Atrial Fibrillation in the real world general hospital

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Historical perspective

- AF discovered either because of symptoms or by chance
- Patients discovered to be in AF in primary care often referred to hospital general cardiology clinics
- GP's reluctant to prescribe warfarin
- Waiting times for clinics many weeks
- Treatment delays significant - risk

What's changing?

- Major initiative to improve detection of AF in primary care – opportunistic screening
- Development of rapid assessment pathways either in primary or secondary care
- Early treatment

How does this impact on the hospital service?

- Increase in referrals due to increase in case detection
- Need to develop means for rapid assessment and treatment of these patients

What actually needs to be done for a patient with 'new' AF?

- Assessment of cause
- Assessment of haemodynamic consequences
- Decision re management of rhythm
  - Rate vs rhythm control
- Decision about preventing blood clots in the heart and thromboembolism/stroke (warfarin, aspirin etc)

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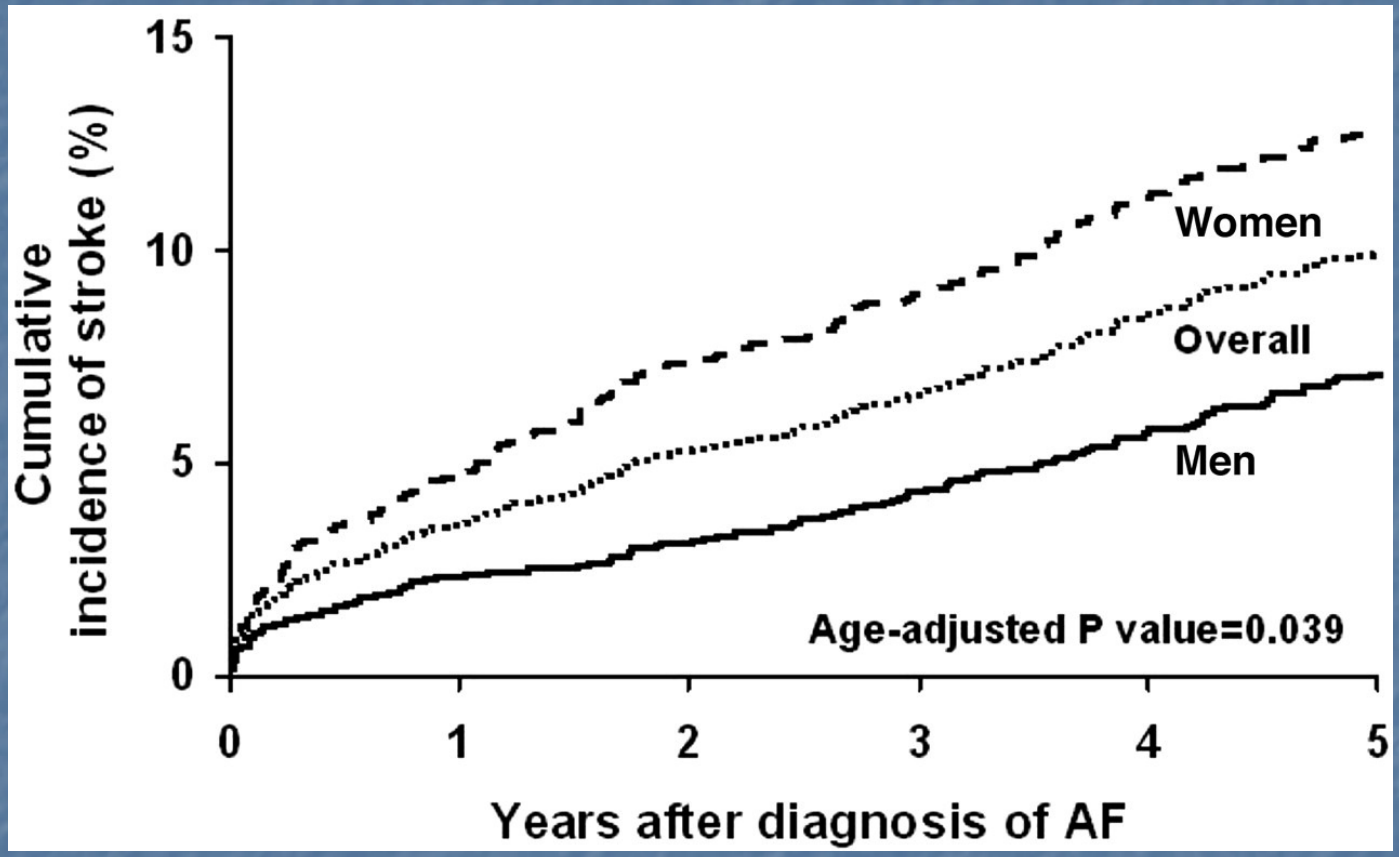
Overall and sex-specific cumulative incidence of first ischemic stroke after first AF



