

STROKE PREVENTION PROGRAMME

PROGRAMME (3). ATRIAL FIBRILLATION PROGRAMME

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Introduction

This programme is designed as a combined primary and secondary prevention programme for those GPs who are interested to look their patients with atrial fibrillation. The programme would be designed to support the practice in building up a disease register of patients with atrial fibrillation, and to set up appropriate recall systems so that interventions can be introduced to lower the risk of first or subsequent stroke in these high risk individuals. Patients in the Romford PCG area carry with them an above average risk of developing a stroke, and the PCG is very keen for practices to take action to reduce the morbidity and mortality associated with CVAs. An extensive review of the literature has shown the most cost effective and clinically appropriate actions that can be taken to achieve this aim is to set up stroke prevention programmes targetted at either patients with known cerebrovascular disease, (see the Romford stroke secondary prevention programme), or patients with atrial fibrillation, as in the programme described below. There has never been a PCG wide programme for the detection and appropriate treatment of patients with atrial fibrillation and this programme should be helpful to those practices that have not yet set up systems for patient care in this area.

Participation in the programme should answer questions such as who are my patients with atrial fibrillation?, how many of them have been treated with anti-thrombin medication? Who should be referred for cardioversion? and what is the most appropriate medication to try to correct the atrial fibrillation arrhythmia?

Objectives of Programme

The objectives of this programme are threefold. Firstly it is an educational programme for GPs and practice staff to support them in updating their knowledge about atrial fibrillation, and answer some of these questions. Secondly it will provide guidance on case finding suitable patients, and the setting up of a disease index for these A.F. patients. Finally there will be advice on treating these patients, with regard to specific treatment of atrial fibrillation and the equally important issue of anti-thrombin treatment, so that the risk of the development of a stroke amongst this high risk group can be reduced. This will be assisted by the use of a locally approved guideline which

suggests in an uncomplicated way the most appropriate practice management of such patients.

How The Programme Might Work in Your Practice

- 1). The participant should read through the attached educational material relating to the wider issue of stroke prevention in general. The material also refers to some aspects of the nature and treatment of atrial fibrillation.
- 2). The participant should then set up a practice meeting to be attended by those members of the practice team who are interested in this subject, to discuss the programme content and to consider the suggested methods of implementing the objectives which have been suggested. In practice this would mean looking at the Atrial Fibrillation Prevention Programme on page 4 and the practice algorithm (guideline) on page 5.
- 3). The tasks required to find the cases of atrial fibrillation within the practice, and who should do the work, should be allocated within the practice. It is helpful to set a target, such as looking at the number of patients found after say three months, which should be agreed. A baseline estimate of known atrial fibrillation patients should be noted, so that a subsequent audit can be used to show whether the atrial fibrillation programme has successfully identified more patients on the disease register.
- 4). The methods of developing the disease index will vary from practice to practice. The final result will be the same however; the production of a list of names of "active" patients (i.e. registered) patients who were known to have atrial fibrillation. In some practices there may already either be a list of known patients or the possibility of read code entries relating to atrial fibrillation being entered in the practice computer system. In those practices which use the electronic records in a very limited way this source of information is likely to be less useful. Nevertheless where possible the practice (electronic) records should be searched for the diagnosis, and the resulting patients names would provide the basis of the atrial fibrillation disease index. The names should be kept as a group on the system, and for the purposes of this programme a print out obtained and kept in this folder. The prevalence data of atrial fibrillation is difficult to assess as there is little published data on the expected prevalence, and the true practice prevalence is very much related to the demography of the practice, for example some studies show that over 10% of patients over the age of 80 years have atrial fibrillation. **However a working guide is that if you work in an average practice you would expect between 6 and 9 patients to have atrial fibrillation per thousand patients at risk.** Thus for example a large local group practice with 14,000 patients has a disease register with the names of 85 atrial fibrillation patients giving a prevalence at the lower end of this range.
These figures may be helpful for you to compare with you own practice population, so as to act as a guide as to the accuracy of your own disease register as it is being developed.
- 5). A follow up meeting should be arranged, after a suitable period, so that the next step; of reviewing the patients added to the disease index may be arranged. It is also helpful to appoint a "lead person" within the practice to oversee the work done; this might be the clinical governance lead within the

practice, or an interested doctor or nurse, who agrees to keep an eye on the progress of the work.

6). At the follow up meeting the number of atrial fibrillation patients should be looked at and compared with the figures given to see whether a reasonable pick up rate has been achieved. You can consider yourself what an acceptable figure might be, based on the data given in this pack. Many practices would want to find at least 5 atrial fibrillation per 1000 patients on their lists, before going onto the next stage of reviewing patients and implementing the agreed guideline.

