

Seeking Patients in Atrial Fibrillation - Guidelines for Medical Professionals

Atrial Fibrillation is the most common sustained dysrhythmia with a national prevalence of 1.2% equating to 840,000 cases nationally, although many authorities would consider this an under estimation. Reviews of the Quality and Outcome Framework (QOF) data reveal a wide variation in the practice prevalence. Clearly some of this prevalence variation will be determined by the practice population demographics. The incidence of Atrial Fibrillation increases with age, with 9% of patients aged 80-90 years old affected. This would suggest the older the mean age of the practice list, the more patients suffering with Atrial Fibrillation there should be.

A practitioner will be made aware of some of the patients suffering with Atrial Fibrillation with the transition from sinus rhythm being symptomatic and thus requiring the intervention from a medical practitioner. However many people tolerate the transition well and have no knowledge of their change of condition.

Whether AF is asymptomatic or not, the increase risk of thromboembolic stroke is increased just by the nature of the dysrhythmia. There are 89,000 strokes each year in England, of which 16,000 present in Atrial Fibrillation and 12,500 are attributable to Atrial Fibrillation.

Appropriate intervention in the high-risk patients with oral anticoagulants has been shown to reduce the stroke risk by 60%.

With the removal of the square root adjustment the importance of appropriate raw prevalence of disease registers included in the Quality and Outcome Framework has changed. This has raised the importance of case finding.

Risk Score for Atrial Fibrillation

The Lancet published a paper from the Framingham Heart Study Group (Development of risk score for Atrial Fibrillation (Framingham Heart Study): a community-based cohort study, Schnabel et al. Lancet 2009 739-745).

This suggested that a variety of factors, easily assessed in a Primary Care setting, can risk stratify a population for development of Atrial Fibrillation over a ten year period.

The study retrospectively selected 4,764 participants who did not have AF from the Framingham Heart Study original cohort. This group were then monitored for the first event of Atrial Fibrillation for a maximum of ten years.

The diagnosis of AF was made if Atrial Fibrillation or Atrial Flutter was present on an electrocardiograph (ECG). The presence of heart failure was confirmed by an echocardiogram. A heart murmur was classified as one exceeding grade 3 of 6 systolic or any diastolic murmur auscultated by a clinician. Hypertension was defined as a systolic blood pressure of greater than 140mmHg or diastolic blood pressure of more than 90mmHg or if antihypertensives were already prescribed.

The risk factors were selected from previous reports and a 'Risk Score' developed.

	Score		
		Male	Female
Age			
45-49		1	-3
50-54		2	-2
55-59		3	0
60-64		4	1
65-69		5	3
70-74		6	4
75-79		7	6
80-84		7	7
≥84		8	8
Body-Mass Index (Kg/m ²)			
<30	0		
≥30	1		
Systolic Blood Pressure			
<160	0		
≥160	1		

Treatment for hypertension			
No	0		
Yes	1		
PR Interval (ms)			
<160	0		
160-199	1		
≥200	2		
Age at which significant murmur developed (years)			
45-54	5		
55-64	4		
65-74	2		
75-84	1		
≥85	0		
Age of heart failure			
45-54	10		
55-64	6		
65-74	2		
≥75-84	0		

Predicted 10-year risk of Atrial Fibrillation assigned to the risk score	Risk Score	Predicted Risk
	0	≤1%
	1	2%
	2	2%
	3	3%
	4	4%
	5	6%
	6	8%
	7	12%
	8	16%
9	22%	
≥10	≥30	

Through this scoring system it is clear that high-risk people could be identified within a practice population. At present there is no clear guidance of interventions that can be seen to prevent the onset of Atrial Fibrillation. However, when looking at practice population, identifying the patients with scores of eight or more for screening could target the practice resources more directly.

Seeking Patients with Atrial Fibrillation:-The Cardiac Network Experience.

North Somerset PCT

A project was undertaken to increase the identification of people with Atrial Fibrillation. This was opportunistic screening of patients over the age of 65 years and was by simple pulse palpitation.

What was significant in this project was that even in practices with high prevalence levels, further cases of Atrial Fibrillation were identified and given appropriate intervention.

Pemberley Surgery, Bedford

The practice nurse seldom undertakes routine taking of the pulse due to general acceptance of the automated blood pressure monitor. This loses the opportunistic identification of AF through routine assessment.

80% of the over 65 population attends the annual flu clinics. This opportunity to perform a simple pulse check was taken to screen an at risk population for Atrial Fibrillation. The practice found that this increased its practice prevalence to 1.9%.

North Bradford PCT

Bradford has a generally young population being a city with a population still in positive population growth. This is reflected in the city's prevalence of Atrial Fibrillation being below the national average. The area to the north of Bradford has an average older population than the city as a whole. Thus it should be expected that this area should have a higher prevalence than elsewhere in the city.

The simple addition of the 'pulse' and 'heart rhythm' prompts to all blood pressure templates within the clinical IT system, has led to the clinician checking these clinical signs.

Covered by the Bingley and North Commissioning Alliance, it is now found to have a population prevalence of 1.6% (compared to 1% for the PCT as a whole) with some practices having a prevalence of 2%.

Conclusion

With the increased mortality and morbidity attached even to asymptomatic Atrial Fibrillation, it is imperative that people are actively sought to ensure appropriate intervention.

This can be achieved through opportunistic screening, and more directed screening of high risk patients. Examples highlighted in this sheet may assist practices in developing a strategy.

Author: Dr Matthew Fay, GP
 Endorsed by: Dr Campbell Cowan, EP
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