Version No</th>
<th>Summary of Changes</th>
<th>Changes Made by</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 Mar 12</td>
<td>V1.0</td>
<td>Initial Issue</td>
<td>Faye Gibson Head Orthoptist</td>
</tr>
<tr>
<td>13 Jul 13</td>
<td>V2.0</td>
<td>Updated version in new trust format</td>
<td>Faye Gibson Head Orthoptist</td>
</tr>
<tr>
<td>13 Jul 16</td>
<td>V3.0</td>
<td>Updated version in new trust format to support newly developed training competencies</td>
<td>Faye Gibson Head Orthoptist</td>
</tr>
</tbody>
</table>

All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.

This document is only valid on the day of printing

Controlled Document

This document has been created following the Royal Cornwall Hospitals NHS Trust Policy on Document Production. It should not be altered in any way without the express permission of the author or their Line Manager.
### Appendix 3. Initial Equality Impact Assessment Form

<table>
<thead>
<tr>
<th>Name of the strategy / policy / proposal / service function to be assessed (hereafter referred to as policy)</th>
<th>(Provide brief description): Visual Field Testing using the Humphrey Visual Field Analyser</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directorate and service area: Head and Neck, Ophthalmology</td>
<td>Is this a new or existing Policy?  Existing</td>
</tr>
<tr>
<td>Name of individual completing assessment: Faye Gibson</td>
<td>Telephone: 01872 253287</td>
</tr>
</tbody>
</table>

1. **Policy Aim***
   - Who is the strategy / policy / proposal / service function aimed at?
   - To provide guidance for staff employed by Royal Cornwall Hospital NHS Trust when performing visual field testing using the Humphrey Visual Field Analyser for patients attending the Ophthalmology Department.

2. **Policy Objectives***
   - As above

3. **Policy – intended Outcomes***
   - As above

4. **How will you measure the outcome?**
   - Hospital case note review

5. **Who is intended to benefit from the policy?**
   - Patients

6a) **Is consultation required with the workforce, equality groups, local interest groups etc. around this policy?**
   - No

   b) **If yes, have these *groups been consulted?**
   - C. Please list any groups who have been consulted about this procedure.
### 7. The Impact
Please complete the following table.

<table>
<thead>
<tr>
<th>Equality Strands:</th>
<th>Yes</th>
<th>No</th>
<th>Rationale for Assessment / Existing Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Sex (male, female, trans-gender / gender reassignment)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race / Ethnic communities / groups</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Disability - Learning disability, physical disability, sensory impairment and mental health problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religion / other beliefs</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Marriage and civil partnership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnancy and maternity</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You will need to continue to a full Equality Impact Assessment if the following have been highlighted:
- You have ticked “Yes” in any column above and
- No consultation or evidence of there being consultation- this excludes any policies which have been identified as not requiring consultation. or
- Major service redesign or development

8. Please indicate if a full equality analysis is recommended. Yes No X

9. If you are not recommending a Full Impact assessment please explain why.

Not required

<table>
<thead>
<tr>
<th>Signature of policy developer / lead manager / director</th>
<th>Date of completion and submission</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Names and signatures of members carrying out the Screening Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
</tr>
</tbody>
</table>

Keep one copy and send a copy to the Human Rights, Equality and Inclusion Lead, c/o Royal Cornwall Hospitals NHS Trust, Human Resources Department, Knowledge Spa, Truro, Cornwall, TR1 3HD

A summary of the results will be published on the Trust’s web site.

Signed _______________

Date _________________