



# South London Cardiac and Stroke Network

**Saturday 31st July 2010**

**Dr Suparna Das  
Assistant Director**



South London  
Cardiac and Stroke Network

# Content

- stroke prevention through addressing AF
- the Greenwich picture
- GRASP – AF tool

# Stroke Prevention: Addressing AF in primary care

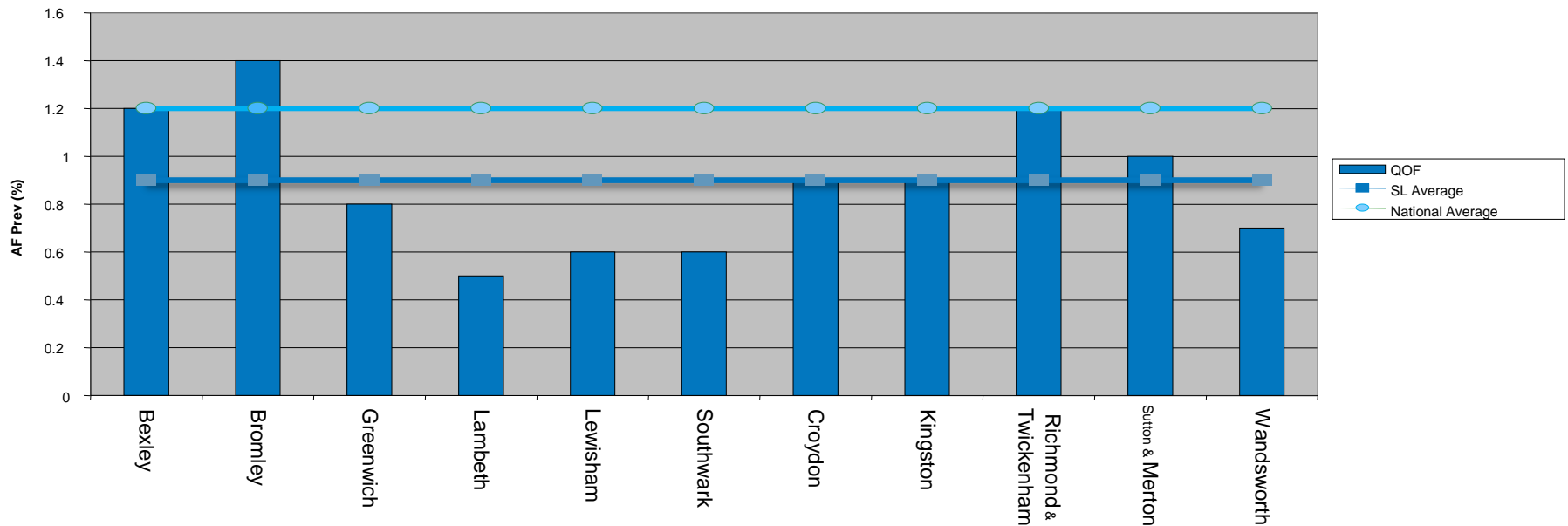
- AF accounts for approximately 14% of all strokes
- AF also increases the risk and severity of stroke
- 2,500 strokes per year are thought to be directly attributable to AF
- The cost per stroke due to AF is estimated to be £11,900 in the first year after stroke occurrence.

Hence optimising treatment for patients in AF is important



# Prevalence of AF: England vs. South London

National prevalence rate in primary care is 1.2% (600,000 patients with AF)



*PCT prevalence variation across South London (QOF 2009)*



# Prevalence of AF in Greenwich

Greenwich AF Prevalence (%)			
National <sup>1</sup>	NHS Greenwich <sup>1</sup>	Age adjusted >65 years <sup>2</sup>	Age adjusted >75 years <sup>2</sup>
1.2	0.8	5.84	8.25

