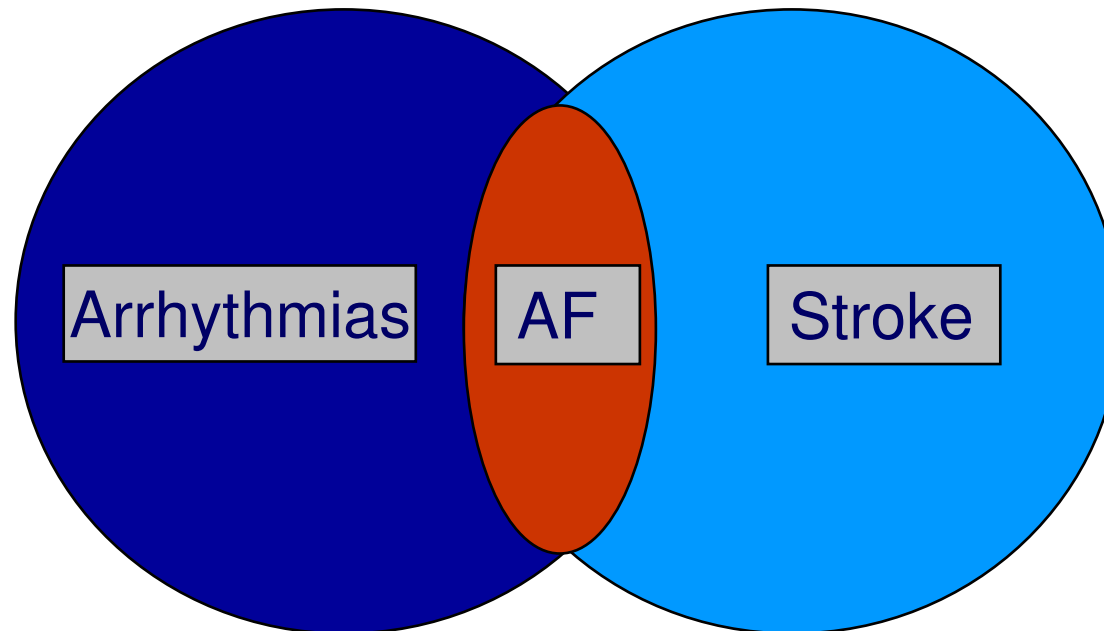


Chapter 8 and Stroke Prevention



AF is the interface between chapter 8 and stroke prevention



Approx 14 % of all strokes are attributable to AF



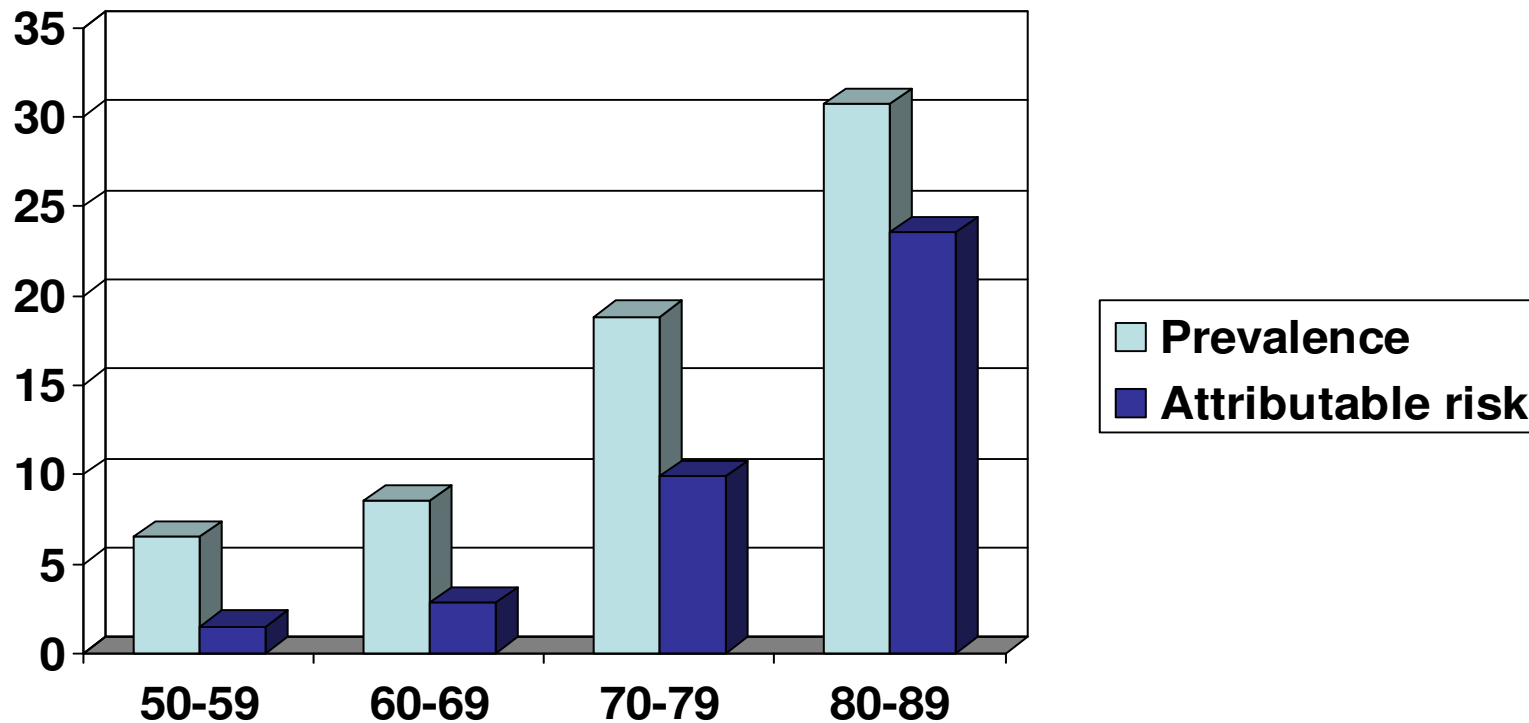
AF and the prevention

- AF is very common
 - 1 – 1.3 % UK population with known AF
 - Approximately 600,000 patients in England
- Major predisposing factor to stroke
 - 16,000 strokes annually in patients with AF in England
 - Of these approx 12,500 are thought to be attributable to AF
 - 4,300 deaths in hospital
 - 3,200 discharges to residential care
 - 8,500 deaths within the first year

