



# AF in the Real World York Health Group Project

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She is a Clinical Tutor on the Bradford University Course for PwSI in Cardiology

She is Chair Elect of the Primary Care Cardiovascular Society

She has given medical lectures, attended clinical meetings, and advisory boards as the guest of Astra Zeneca, BMS, Boehringer Ingleheim, Pfizer, Sanofi-Aventis, Shering Plough and Takeda

# Why is the Management of AF in Primary Care important?

- AF is the most important preventable cause of stroke
- Strokes caused by AF are more severe, with more disability
- AF is under detected
- Under Diagnosed
- Under Treated :- Only 50% of High Risk on Best Treatment
- Mostly in Primary Care

# Leeds Stroke Prevention Audit

- Arrhythmia Specialist Nurses ( BHF)
- 151,000 patients in 17 practices
- 2,119 with AF (1.4%)
- Development of computer search for CHADS2 score
- Of those at high risk of stroke with CHADS2 score of 2 or more 46% were not taking warfarin

# West Yorkshire Cardiac Network

- Development of GRASP AF Tool to use existing information to risk score AF patients using CHADS2
- **Guidance on Risk Assessment and Stroke Prevention in Atrial fibrillation= GRASP**
- IT support from PRIMIS+
- Can the GRASP Tool be run in Primary Care and on all Primary Care computer systems?
- Will this have an impact on warfarin prescription and stroke reduction?

# Assessing Stroke Risk ( non valvular AF)

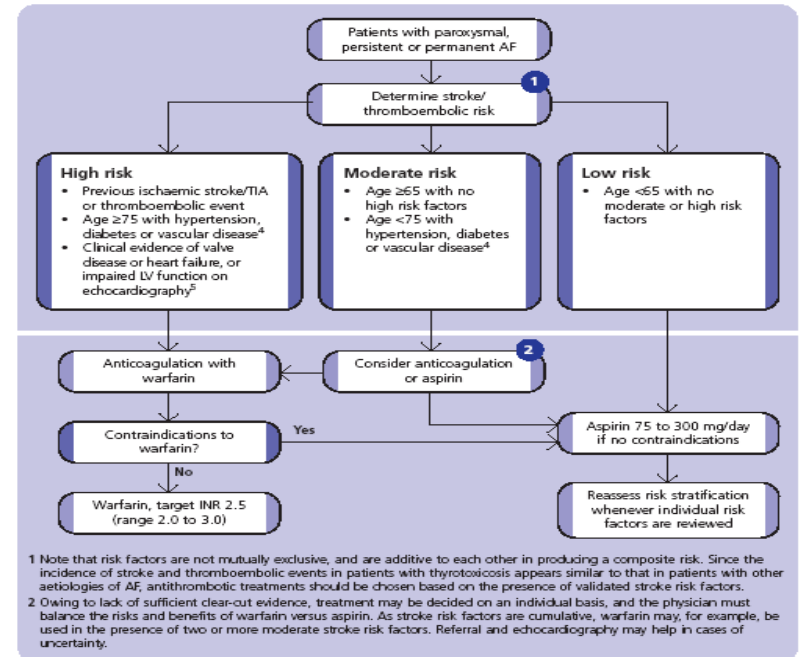
	Risk Factor	Yes	No
<b>C</b>	Congestive Heart Failure	1 point	0
<b>H</b>	Hypertension (160/90)	1 point	0
<b>A</b>	Age >75	1 point	0
<b>D</b>	Diabetes	1 point	0
<b>S</b>	Stroke or TIA	2 points	0
	Risk Score		
	Annual Stroke Risk		
	<b>Consider Warfarin</b>	<b>&gt;=2</b>	

Atrial fibrillation

Stroke risk stratification and thromboprophylaxis

## Stroke risk stratification and thromboprophylaxis

Stroke risk stratification



<sup>4</sup>Coronary artery disease or peripheral artery disease.

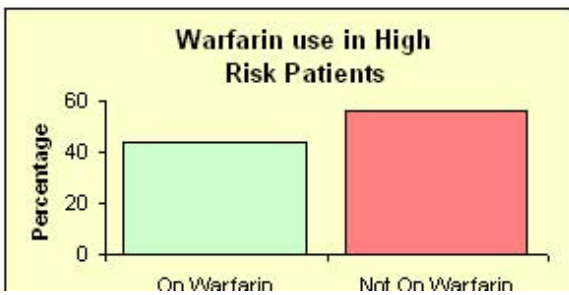
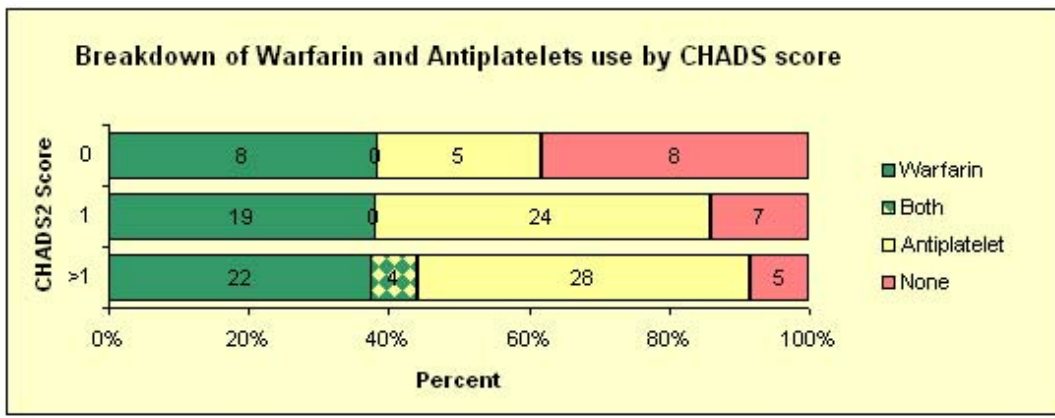
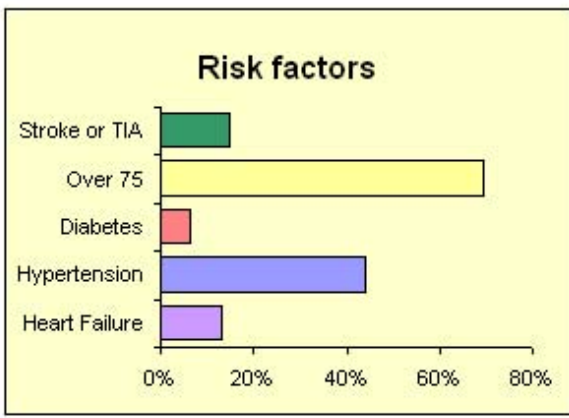
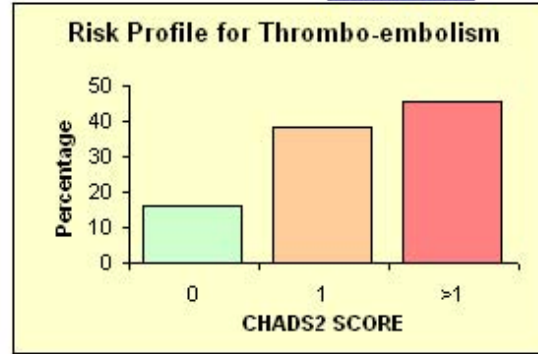
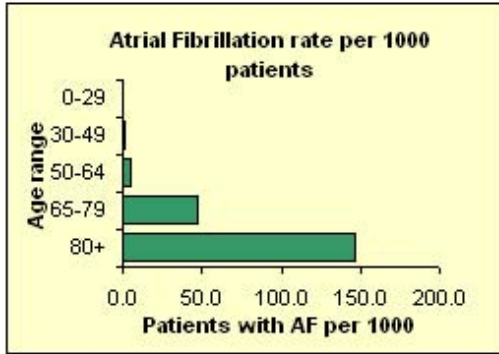
<sup>5</sup>An echocardiogram is not needed for routine assessment, but refines clinical risk stratification in the case of moderate or severe LV dysfunction and valve disease.

## Audit of Atrial Fibrillation and CHADS2 Scores

[Classic View](#)

Practice:  
 Reference Date for Audit 03/07/2008  
**Total Practice Population 9824**

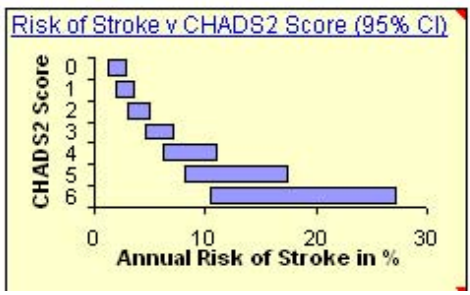
	Total	Percent
No. with Atrial Fibrillation	130	1.32
Percent of over 65s with AF		8.12



**Strokes Expected Annually in the 33 high risk untreated**

# 2.0

(95% CI 1.4 to 2.6)



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



- York Health Group
- 24 practices in and around York
- Range 1041-39299
- Total Population 232,883
- One practice based commissioning cluster
- One Acute Trust
- 2 cardiac Networks, West Yorkshire and NEYNL