Miyasaka, Y. et al. Stroke 2005;36:2362-2366

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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

Rapid access AF clinics

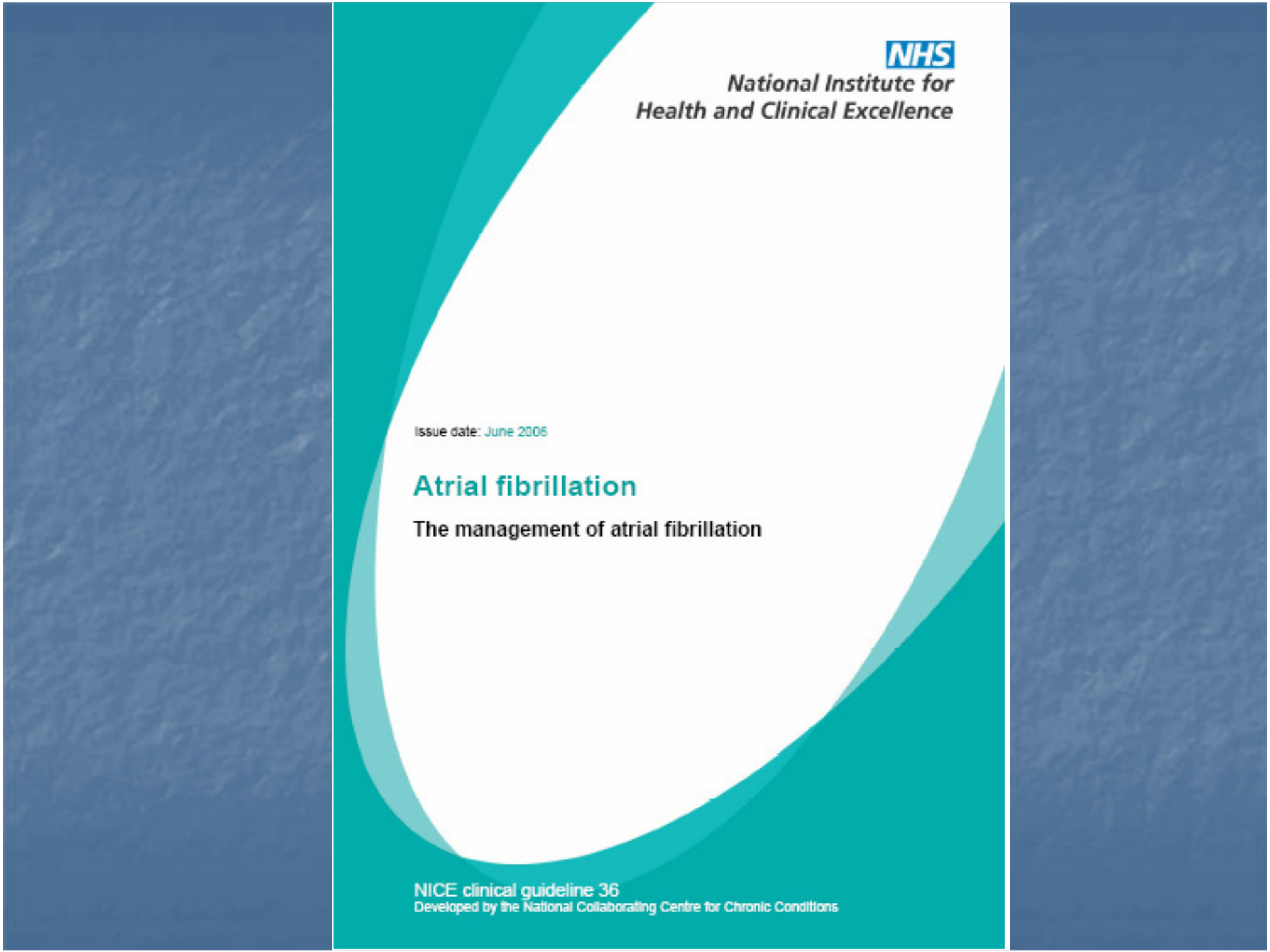
- Can be provided in primary and secondary care
- Can be run by nurses using protocol-based decision making – CHADS2 – for anticoagulation
- Provided patients are not compromised, further investigations and treatment are less urgent, but still can be provided by nurses with appropriate supervision
- Echo not necessary to decide re antico.