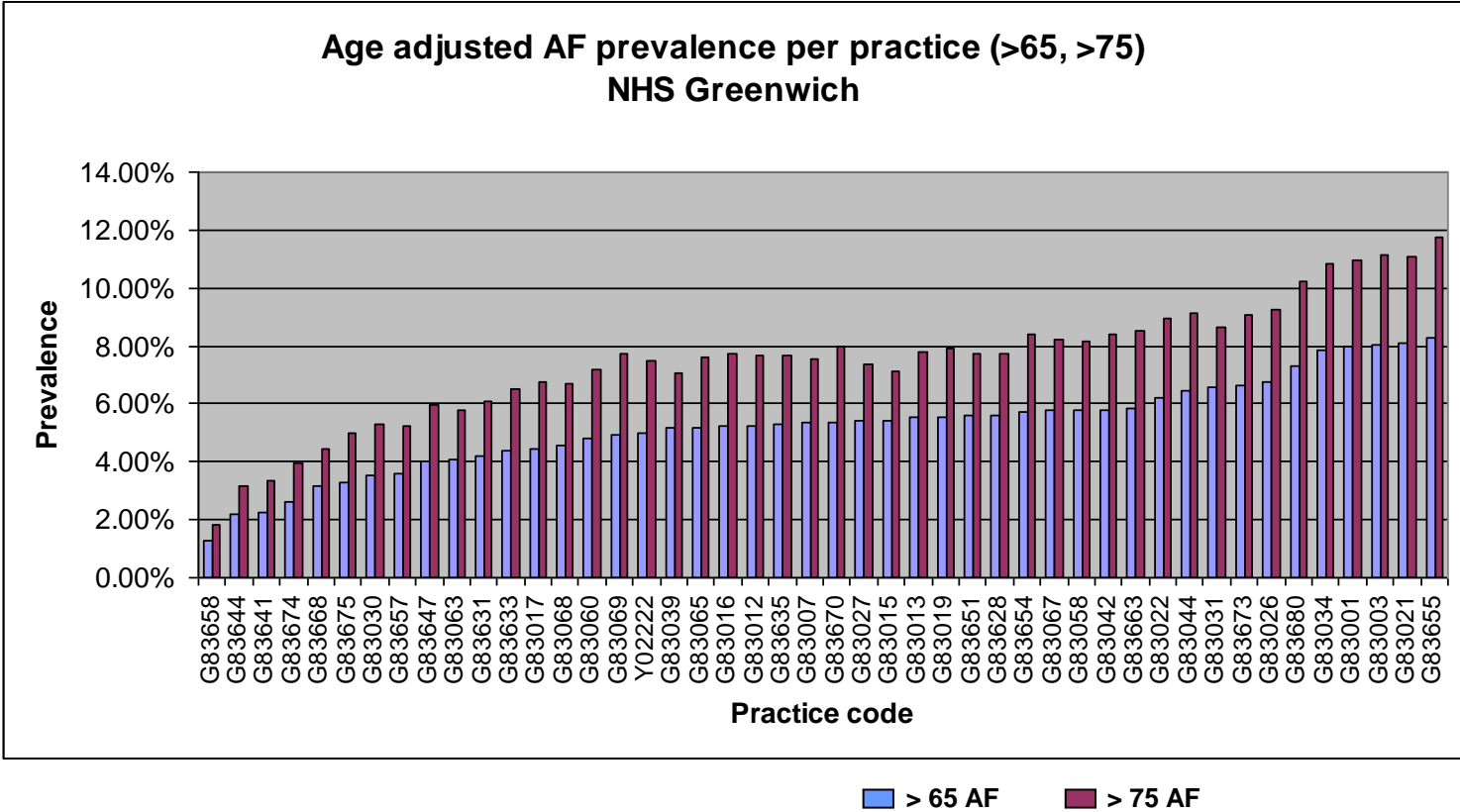
age adjusted prevalence:

- AF increases per decade
- relates to CHADS2 risk stratification tool
- can be used to identify those practices with higher age bracket population that should have a higher prevalence
- identify 'within borough' variation