# York Health Group Project

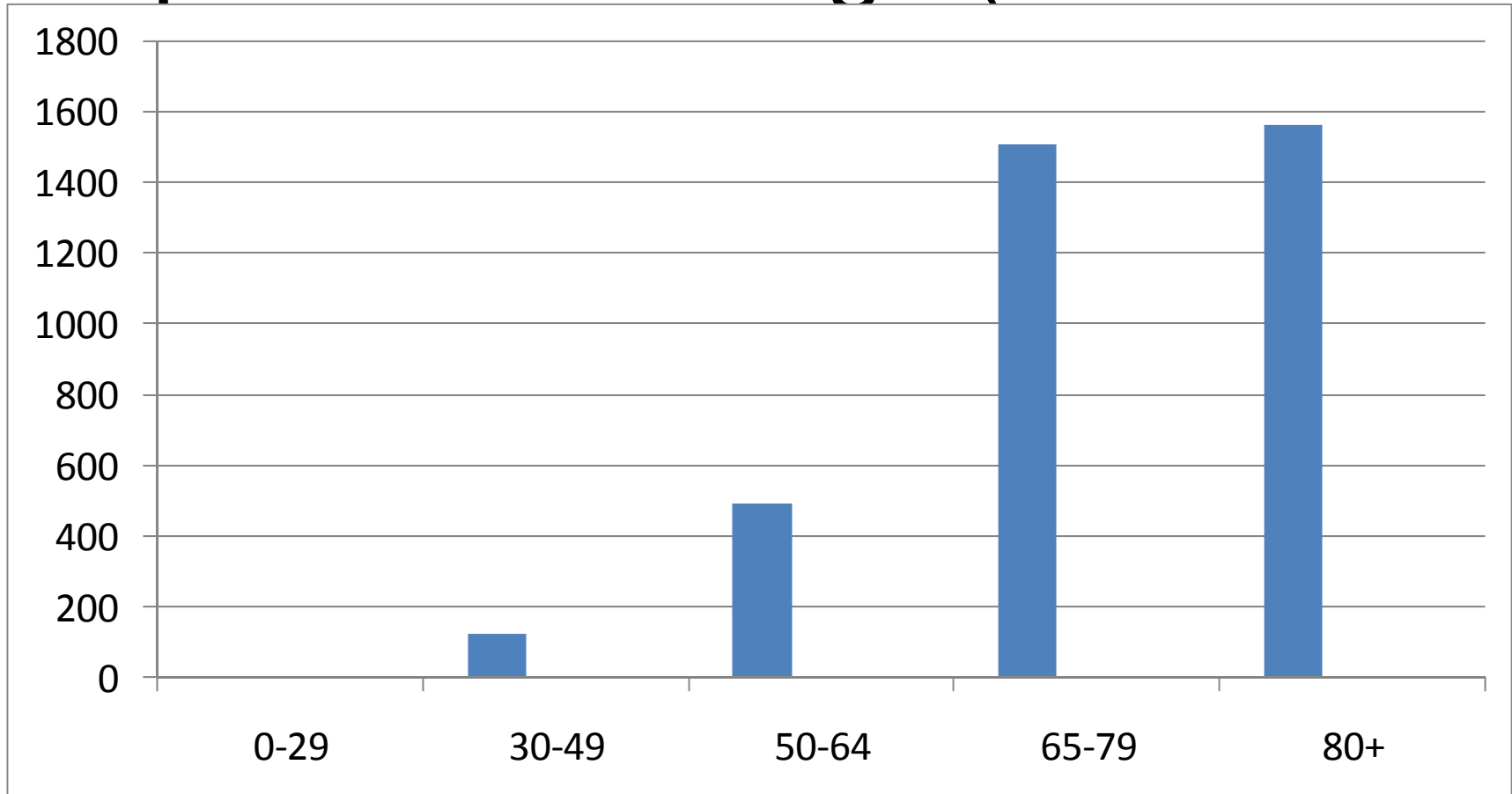
- To educate representatives from each practice on the importance of good management of AF
- To run GRASP AF tool
- **How well does it work in the real world?**
- To review those with CHADS2 score of 2 or more and not taking warfarin to consider starting warfarin
- No target to increase warfarin prescription
- Payment for each case review either in person or computer records ( £10 per case)
- 100% practices supported project

# What do you know?

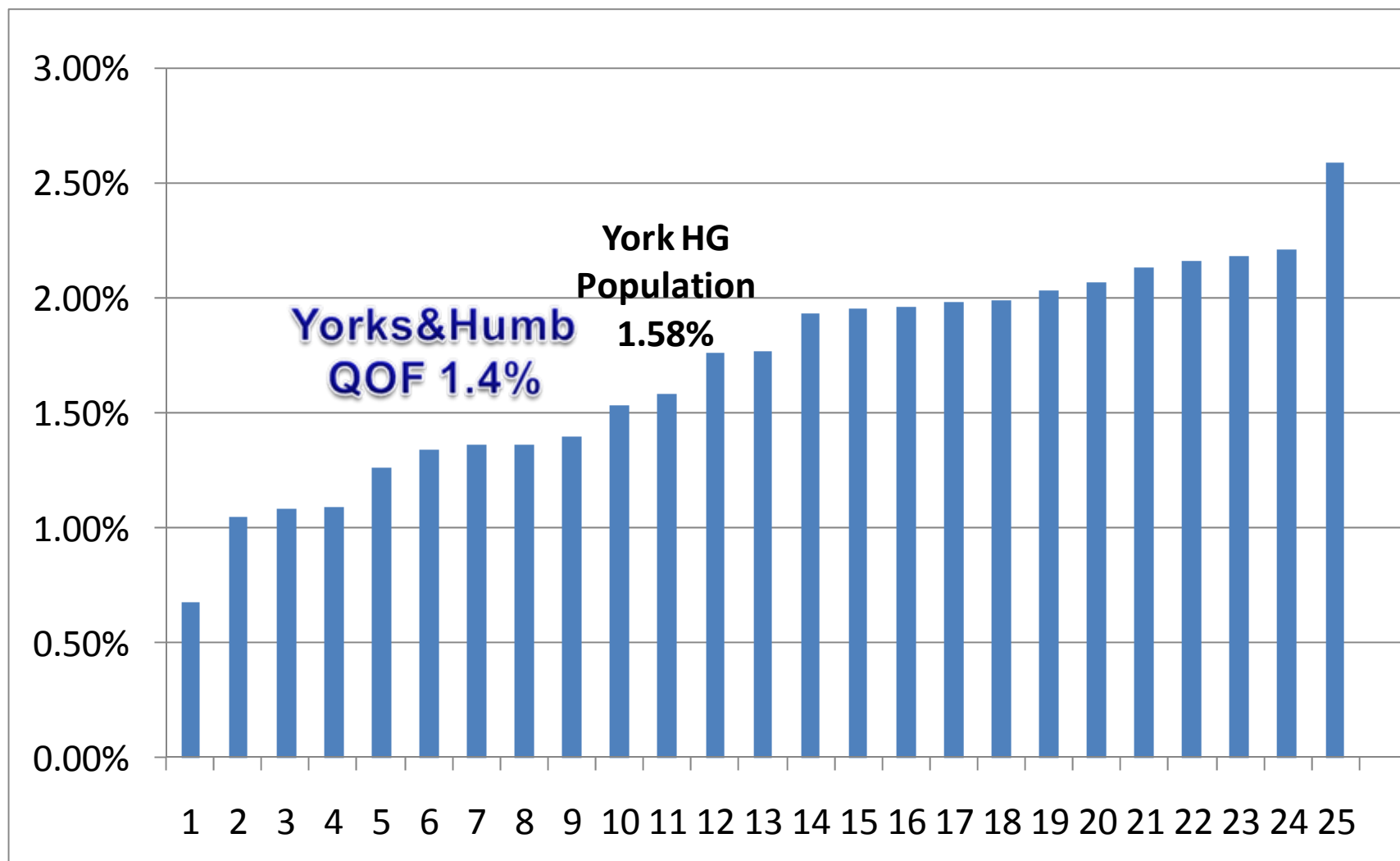
# How do you assess your patients with AF?



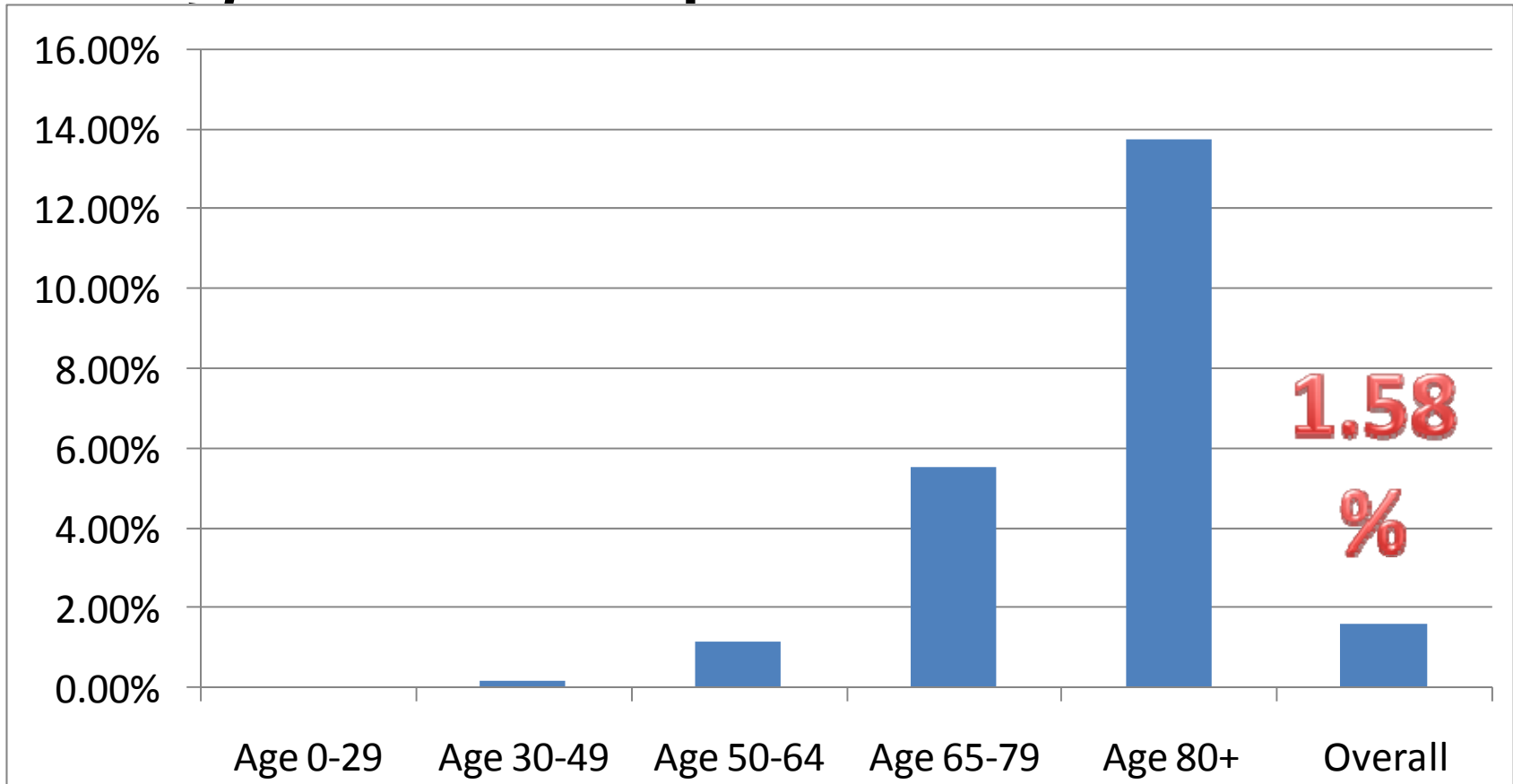
# AF patients with Age ( Total 3699)