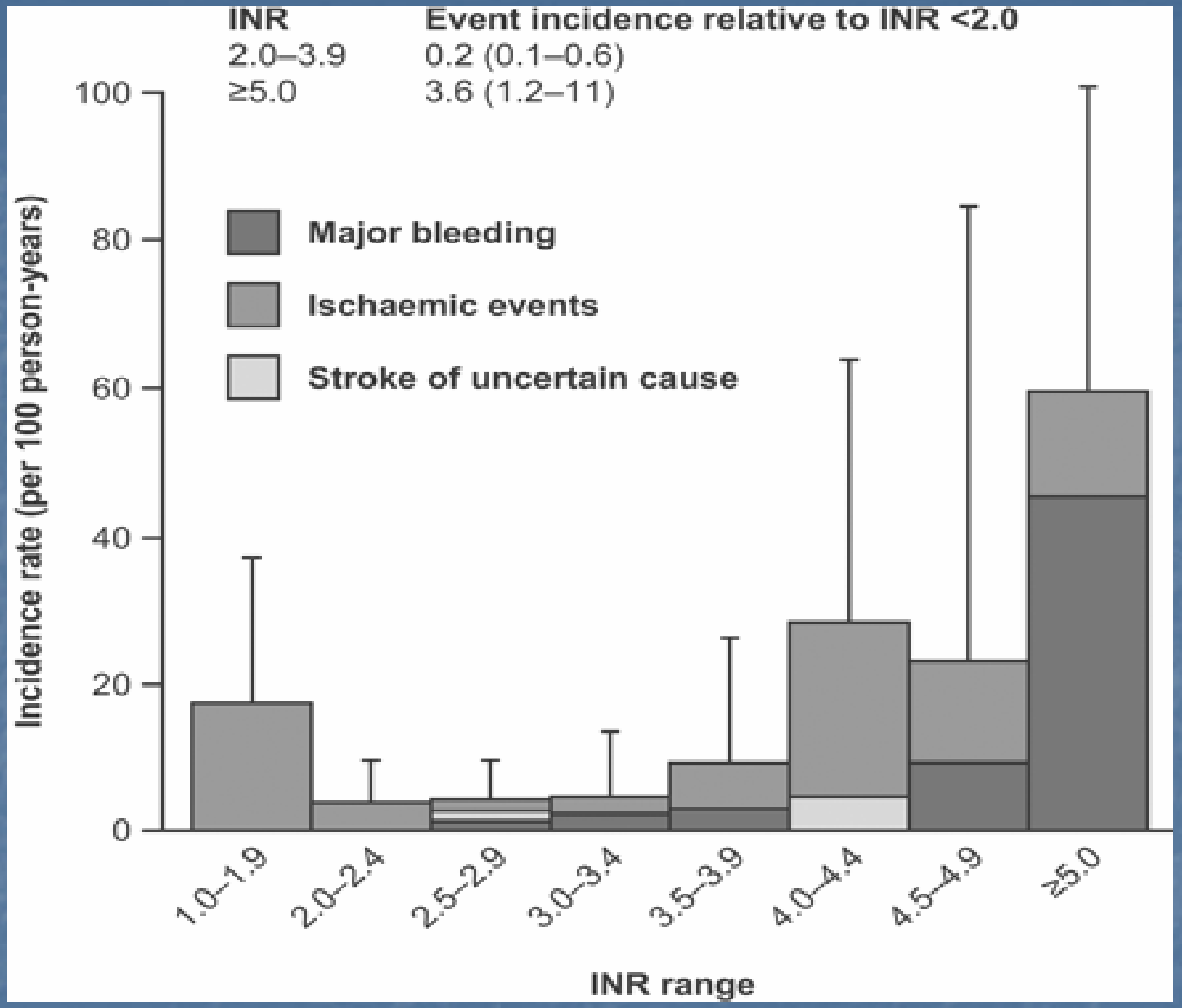
What do we know about how acute admissions with AF are managed in hospitals?