7). It may be necessary at this stage to introduce specific measures to increase your numbers of atrial fibrillation patients. This can be done in a number of ways. Firstly by opportunistic case finding, patients seen in regular consultations should be screened for arrhythmias, such as when an irregular pulse was noted when a blood pressure measurement was being made. In addition to noting such a finding the patient should be assessed and if there is a doubt about the diagnosis a rhythm strip (ECG) arranged. Secondly the practice computer system should be used to identify patients who may have been noted to have had either atrial fibrillation or an unidentified arrhythmia. Review of the manual notes may reveal further patients with atrial fibrillation. Finally the practice may consider pro-active methods of identifying atrial fibrillation patients, such as recalling targeted patients, such as those over the age of 80 years, (of whom up to 10% may have atrial fibrillation,) who had not been seen recently.

8). Once a satisfactory disease index had been constructed, the review stage can take place. Here the medical records both manual, electronic or both, as appropriate need to be examined by the participants to check how each patient is being managed compared with the guideline provided. This should look at whether the patient has a minimum level of investigations, been assessed for being either high or low risk, and then being treated with some sort of anti-thrombin therapy. In practice patients should be on either aspirin, (or alternative oral therapy if allergic to aspirin) or anticoagulant.

9). The final part of the programme consists of arranging a final audit based on the number of patients on the atrial fibrillation disease register, the number of patients whose management was changed as a result of the programme, and most importantly the percentage of patients in the practice who were known to have atrial fibrillation and were on anti-thrombin therapy. This audit looks at the number of patients on your disease register at the start of the programme and at the end of it. It uses data collected from the computer system, and is fairly straightforward to carry out. In order to do the required searches you will have to make the disease index patients into a searchable group, and you will have to know how to search this group as to current therapy with either aspirin or anti-coagulants. Depending on the practice method of data recording the individual manual records may well have to be drawn to review current therapy; e.g. to check whether patients are attending a local anticoagulant clinic or not.

Below are some sample figures to act as an example.

An Example Audit

Initial data collection date;	
Number of AF patients on disease index;	67 patients
Initial prevalence of AF among practice population;	0.49%
Initial number of patients on oral anti-platelet therapy;	17
Initial number of patients on anticoagulant therapy;	12
Percentage patients with AF documented to be on prophylactic treatment	43.3%

Final data collection date;	
Number of AF patients on disease index;	84 patients
Final prevalence of AF among practice population;	0.63%
Final number of patients on oral anti-platelet therapy;	37
Final number of patients on anticoagulant therapy;	25
Percentage patients with AF documented to be on prophylactic treatment	73.8%

ATRIAL FIBRILLATION MANAGEMENT PROGRAMME; A SUMMARY OF REQUIRED STEPS FOR IMPLEMENTATION

- Preliminary audit to make an estimate of baseline number of atrial fibrillation patients.
- Programme of opportunistic case finding begins.
- Computer search of practice database to identify further patients.
- Construction of a revised disease index based on the above measures.
- Review of medical records of patients on atrial fibrillation index.
- Recall and review of patients not on anti-thrombin therapy.
- Final audit to demonstrate improvement in identification and management of atrial fibrillation patients.

Has the Programme Been Successful?

Once you have entered the figures you can review whether the programme has proved successful at identifying and treating your atrial fibrillation patients. For example you may consider that a successful programme would be one which

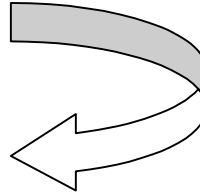
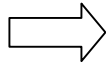
- a). Identifies sufficient patients with atrial fibrillation to show a definite increase in prevalence figures during the course of the programme, and
- b). Demonstrates a final prevalence of at least 0.6%, (6 patients per 1000 population), and
- c). Demonstrates a final percentage of atrial fibrillation patients who are on either anti-coagulants or aspirin exceeding say 80% of the affected population.

EXAMPLE PRACTICE GUIDELINE

ATRIAL FIBRILLATION PRACTICE MANAGEMENT

Screening at risk groups
Opportunistic case finding

ATRIAL FIBRILLATION DIAGNOSIS



**ASSESS
BY GP**

1). Consider referral to cardiologist

2). Assess for further investigations

- CXR / ECG / Echocardiogram
- U&E / TFT / Cholesterol

3) Consider specific treatment for the Atrial Fibrillation

- **Assess for presence of :**
 - Hypertension
 - Thyroid disease
 - Ischaemic Heart disease
 - Congestive cardiac failure
 - Cardiomyopathy
- **Treat with specific agent:**
 - digoxin / verapamil / diltiazem / beta blocker

4). Start Anti-Thrombin therapy

- **Assess for age**
- **Assess for additional risk factors**
 - Past history of CVA / TA
 - Hypertension
 - Congestive cardiac failure
 - Ischaemic heart disease
 - Diabetes mellitus
 - Structural Heart defect / enlarged left atrium
- **Assess for Social / compliance / polypharmacy issues**

ASPIRIN 150
MGM. DAILY

Age < 75

Low risk factors

**Anti-Thrombin
Therapy decision**

REFER TO
ANTICOAGULANT
CLINIC

Age > 75

Additional risk factors

STROKE PREVENTION PROGRAMME

Programme Design © Paul Myers January 2001

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