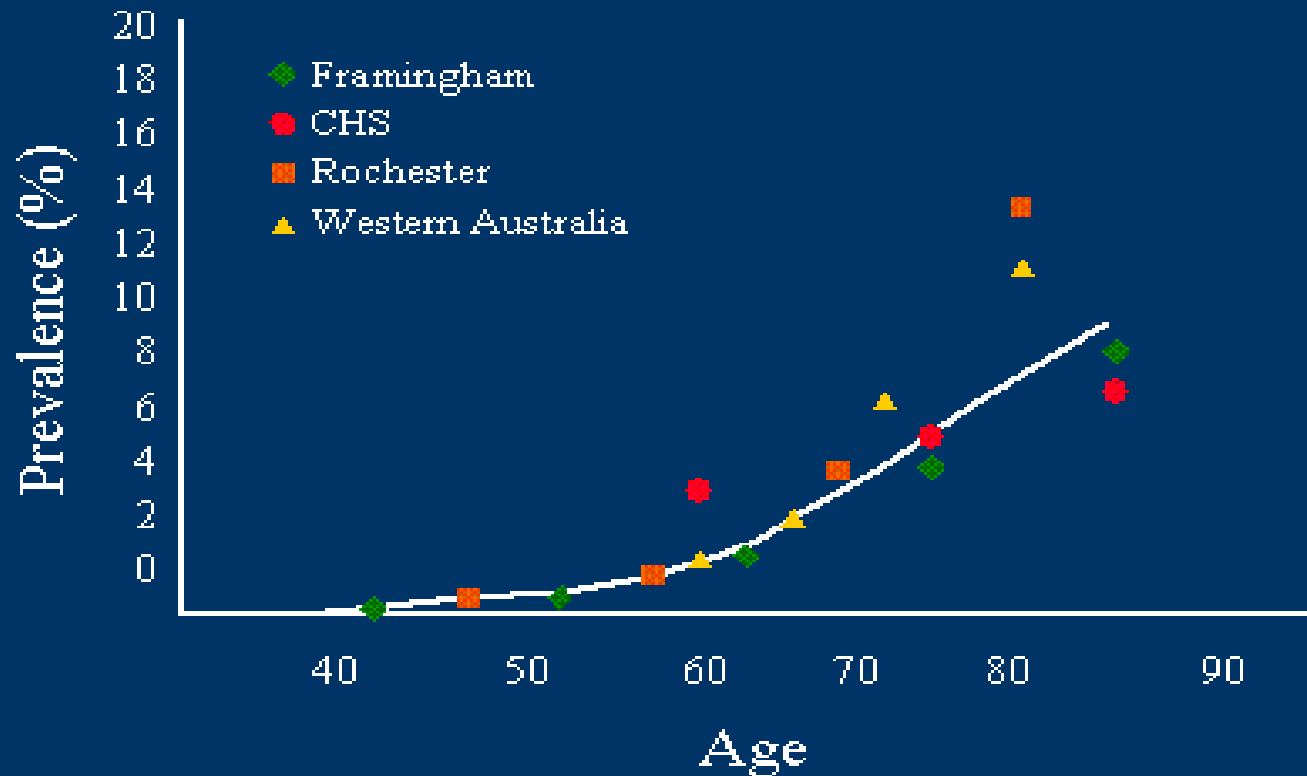
# Prevalence of AF in all 24 practices and York Health Group