- Very little published
- Many different scenario's
  - Acute decompensated AF
  - Stroke
  - EtOH
  - ACS
  - Post-op
  - Palpitations
  - Chance finding

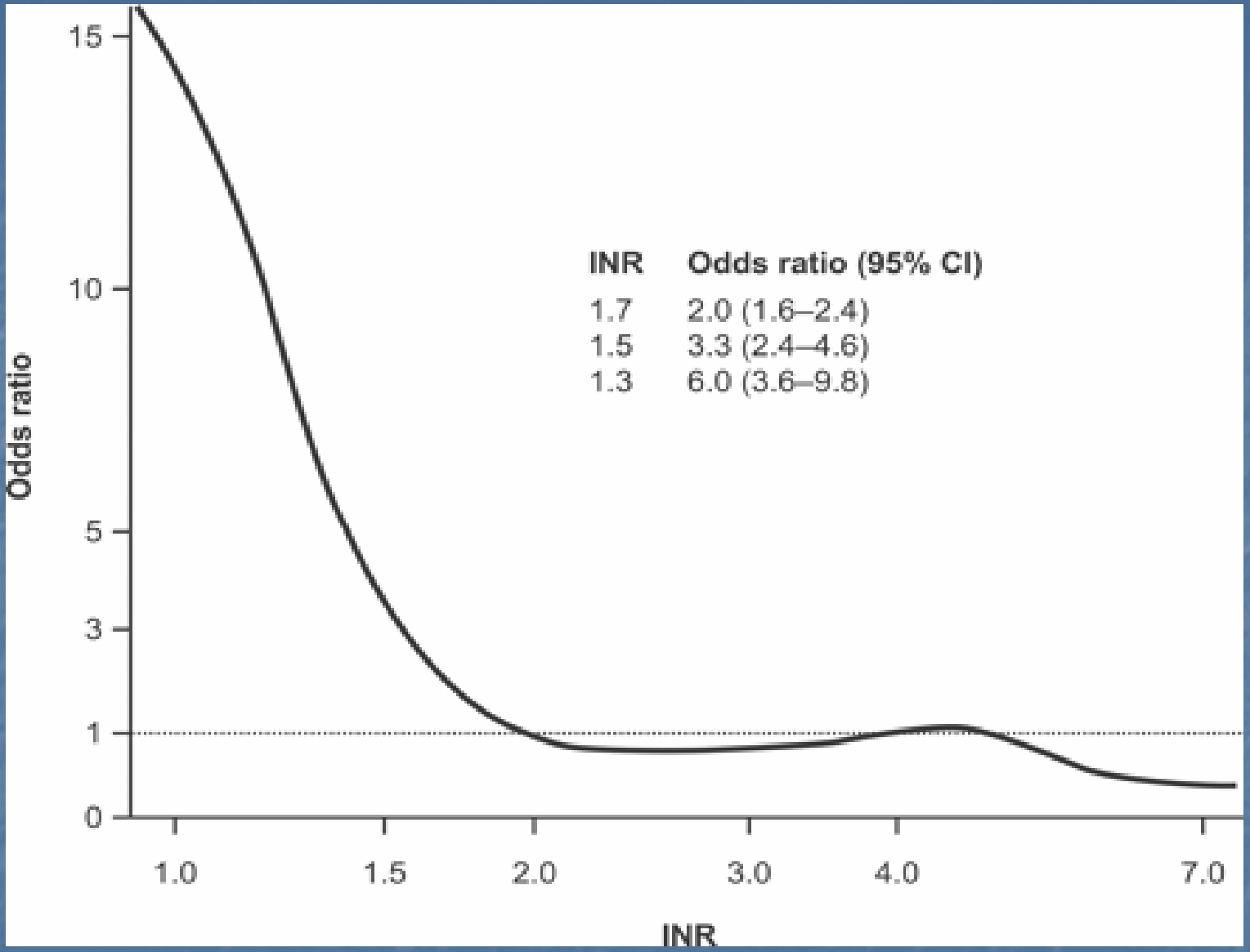
Principles of management remain the same

- Assess risk of stroke and treat appropriately
  - Complications of sick patients with potential contraindications to anticoagulation
- Assess circulatory state and initiate treatment for
  - Rapid heart rate (DC cardioversion if <48hrs)
  - Heart failure
  - ACS if appropriate (ECG and Trop)
- In context of complex co-morbidities, the thromboembolic risk of AF can get forgotten


NHS
National Institute for
Health and Clinical Excellence
Issue date: June 2006
Atrial fibrillation
The management of atrial fibrillation
NICE clinical guideline 36
Developed by the National Collaborating Centre for Chronic Conditions



Risk of bleeding in patients treated with warfarin to various INR's



Odds ratio for stroke in patients treated to different INR's

Rate vs rhythm control in acutely ill patients

- Rate control may be all that is necessary to restore haemodynamics, but that does not deal with risk of thromboembolism
- Some rate-controlling drugs cause hypotension, particularly in sick patients
- Serious illnesses increase the risk of recurrence of AF even if SR restored