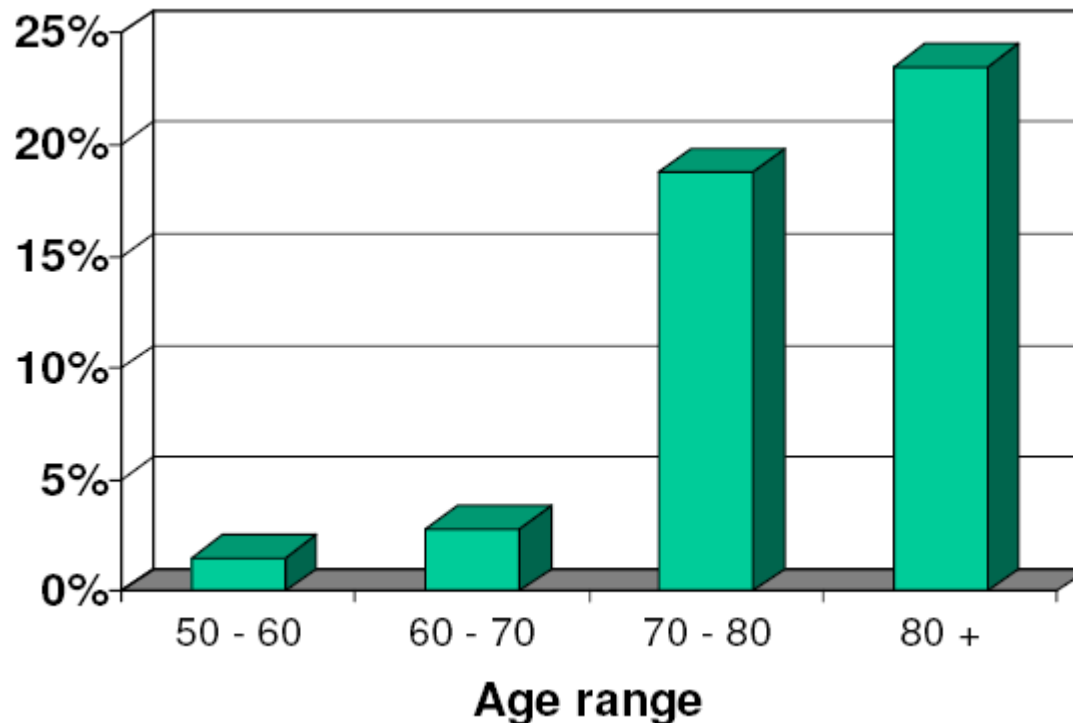
<sup>1</sup>Data source: AF1 Indicator from QOF 2009 ([www.gpcontract.co.uk](http://www.gpcontract.co.uk))

<sup>2</sup> Data source, NHS Greenwich

# Greenwich - age adjusted AF prevalence by practice



# % of strokes attributable to AF by age



# The BIG question..... any cost savings?

- The cost of maintaining one patient on warfarin for one year, including monitoring, is estimated to be £383.
- The cost per stroke due to AF in the first year is estimated to be £11,900

	PCT 1	PCT 2	PCT 3	PCT 4	PCT 5	PCT 6	PCT 7	PCT 8	PCT 9	PCT 10	PCT 11
Estimated prevalence of atrial fibrillation for your population (persons)	1,700	3,100	1,200	2,600	1,500	2,100	3,100	1,400	1,600	1,700	1,500
Estimated additional number requiring warfarin according to NICE guidance for AF (persons)	580	1,050	420	900	510	730	1,060	490	550	570	530
Total number of strokes avoided p.a. if fully compliant with NICE guidelines for AF	23	41	16	35	20	28	41	19	21	22	20

Using the above figures for PCT 6 the cost of treating additional patients on warfarin to avoid 28 strokes equates to a yearly saving of **£54,340**



# Focus Areas

## STROKE PREVENTION

### 1. Identifying AF

- Promote pulse checks;*
- Opportunistic opportunities e.g., flu clinics/health checks
  - Add onto disease templates
  - Patient recalls/reviews
  - Patient awareness

### 2. Diagnosing AF

- Access to timely diagnostics
- Clinician confidence in interpretation
- Utilise new technologies e.g., remote interpretation

### 3. Treating AF

- Treatment optimisation for existing AF
- Using CHADS2 for stroke risk stratification
- Robust local pathway to allow primary care management as appropriate

## EDUCATION

# Tools available

## Identifying AF

- Commissioning paper – why address AF in the first place?
- Patient awareness leaflet
- Local results from a flu clinic pulse pilot
- Know your pulse

## Diagnosing AF

- ECG economic modelling template
- Telemedicine service

## Treating AF

- Pathway and FAQ
- 10 steps before secondary care referral, traffic lights
- GRASP-AF
- Warfarin decision tool
- Anticoagulation NPSA standards
- New drugs consensus statement

Examples of initiatives from other areas are also available.....