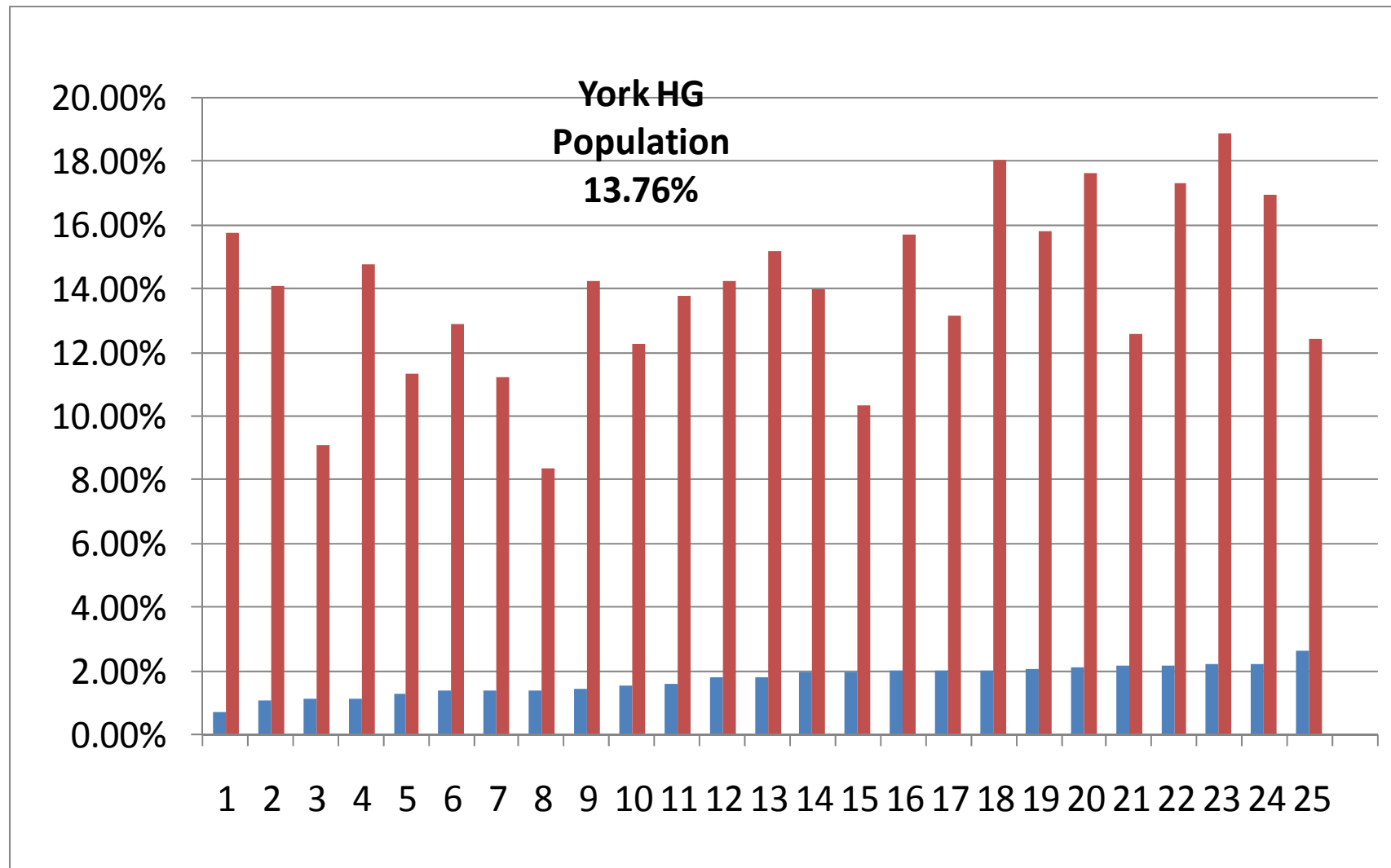
# Age related prevalence of AF



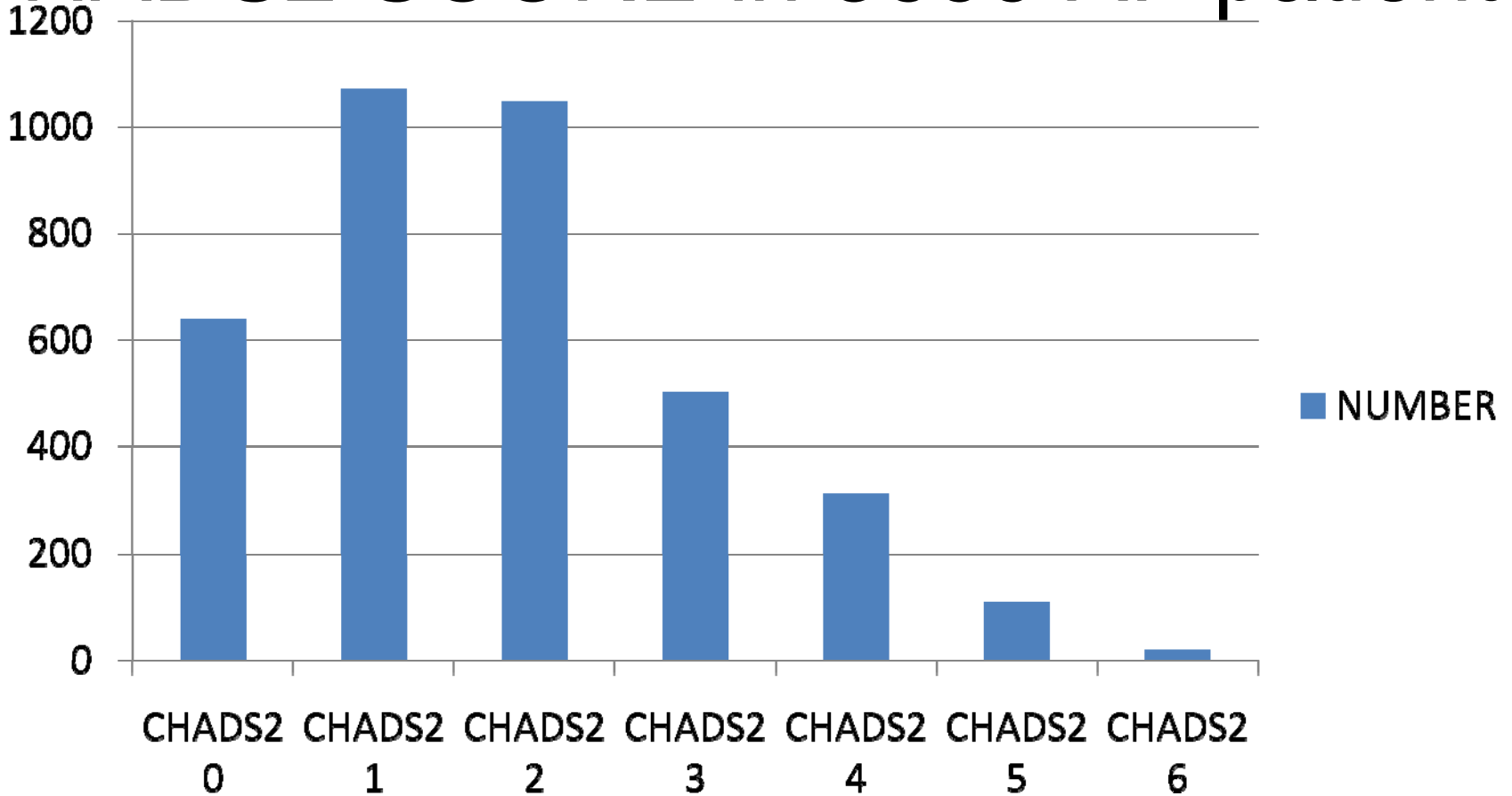
## Prevalence of AF at Various Ages



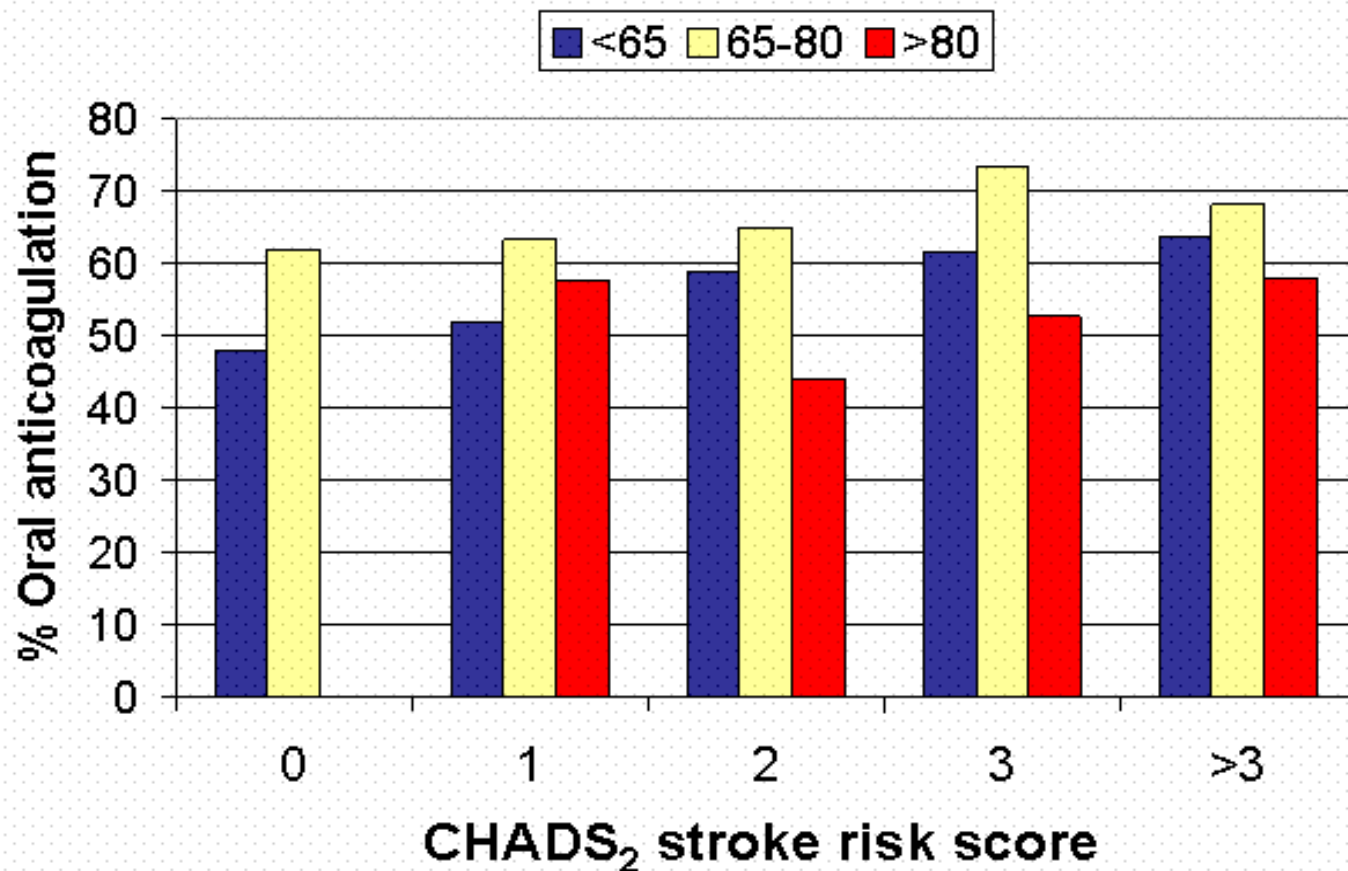
# Prevalence in 80yrs and over York Health Group



