

Hypertension and AF screening in optical practices

Proof of concept trial

The purpose of the optical practice hypertension and AF screening trial focuses on the early detection of high blood pressure (hypertension) and atrial fibrillation (AF). Optometrists will offer individuals a blood pressure test using a monitor that is validated for the detection of AF, and offer brief interventions to improve their lifestyle. People identified with high blood pressure readings or identified with potential AF will be encouraged to visit their GP practice.

The trial will support the Government's Cardiovascular Disease Outcomes Strategy¹, which aims to help improve outcomes for people with or at risk of cardiovascular disease (CVD).

The trial is looking to explore the potential for a larger role for optical practices in public health, specifically around early detection of high blood pressure or AF and supporting lifestyle improvement (i.e. giving practical tips to members of the public around key risk factors for high blood pressure).

Early results from a similar project in community pharmacies in have shown positive results with a specified population.

- 48 pharmacies involved
- 521 patients screened
- 31% of patients referred to their GP with high blood pressure (stage 1&2)
- 2.5% of patients referred to GP with severe hypertension
- 1% of patients referred to GP with hypotension
- 1.9% of patients with potential AF

Optical practices have a distinct opportunity for screening patients. Vision often starts to decline around the age of 40 yrs. This is a key age when blood pressure may start to rise. Optical practices may provide access to men over 40 for screening which is a difficult target group to reach in other healthcare environments.

Proposed trial

This proof of concept trial is planned to run over a four week period in a small number of optical practices in Derbyshire and Nottinghamshire.

Inclusion criteria for patients in the trial will be

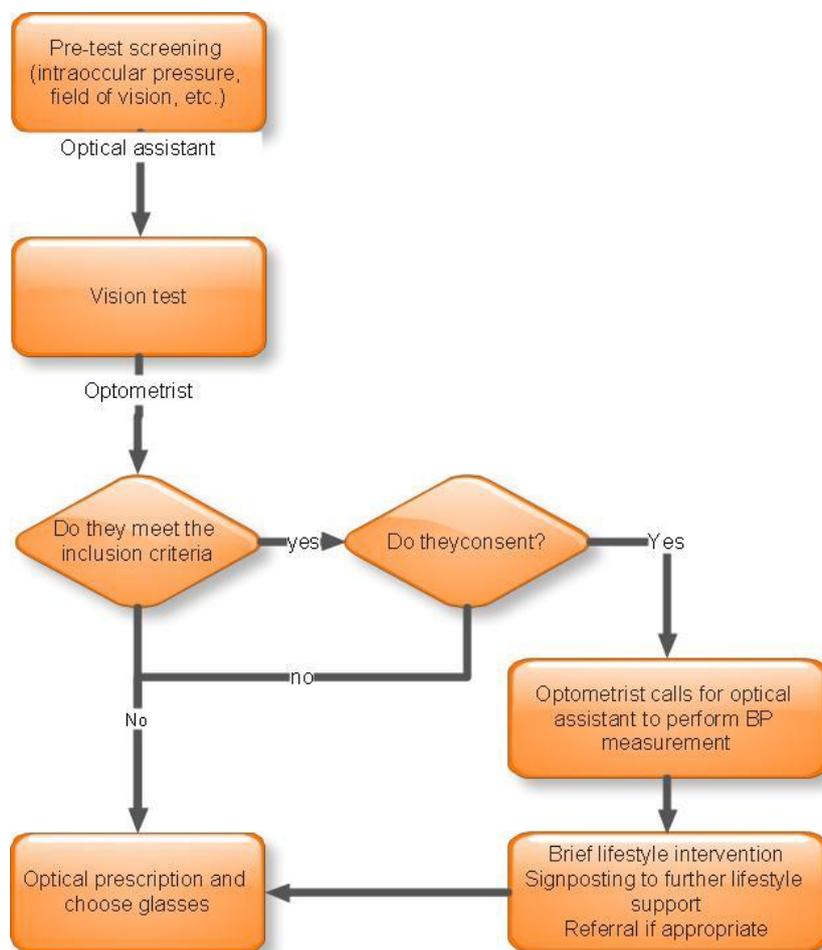
- Over 40 years old
- Male and female
- Any ethnicity
- Not previously diagnosed with hypertension or AF
- Blood pressure not tested within the last six months.

The aims of the service are

- To identify individuals with high blood pressure or atrial fibrillation
- To provide brief lifestyle interventions to all patients screened
- To signpost patients to other sources of lifestyle advice
- To refer patients with high blood pressure readings or a suspected diagnosis of atrial fibrillation to their GP practice
- To refer patients with a low blood pressure (systolic reading below 90mmHg) to their practice nurse or GP

The aim of the trial is to investigate whether optical practices are an effective and acceptable site to screen for undiagnosed hypertension and/or atrial fibrillation.

Service process



Outcomes for blood pressure measurements

Systolic < 90 mmHg	<ul style="list-style-type: none"> Referral for check up by GP/practice nurse
<140/90 mmHg	<ul style="list-style-type: none"> General lifestyle brief interventions Reassurance that BP is normal
140/90 - 179/100 mmHg	<ul style="list-style-type: none"> General lifestyle brief interventions Non urgent referral for check up by GP/practice nurse
>180/110	<ul style="list-style-type: none"> General lifestyle brief interventions Referral (in next 2-3 days) for check up by GP/practice nurse

All patients who have a result that suggests atrial fibrillation will be referred to their GP.

Patients will also be signposted to other local services (e.g. smoking cessation, weight management, dietician) for further support

Data collection

The trial will use a brief data collection forms for recording patient data. Information for evaluation will be inputted into an online database in an anonymised format. Patient data will be stored securely in the optical practice and kept for two years.

A payment of £5 per screening has been secured for the first 500 screened patients in the trial. Information recorded on the online database will be used to authorise these payments.

Data collected will include

- Number of patients identified within inclusion criteria
- Number of patients declining test
- Blood pressure measurement value
- Potential AF detected
- Advice given
- Referral made
- Demographics (age, sex, ethnic origin, etc.)

Data collection forms will be made as simple as possible to facilitate rapid data capture.

Evaluation data will be evaluation by Metaphor Development Ltd.

Training provision

Team members in the optical practices will be provided with training to ensure they are skilled and knowledgeable to fulfil their role in the trial. Training will include;

- Prevalence, impact and pathophysiology of hypertension
- Lifestyle advice to reduce hypertension
- Making Every Contact Count and brief interventions
- Measuring blood pressure effectively
- The protocol for the trial

Resources required

- Blood pressure monitor
- Outcomes for blood pressure measurements laminated aide memoire card
- Lifestyle brief intervention laminated aide memoire card
- Data collection forms
- Referral letters
 - Hypotension
 - Stage 1&2 hypertension
 - Severe hypertension
 - Atrial fibrillation

1. Department of Health (2013). Cardiovascular Disease Outcomes Strategy: Improving outcomes for people with or at risk of cardiovascular disease. London: Department of Health.