# National Priority Project on AF - four pilot sites in South London

**Greenwich**

**Bromley, Wandsworth and Sutton & Merton**

**Aim:** Raise awareness of stroke caused by unmanaged AF

## **Activities:**

Pulse screening

Anticoagulation monitoring

Improving access to ECG

Support practices to use **GRASP-AF**

## **Outcomes:**

Increase uptake of patients on warfarin rather than aspirin

Cost efficiencies in ECG service arrangements

Pathway development across primary and secondary care



# GRASP-AF

1. A **FREE** query and risk stratification tool which is available for use with all GP clinical systems in England.
2. Delivered by PRIMIS+ and developed by the West Yorkshire Cardiac & Stroke Network
3. Provides a set of MIQUEST queries to identify, for your practice, patients with a diagnosis of AF who are not on warfarin.
4. It calculates their risk of stroke using the validated CHADS2 scoring system and highlights patients with a CHADS2 score of 2 or more who are not on warfarin.
5. These patients can then be reviewed to assess their suitability for warfarin.



# CHADS<sub>2</sub>: Stratifying stroke risk in AF

<b>CHADS<sub>2</sub> item</b>	<b>Points</b>
<i>Congestive heart failure</i>	<i>1</i>
<i>Hypertension</i>	<i>1</i>
<i>Age ≥ 75</i>	<i>1</i>
<i>Diabetes</i>	<i>1</i>
<i>Previous stroke or transient ischaemic attack</i>	<i>2</i>

Microsoft Excel - WBook1

File Edit View Insert Format Tools Data FORMS CHART Window Help

AF: Age sex profile

MIGQUEST response file AFREPA.CSV was created on 03/07/08 using Refdate 03/07/08

AF\_CHADS2 SCORE AFREPA: Report on patients with AF (Pseudonymised)

Filter Management

Select a filter to load. Active filters have text in the box. Then press 'Load'

- Filter 1 High risk not on warfarin
- Filter 2 Medium risk not on warfarin
- Filter 3 On Warfarin with history of haemorrhagic stroke
- Filter 4 Patients with reasons for not being on warfarin
- Filter 5

Load Clear Filter Cancel

Reference	Age	Sex	Registration date	CHADS2 score	Latest warfarin code in L6M	Latest warfarin date in L6M
Du1xOwBEtx	76	M	24/09/04	1	bs17	03/06/08
Du1xOwBEtx	73	M	29/08/07	1		
Du1xOwBEuB	70	M	29/11/77	0		
Du1xOwBEww	76	M	05/02/04	1	bs1A	13/05/08
Du1xOwBwCC	81	M	27/04/04	0	bs18	16/06/08
Du1xOwB1Dv	70	F	21/04/04	0		
Du1xOwB1v1	81	F	24/09/04	2	bs18	07/05/08
Du1xOwBCxu	94	M	05/07/04	3		
Du1xOwB1Eu	79	M	26/04/04	1		
Du1xOwBDuD	84	F	21/07/04	2		
Du1xOwBuCt	90	F	03/11/04	1		
Du1xOwB1Et	64	F	25/09/07	1	bs1A	13/06/08
Du1xOw11xx	80	F	16/06/07	2		
Du1xOw11xx	89	M	08/04/03	1		
Du1xOw1uxx	73	M	13/03/61	0	bs19	16/05/08
Du1xOwDDBx	74	M	28/01/62	0	bs19	20/06/08
Du1xOw1Cx	65	F	02/11/61	0		
Du1xOwssCx	75	M	22/10/62	2		
Du1xOwuxx	81	M	04/03/71	1		
Du1xOwvtx	90	F	05/05/94	4		
Du1xOwvtxB	70	F	20/10/94	1		

Preparing the Summary Sheet...

start Internet Explorer Presentat... Novel GroupWise ... 2 Windows Expl... Microsoft Excel - ... 11:53

# Audit of Atrial Fibrillation and CHADS2 Scores

[Classic View](#)

Practice:

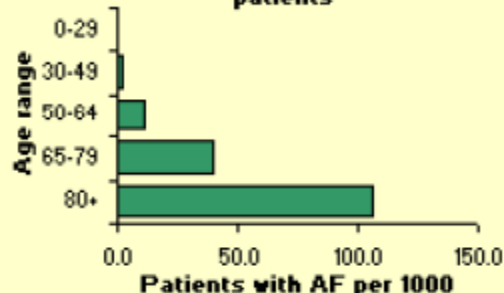
Reference Date for Audit 12/08/2008

**Total Practice Population 5342**

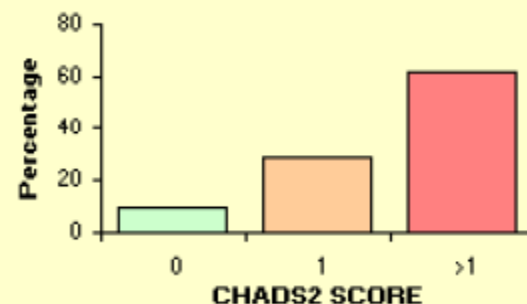
	Total	Percent
No. with Atrial Fibrillation	84	1.57
Percent of over 65s with AF		6.15

**NB: Handling of Warfarin Exclusions**

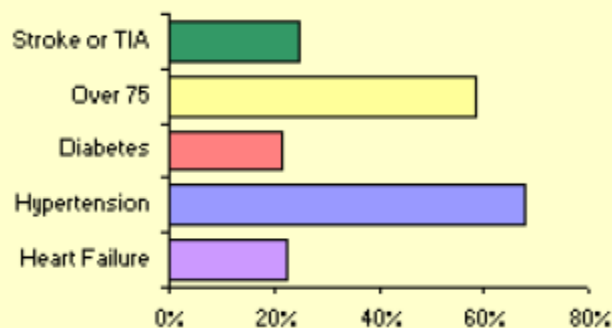
**Atrial Fibrillation rate per 1000 patients**



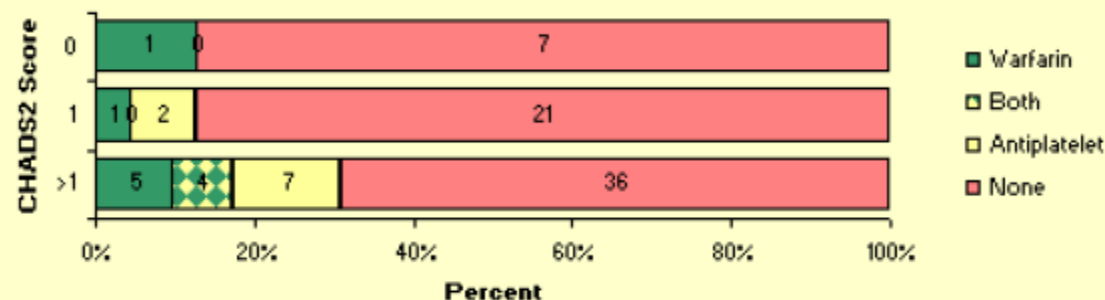
**Risk Profile for Thrombo-embolism**



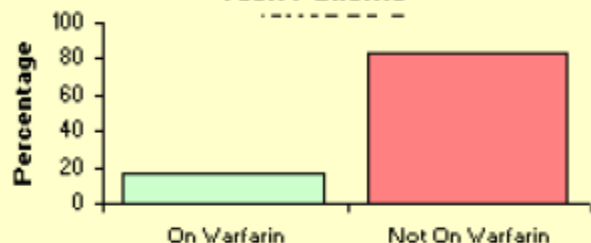
**Risk factors**



**Breakdown of Warfarin and Antiplatelets use by CHADS2 score**



**Warfarin use in High Risk Patients**

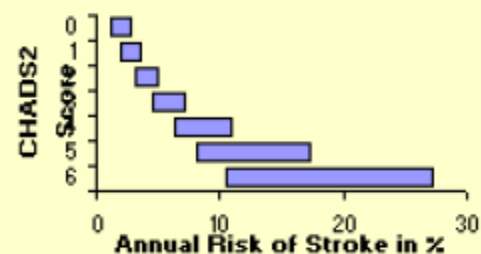


**Strokes Expected Annually untreated**

**2.4**

**(95% CI 1.8 to 3.1)**

**Risk of Stroke v CHADS2 Score (95% CI)**



Results from the national registry of atrial fibrillation

[ADVICE](#)  
[REFERENCES](#)  
[PODCAST](#)

# WARFARIN: DISCUSSING WARFARIN THERAPY WITH YOUR PATIENT

## ANTICOAGULATION IS UNDERUSED IN THE TREATMENT OF ATRIAL FIBRILLATION

Starting warfarin can be a daunting prospect for many patients. Informing them about what to expect from therapy, the potential benefits and possible side effects can help them make that decision.