# CHADS2 SCORE in 3699 AF patients

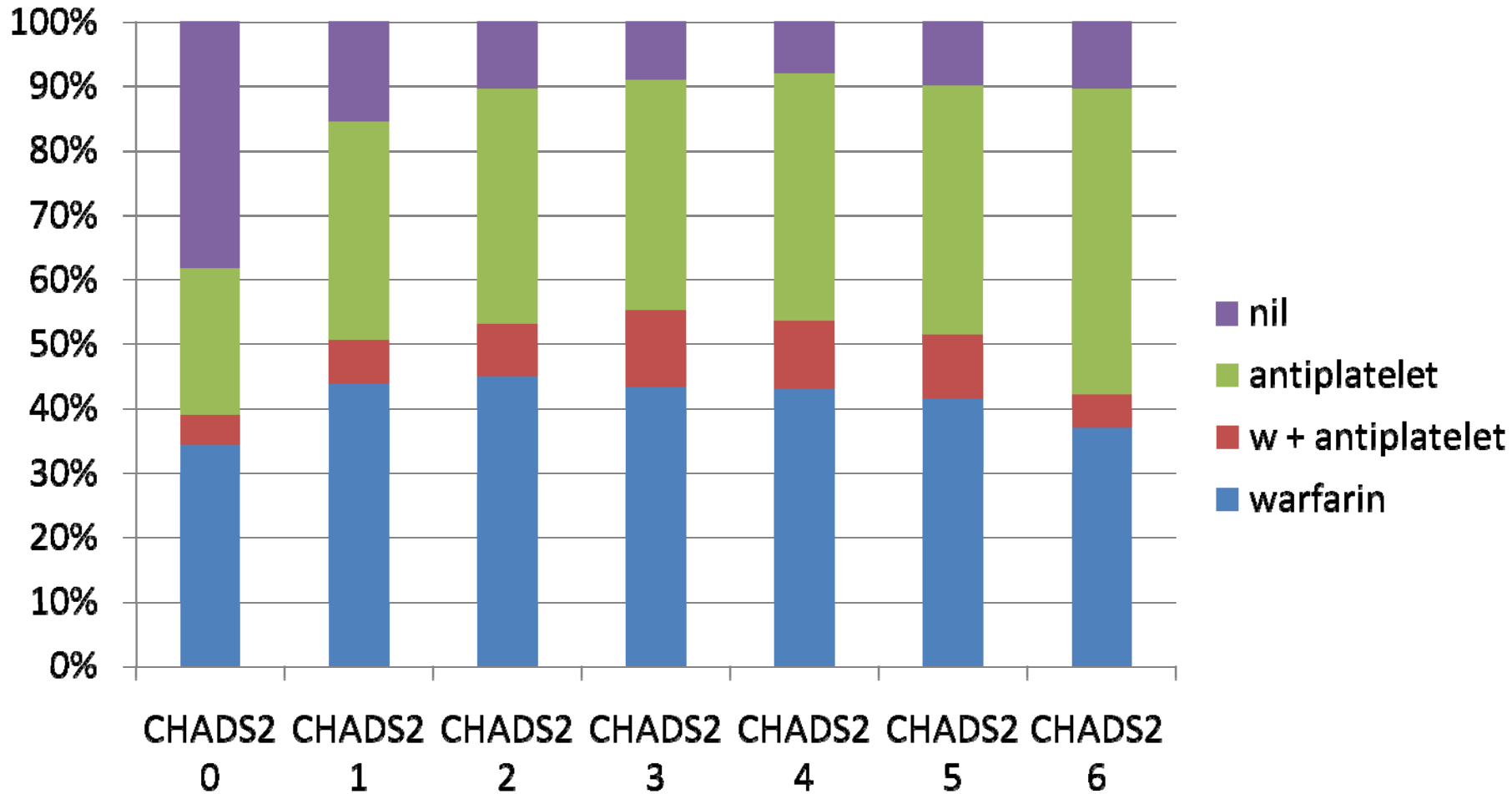


# Oral Anticoagulation versus CHADS<sub>2</sub>

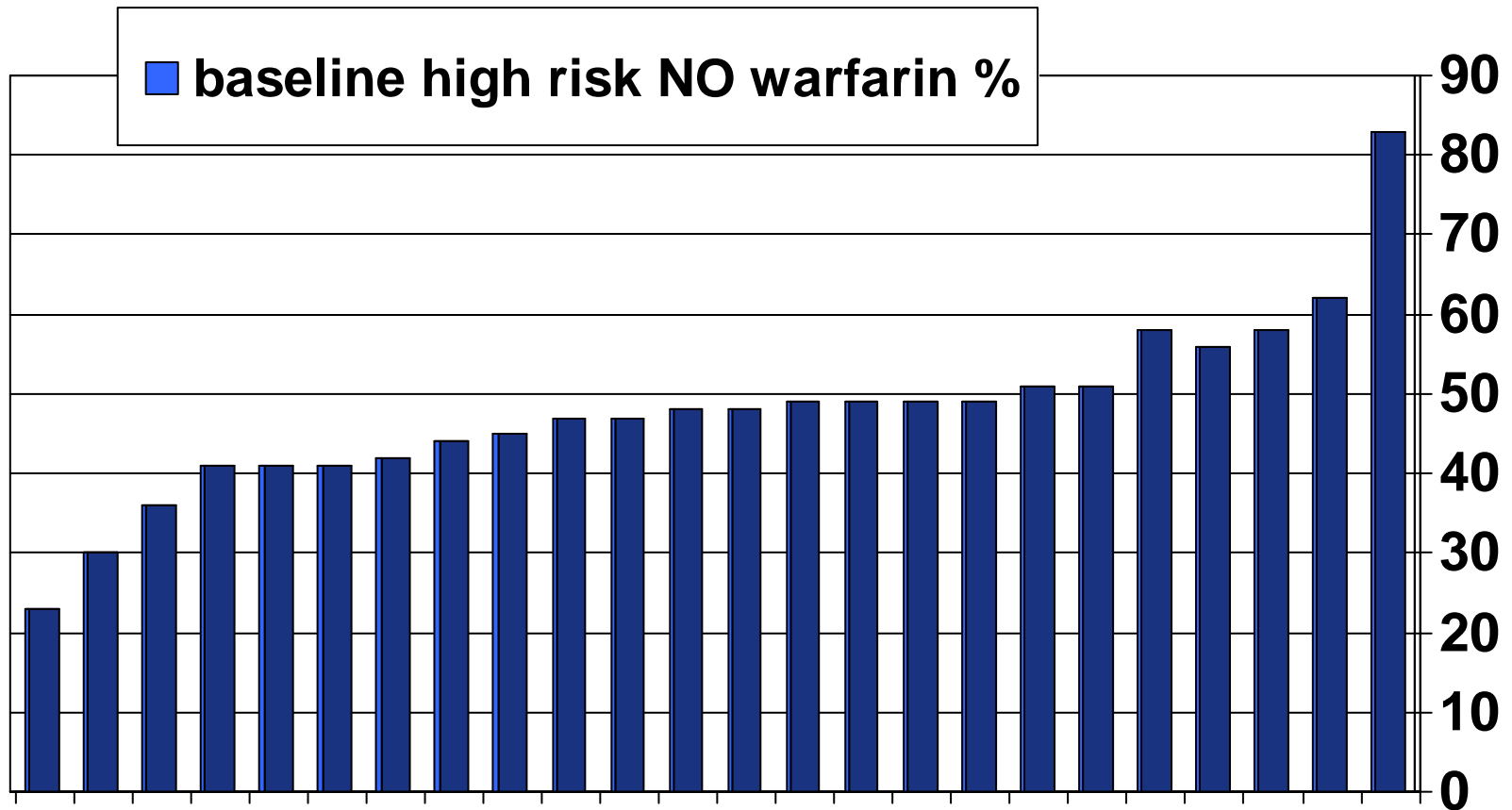


Euro Heart Survey on Atrial Fibrillation

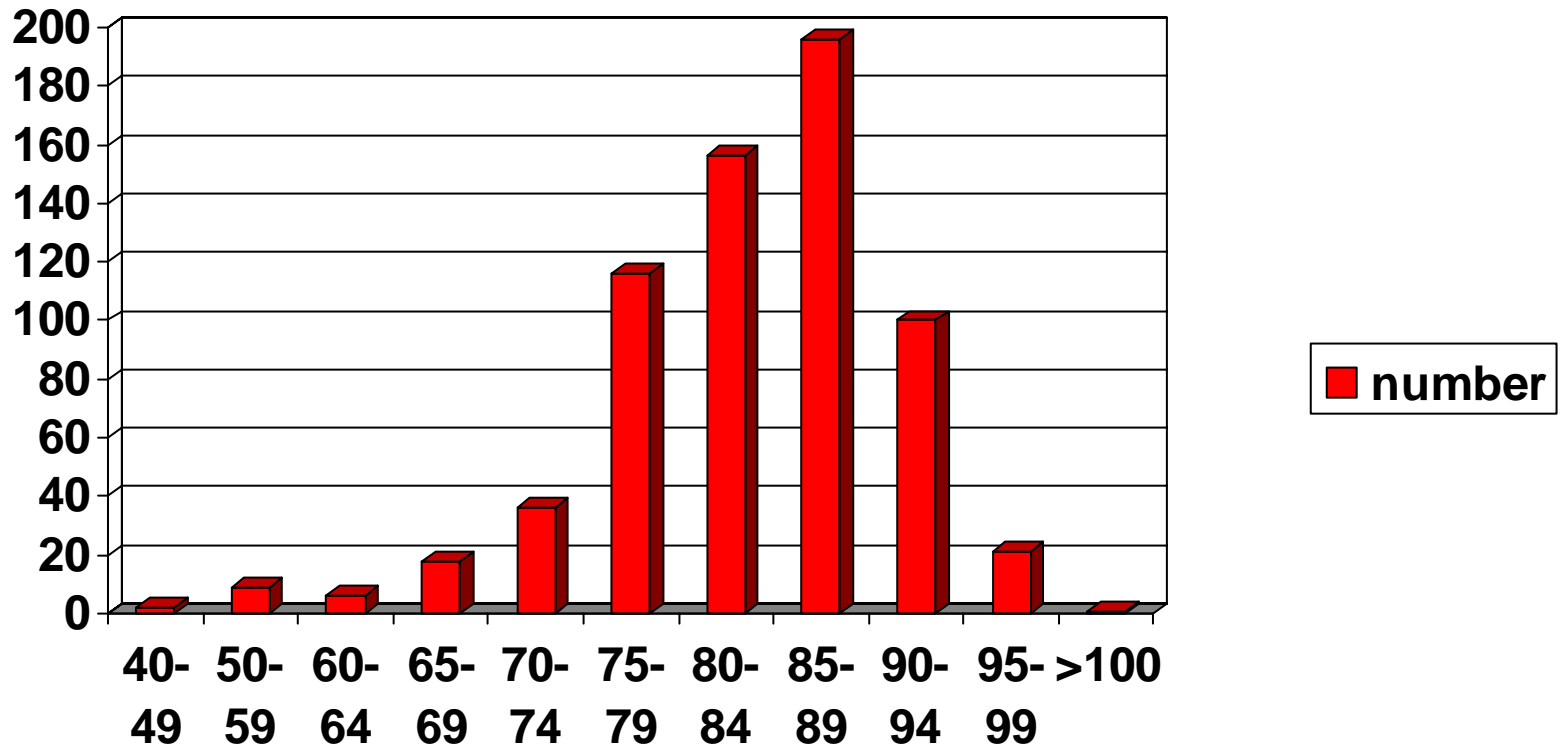
# Pre- review Anticoagulation status and CHADS2 Score York