DH figures 2007

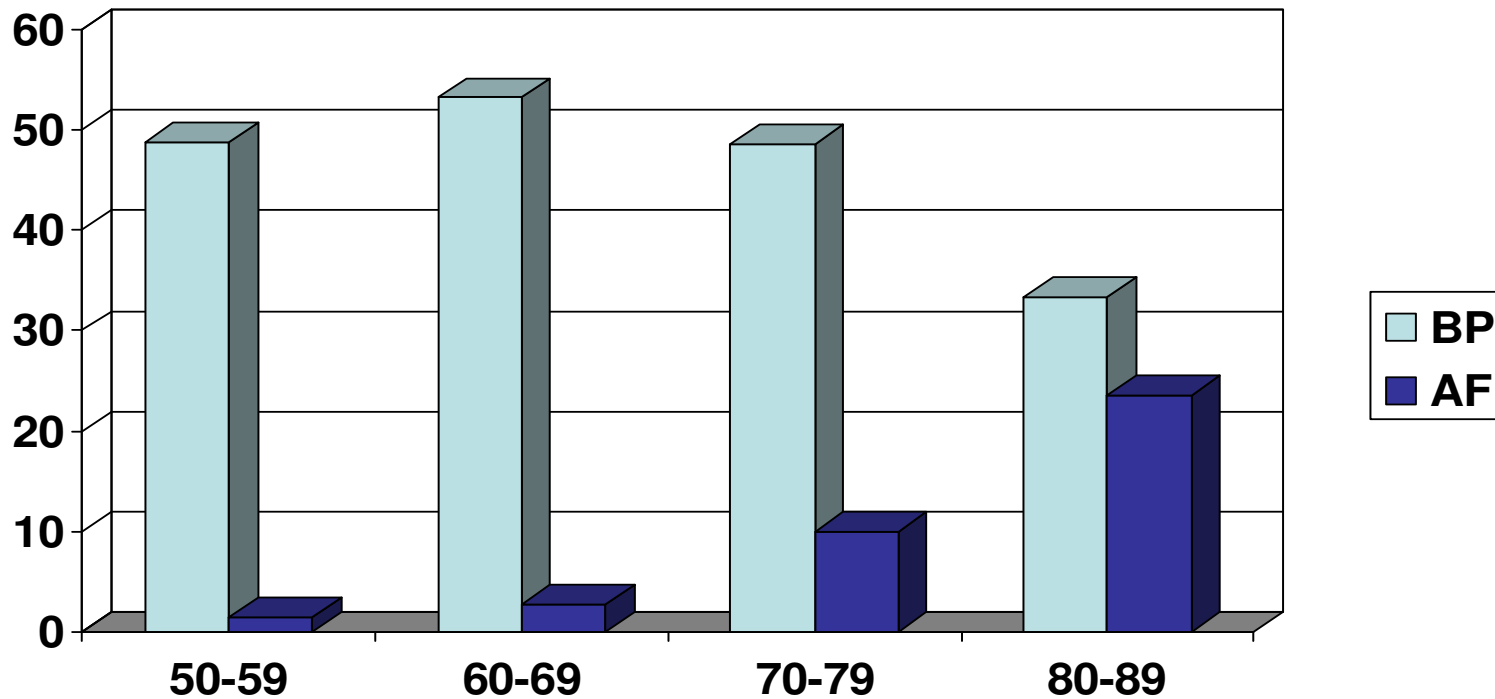


Attributable risk - AF





Attributable risk of stroke





Risk reduction with warfarin

- Reduces relative risk of stroke by approx 70 %
- Absolute risk reduction
 - Primary stroke 2.7 %
 - Secondary stroke 8.4 %
- Numbers needed to treat for 1 year to prevent 1 stroke
 - Primary stroke 37
 - Secondary stroke 12
 - Overall 25 (approx)



Risks / costs associated with AF

- 12,500 strokes annually attributed to AF in UK
- Excess costs attributable to AF £ 148 million
 - Hospital stay cost £103 million
 - Post-discharge care £45 million
- Cost per stroke is £11,900
- These estimates do not include continuing costs after first year



Costs attributable to treating AF

- Annual cost per patient £383
- Costs per stroke averted £9,575 – £14,171
- Additional costs due to major bleeds
£236 – 349 / patient

Treatment saves money and pays for itself



Under anti-coagulation of AF

- Amongst patients with recognized AF, approx half of those who would benefit from warfarin are receiving it
- NICE estimate that of 355,000 patients who should be taking warfarin
 - 189,000 are actually receiving it.
 - An additional 166,000 should be receiving it



Audit tool

- GP database interrogation based on Miquet
- Stroke risk stratification based on CHADS 2 score
- A few minutes work to identify pts for review who might benefit from warfarin
- **Preliminary data confirms that 40-50 % of pts who might benefit from warfarin are not receiving it**



CHADS₂ score

| | |
|--------------------------|---|
| Congestive heart failure | 1 |
| History of hypertension | 1 |
| Age > 75 | 1 |
| Diabetes | 1 |
| Stroke / TIA | 2 |

Warfarin indicated when CHADS₂ score \geq 2



Determine stroke/thromboembolic risk

High risk:

- Previous ischaemic stroke/TIA or thromboembolic event
- Age >75 with hypertension, diabetes or vascular disease
- Clinical evidence of valve disease, heart failure, or impaired left ventricular function on echocardiography

Moderate risk:

- Age >65 with no high risk factors
- Age <75 with hypertension, diabetes or vascular disease

Low risk:

- Age <65 with no moderate or high risk factors

NICE Guidelines



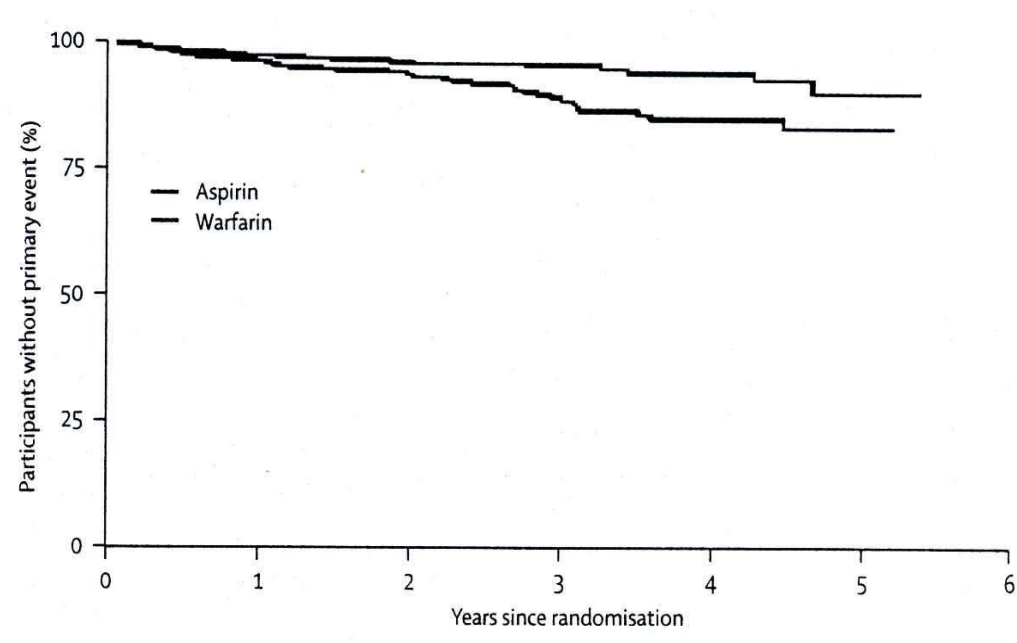
Existing AF QOF Allocation

| | | Points |
|-----|--|--------|
| AF1 | The practice can produce a register of patients with AF | 5 |
| AF2 | The % of patients with AF diagnosed with ECG or specialist confirmed diagnosis | 10 |
| AF3 | The % of patients with AF who are currently treated with anti-coagulation drug therapy or an anti-platelet therapy | 15 |



BAFTA - primary endpoints

- Primary endpoints
 - Fatal or non-fatal disabling stroke
 - Other intracranial haemorrhage
 - Arterial embolism
- Warfarin 1.8 % / year
Aspirin 3.8 % / year
Relative risk 0.48
(95 % CI 0.28 – 0.8)





BAFTA – Annual risk of extra-cranial haemorrhage



- Warfarin 1.4 %
- Aspirin 1.6 %

Warfarin did not increase haemorrhagic risk
in comparison with aspirin



Existing AF QOF Allocation

| | | Points |
|----------------|---|---------------|
| AF1 | The practice can produce a register of patients with AF | 5 |
| AF2 | The % of patients with AF diagnosed with ECG or specialist confirmed diagnosis | 10 |
| AF3 | The % of patients with AF who are currently treated with anti-coagulation drug therapy or an anti-platelet therapy | 15 |



Possible Changes to QOF

- AF1 The practice can produce a register of patients with AF
- AF2 The % of patients with AF diagnosed after 1 April 2008 with ECG or specialist confirmed diagnosis
- AF3 The % of patients with AF in whom stroke risk has been assessed using an accepted scoring system (CHADS or NICE) in the last 15 months
- AF4 The % of patients at high risk of stroke who are receiving anti-coagulants (unless a contra-indication or side effects are recorded)



Other work to support AF

- NICE guidelines launched in June 2006 (CG36 - The management of atrial fibrillation)
- DH cost-benefit analysis produced – looking at best way of building this into our work
- Northern SHA sponsoring a PbR Development Site project to look at costs and reimbursement for ablation (percutaneous and surgical) – Newcastle and Middlesbrough
- Society for Cardiovascular Surgeons (SCVS) and HRUK to look at AF ablation protocols between cardiology and surgery specialties
- Education for Health atrial fibrillation training modules