Warfarin is considered to be underused in AF, even though most systematic reviews have shown that it is better than aspirin at reducing the risk of stroke<sup>1</sup>

### AF as a Cause of Stroke

#### National Data

- 18% patients presenting with stroke are in AF at presentation<sup>2</sup>
- This equates to 16,000 strokes, of which **12,500 are thought to be directly attributable to AF<sup>2</sup>**
- AF is therefore directly responsible for 14% of all strokes<sup>2</sup>
- The annual risk of stroke is 5-6 times greater in AF patients than in people with normal heart rhythm<sup>2</sup>
- Warfarin is highly effective in preventing stroke in AF, reducing risk of stroke by 64% compared to placebo<sup>3</sup>
- Aspirin only reduces this risk by 22%<sup>3</sup>
- The 2006 NICE guidance on AF costing report concluded that **46% of patients who should have been receiving warfarin were not<sup>2</sup>**

### The BAFTA Trial<sup>3</sup>

- RCT of warfarin (target INR 2.5) vs. aspirin (75mg) in atrial fibrillation
- 973 patients aged **75 years and over** recruited from 234 practices (mean trial age = 82yrs)
- Stroke risk was halved in the warfarin group.
- There was no increased bleeding risk with warfarin in comparison with aspirin

20 strokes prevented per 1000 patients with AF treated per year with warfarin vs. aspirin  
**NNT = 50 for 1 year**

Warfarin protects the over 75yrs against risk of stroke associated with AF, the group with the highest incidence of stroke.

#### Risk of Major Haemorrhage with Age p.a.<sup>3</sup>

Age Range	Warfarin	Aspirin	Relative Risk
75-79	1.1%	0.8%	1.44
80-84	2.3%	2.4%	0.96
85+	2.9%	3.7%	0.77

### Does my patient need warfarin?

#### Assessing Stroke Risk in AF patients.

CHADS<sub>2</sub> is an easy-to-use classification scheme that estimates the risk of stroke in people with AF.

Physicians and patients could use CHADS<sub>2</sub> to make decisions about antithrombotic therapy based on patient-specific risk of stroke<sup>2</sup>.

CHADS <sub>2</sub> item	Points
Congestive Heart Failure	1
Hypertension (systolic >160mmHG)	1
Age greater than 75yrs	1
Diabetes	1
Prior Stroke or TIA	2

#### Risk Calculation for CHADS<sub>2</sub><sup>2</sup>

Total Score	Risk of Stroke	Antithrombotic Therapy Indicated
0	Low	Aspirin
1	Moderate	Warfarin or Aspirin
2 or more	High	Warfarin



# QOF set to boost numbers of AF patients on warfarin

04 Jun 10

*By Lilian Anekwe*

**Exclusive: GPs could be set for new QOF indicators to encourage them to prescribe warfarin rather than aspirin to atrial fibrillation patients at highest risk of stroke, Pulse can reveal.**

The current AF3 QOF indicator offers 12 points for 'the percentage of patients with atrial fibrillation currently treated with anticoagulation drug therapy or an antiplatelet therapy.'

But the Department of Health, and now NICE, are keen to see GPs ramp up the prescribing of warfarin, which the DH estimates could prevent up to 10,000 strokes a year.

At a meeting in Manchester this week, the QOF indicator advisory committee heard that there is an inappropriately low use of warfarin in primary care and reluctance among some GPs to use warfarin in suitable patients.

The committee asked for indicators to be developed for piloting that will modify the AF3 indicator and introduce a structured risk assessment, using the CHADS2 or other appropriate risk scoring tool, to stratify patients with atrial fibrillation into those at high, medium or low risk of stroke.

Patients classed at low or medium risk of stroke could be prescribed aspirin or warfarin, but those at high risk should be treated with warfarin or other anticoagulants.

Dr Colin Hunter, chair of the independent advisory committee and a GP in Aberdeen, said: 'I don't think we can [yet] make a decision on which tool to use but there is sufficient concern about the variation in care that warrant it going forward to piloting.'