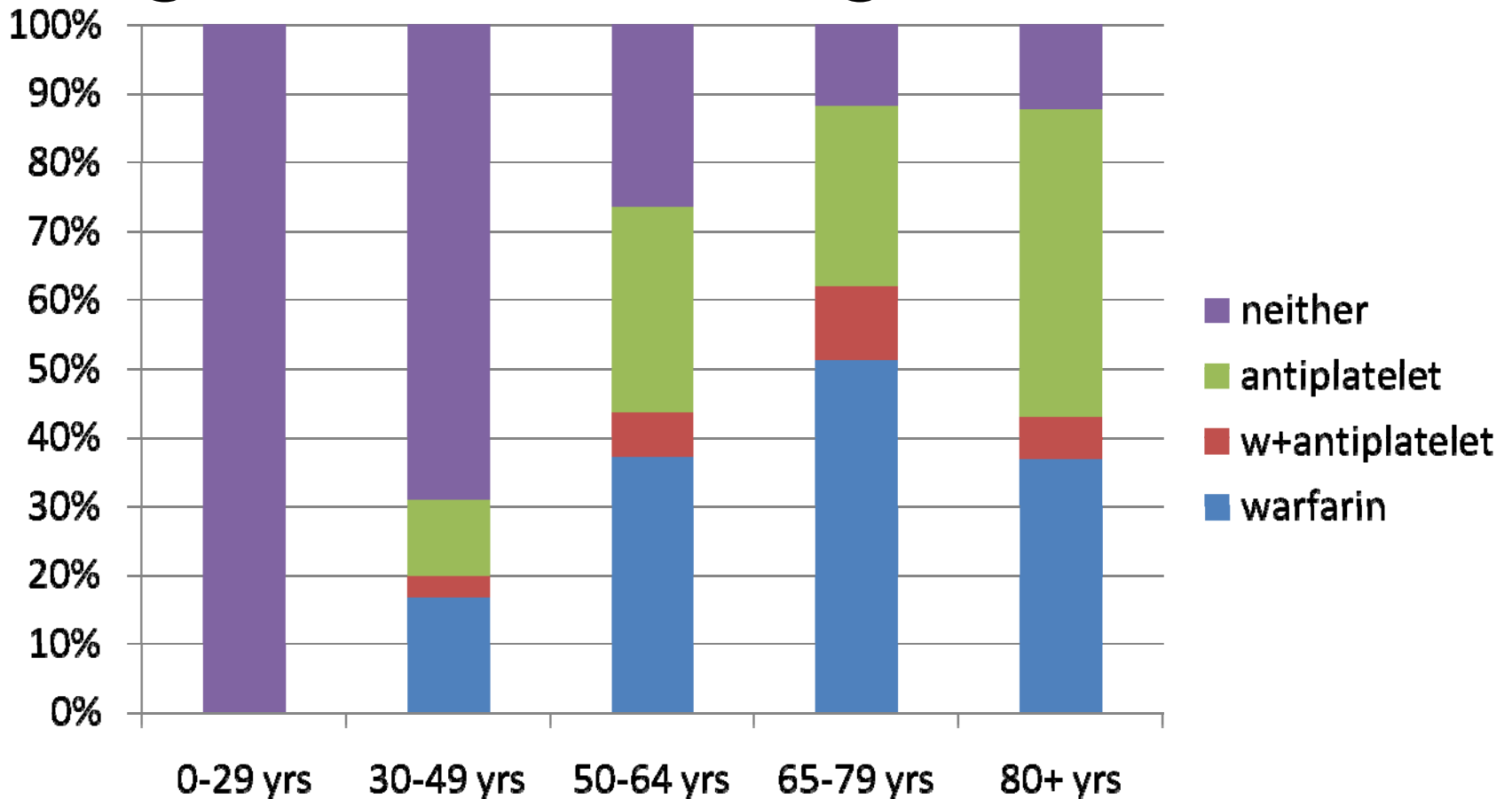
# Distribution of % with CHADS2 of 2 or more and NOT taking warfarin



# AGE and CHADS 2 Score 2 or more NOT prescribed warfarin



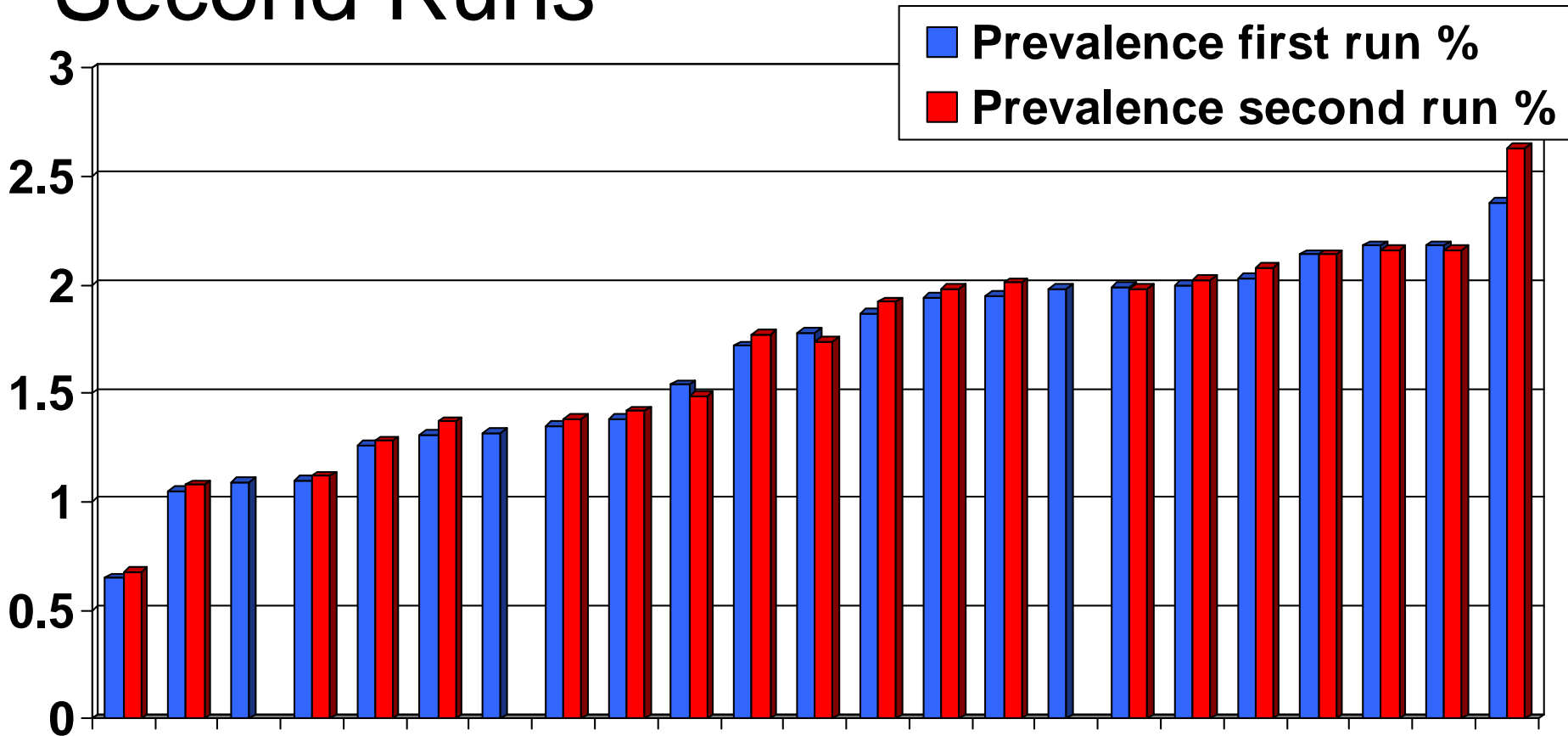
# Age and Anticoagulation York



# What was the impact of the study on prevalence?

- Did it increase?
- Did it decrease?
- AF codes inactivated if one episode or cardioverted or ablated

# Practice Prevalence First and Second Runs



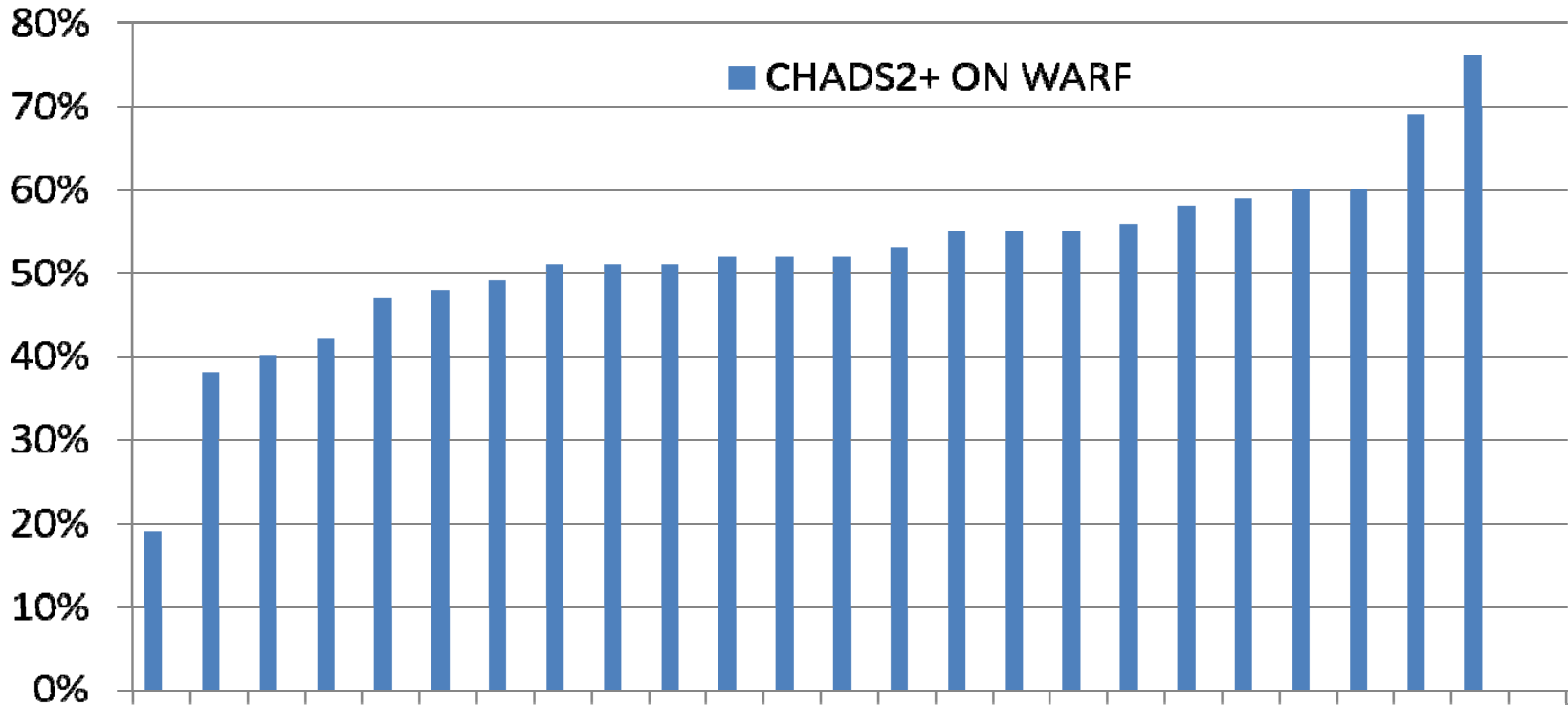
# What Impact did the Reviews have on % High Risk Patients taking Warfarin?