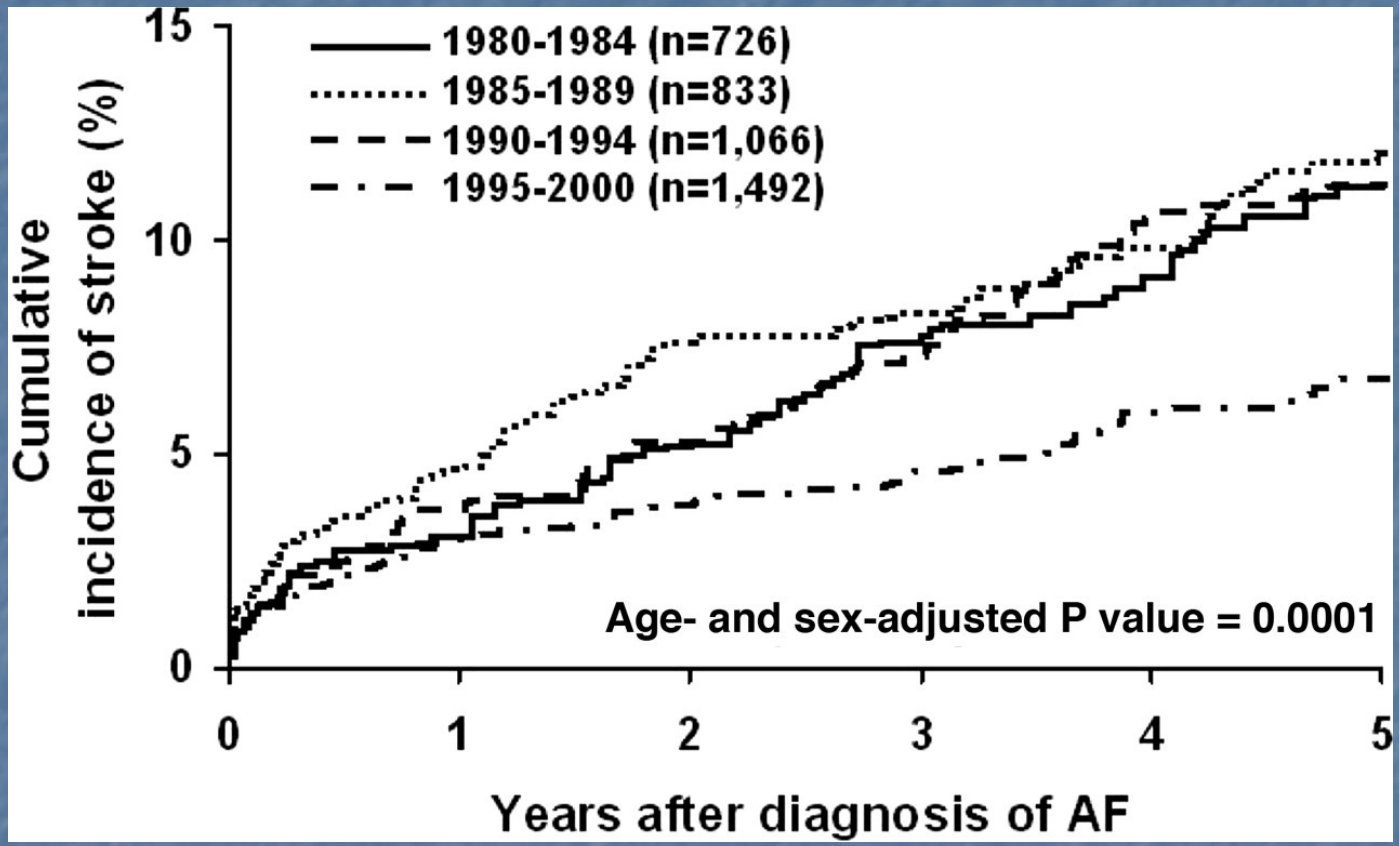
Anticoagulants and antithrombotic agents

- Risk of combining warfarin/ heparin with aspirin &/ clopidogrel is not clear, but probably significant
- Many patients with cardiac conditions treated with aspirin &/ clopidogrel
- Increased risk makes restoration of sinus rhythm desirable. DC cardioversion most reliable
- Use of transoesophageal echo rather than warfarin justified.

Difficult decisions

- Patient with acute stroke and thrombus in left atrium
  - Anticoagulate after 2 weeks (after CT to r/o haemorrhage)
  - Consider surgery if recurrent thromboembolism – amputation of L atrial appendage + maze operation

Time trends of overall cumulative incidence of first ischemic stroke after first AF stratified by calendar year of AF diagnosis



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Conclusions

- AF in hospital is managed on similar lines to that out of hospital
- More often associated with embolism or haemodynamic instability
- Difficult decisions not always evidence based
- Don’t forget the risk of embolism