**PAC Conclusion (8): Whilst an estimated 4,500 strokes could be prevented each year through better detection and treatment of atrial fibrillation, many people remain undiagnosed or fail to receive the recommended treatment. The National Institute for Health and Clinical Excellence (NICE) should review whether GPs' incentives are aligned with clinical guidelines so as to reward best practice in the treatment of atrial fibrillation. At the local level, Primary Care Trusts should encourage all healthcare providers to use existing opportunities to check and record patients pulses, for example during flu clinics.**

## Useful Sources of Information:

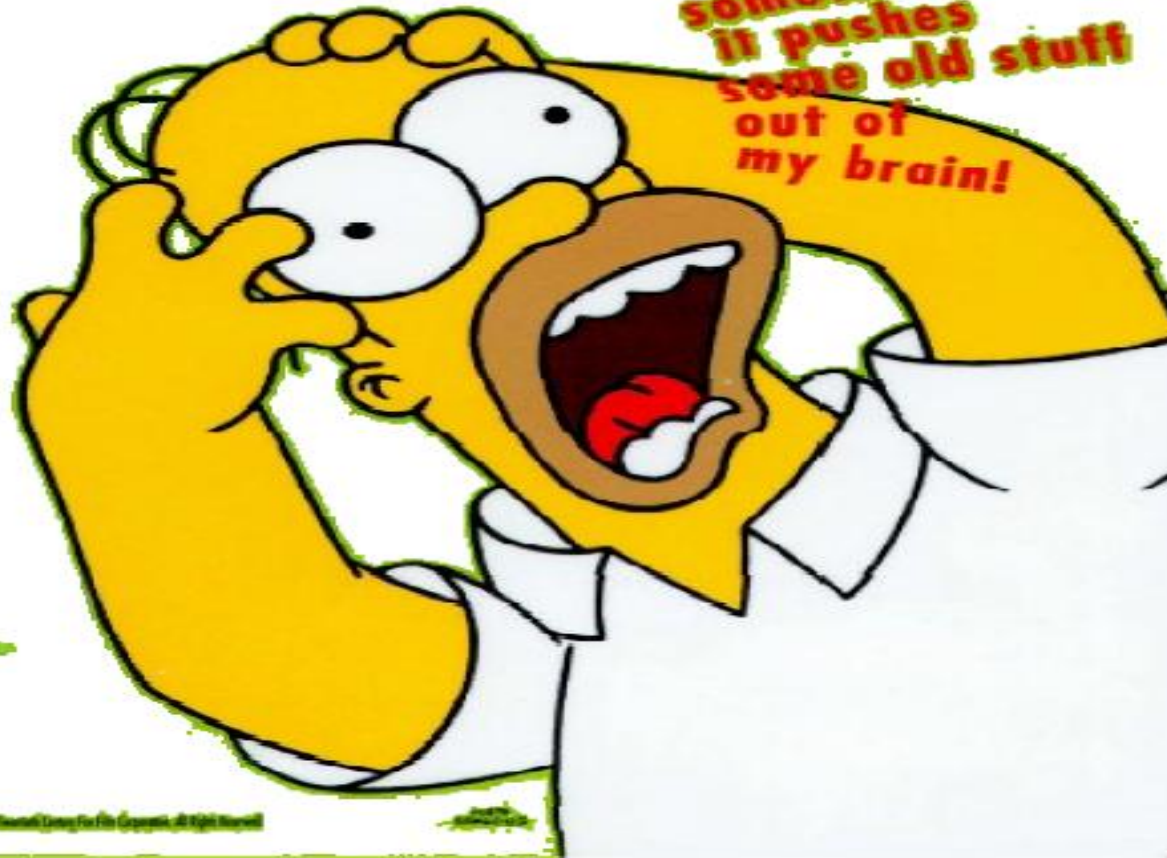
[www.improvement.nhs.uk/graspaf](http://www.improvement.nhs.uk/graspaf)

[www.slcsn.nhs.uk/af](http://www.slcsn.nhs.uk/af)



**THE SIMPSONS**

**Every time  
I learn  
something new  
it pushes  
some old stuff  
out of  
my brain!**



© 1990 Twentieth Century Fox Film Corporation. All Rights Reserved.



# For help or support contact

Project Manager for arrhythmia & prescribing

[Senai.jimenez@slcsn.nhs.uk](mailto:Senai.jimenez@slcsn.nhs.uk)

Project Manager for CVD prevention

[Vicky.cox@slcsn.nhs.uk](mailto:Vicky.cox@slcsn.nhs.uk)