- Did it increase?
- If so by how much?
- Did it decrease?

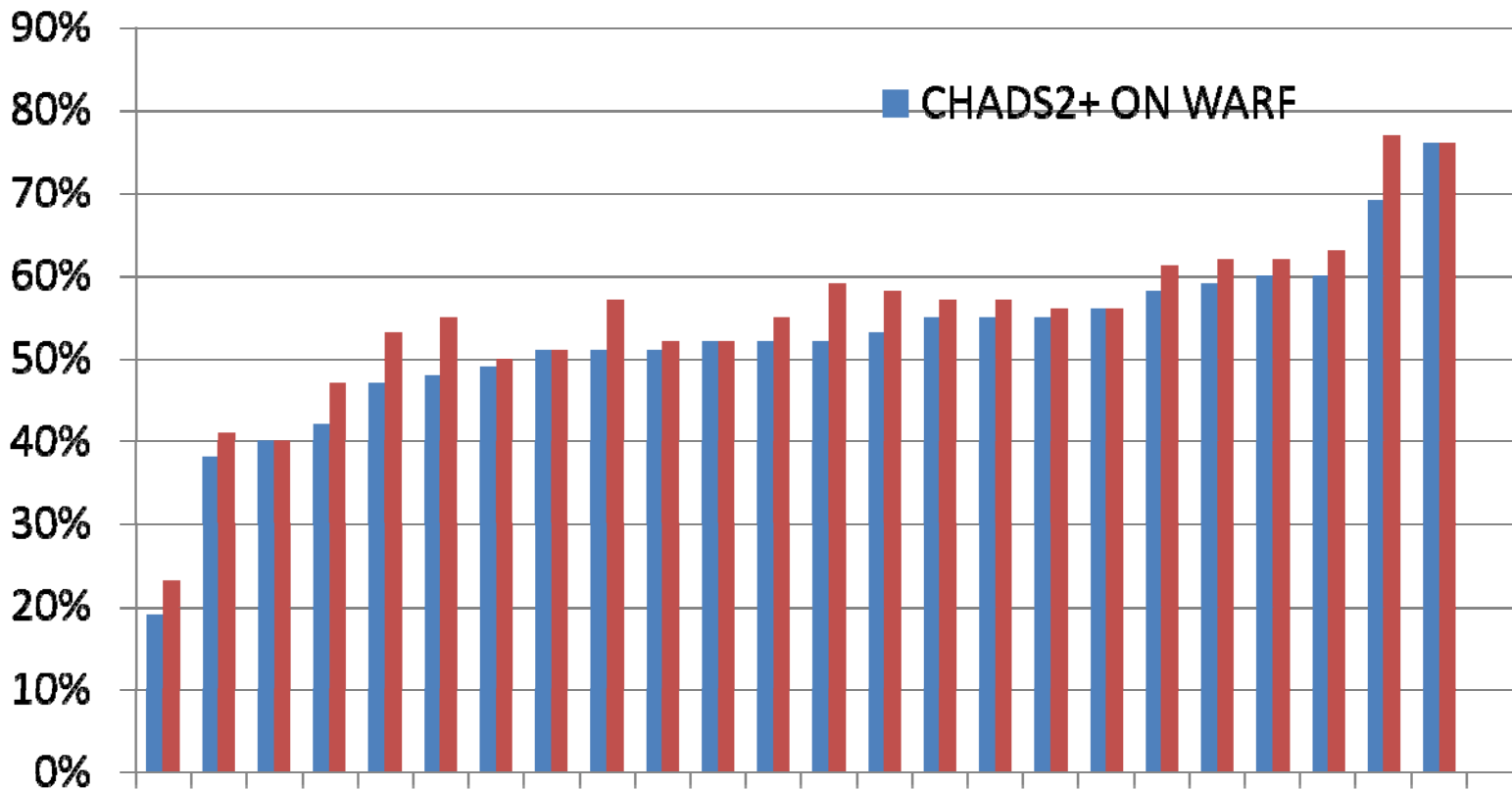
# What Impact did the Reviews have on % High Risk Patients taking Warfarin?

- 767 patients with Score 2 or more reviewed
- Did it increase?
- If so by how much?
- 53 started on warfarin
- 43 more still under consideration
- A potential 12% increase and 4 strokes prevented each year

# % of AF Patients on Warfarin with CHADS2 2 or more pre-review



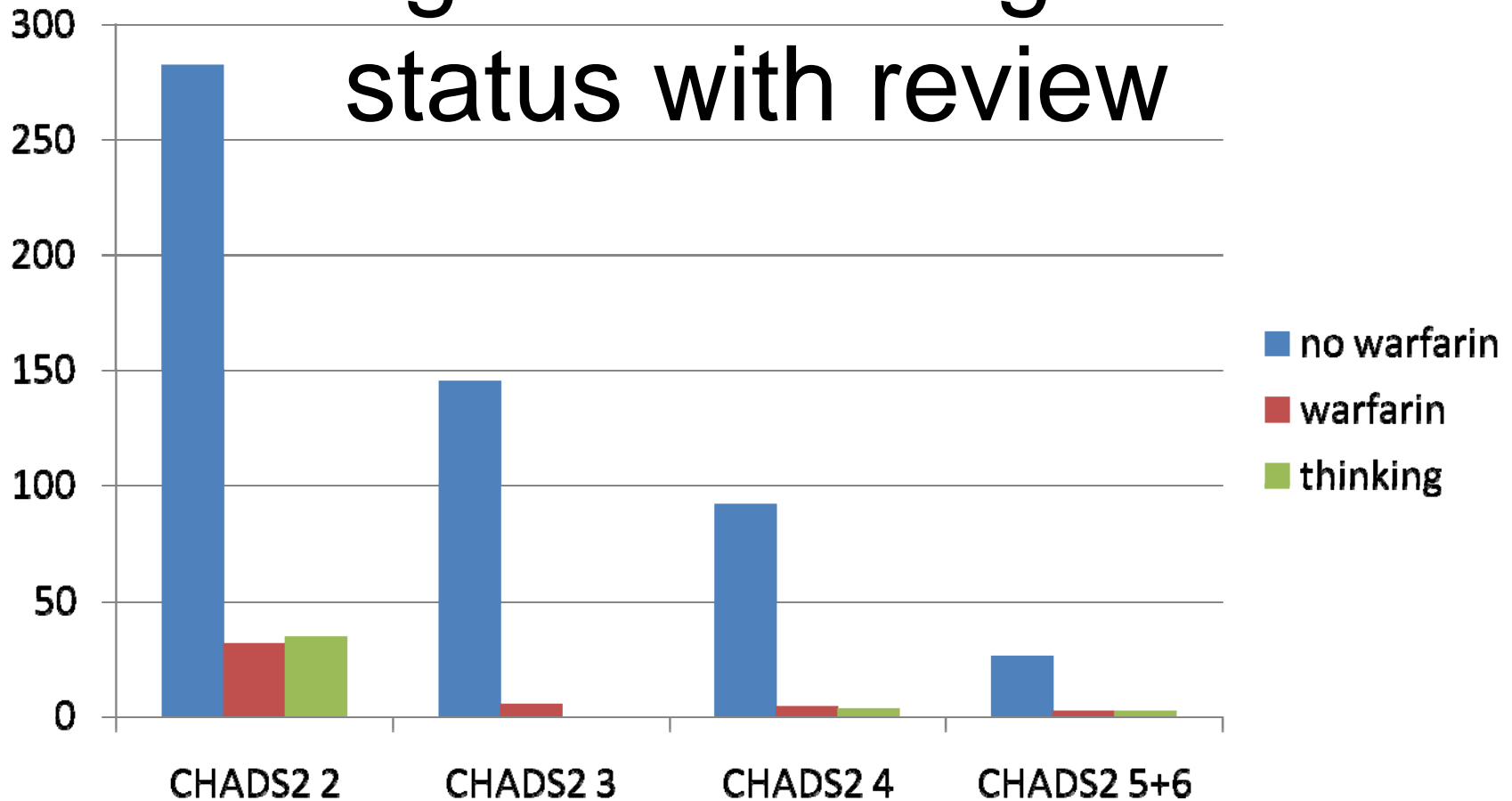
# % of AF Patients on Warfarin with CHADS2 2 or more post-review



# What Impact did the Reviews have on the Highest Risk Patients taking Warfarin?

- Are higher risk patients more likely to be started on warfarin?

# Change in anticoagulation status with review



# Why were patients not changed to warfarin?

- Absolute Contraindications
- Relative Contraindications
- Patient Declined
- Doctor related

# Absolute Contraindications

- Patient died 13
- Terminal Illness 13
- Reaction to Warfarin 1
- Renal/ Hepatic 25
- Anaemia 26
- Peptic Ulcer 11
- GI Haemorrhage 38
- Varices 0
- Major Haemorrhage 14
- Intracranial Haemorrhage 14
- BP >180 8
- Alcohol 4
- Recent surgery 7

# Relative contraindications

- Risk of falls 77
- Aspirin and Clopidogrel 6
- Psychiatric reasons 110
- Infection 3
- Patient Declined 93

# Doctor Related

- Logistics 13
- GP decision only recorded 191
- No reason 14
- Can't decide 43

# Why were patients not changed to warfarin in 767 reviews ?

- Absolute Contraindications 174 = 23%
- Relative Contraindications 196 = 26%
- Patient Declined 93 = 12%
- Doctor related 261 = 34%

# Doctor Related

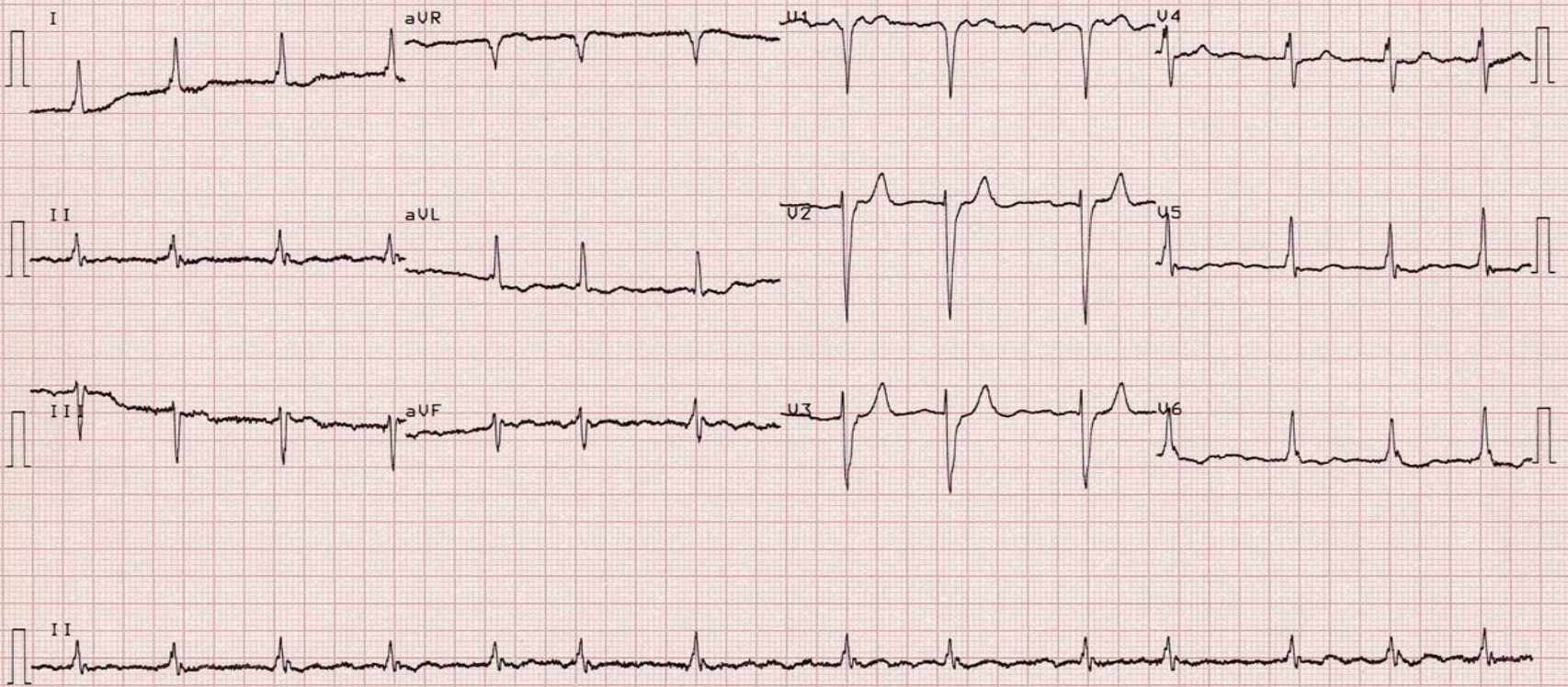
- Uncertainty of diagnosis ( all have ECG machine)
- Safety of warfarin:- ‘ First do not harm’
- Problems with elderly
- No-one had heard of the BAFTA study
- Problems with multiple doctor review
- 1 practice did not attend education, reviewed 35 and did not offer warfarin to any
- Education is important for doctors and patients
- None of GP saw summary page, only lists and therefore did not see improvement

Pat-Name: **A.Z**  
 HR 81/min  
 Intervals:  
 RR 737 ms  
 P 64 ms  
 PR 360 ms  
 QRS 110 ms  
 QT 350 ms  
 QTC 412 ms  
 Axis:  
 P 0°  
 QRS -1°  
 T 149°  
 P (II) - mV  
 S (V1) - mV  
 R (V5) 0.93 mV  
 Sokol. 3.06 mV

SINUS RHYTHM  
 ATRIAL PREMATURE COMPLEX(ES)  
 FIRST DEGREE AV BLOCK  
 LEFTWARD AXIS  
 ST & T ABNORMALITY, CONSIDER  
 LATERAL ISCHEMIA OR LEFT VENTRICULAR STRAIN  
 UNCONFIRMED REPORT

10 mm/mV

10 mm/mV

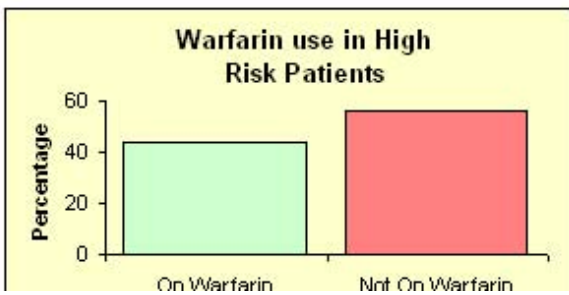
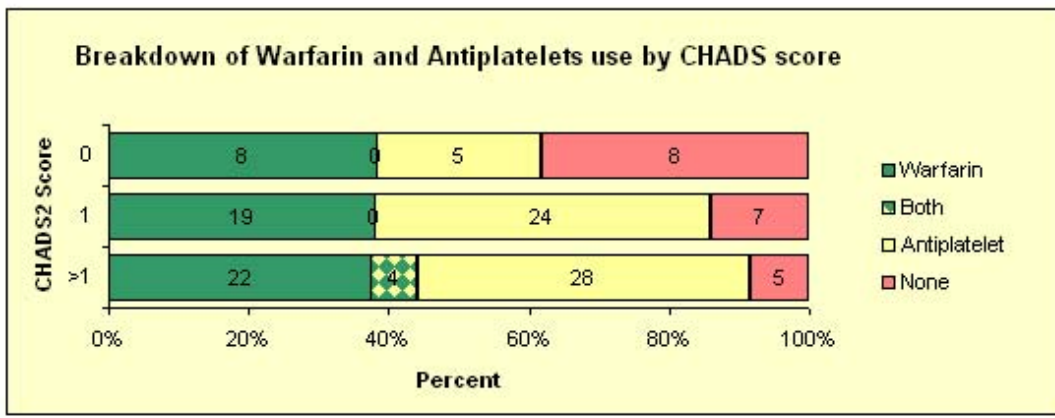
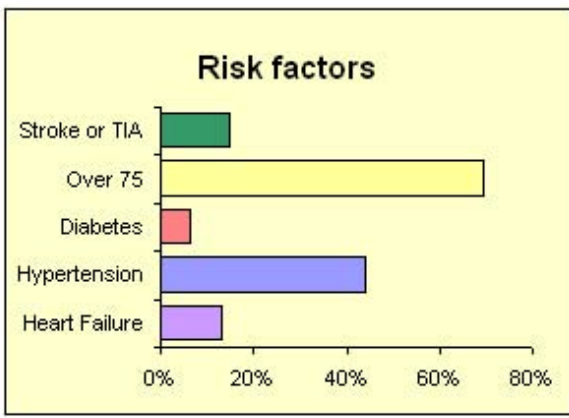
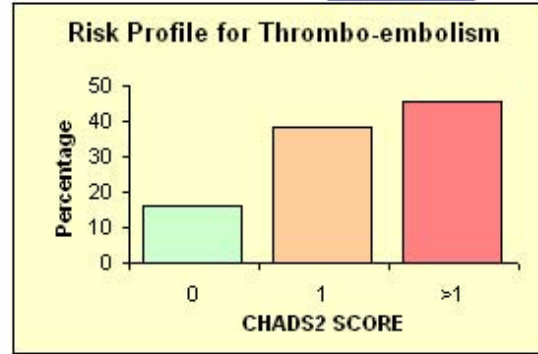
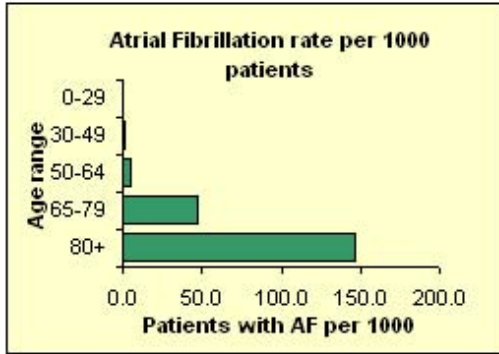


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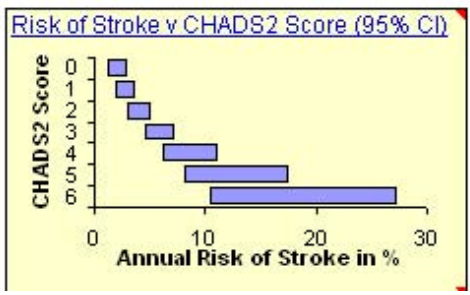
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# What impact did this have on referrals?

- Cardiology referrals 34
- Open Access Echo 24
- Care of Elderly 18
- Warfarin prescription 53
- Still thinking 43
- Auricle offered to 12 practices  
and used by only 2

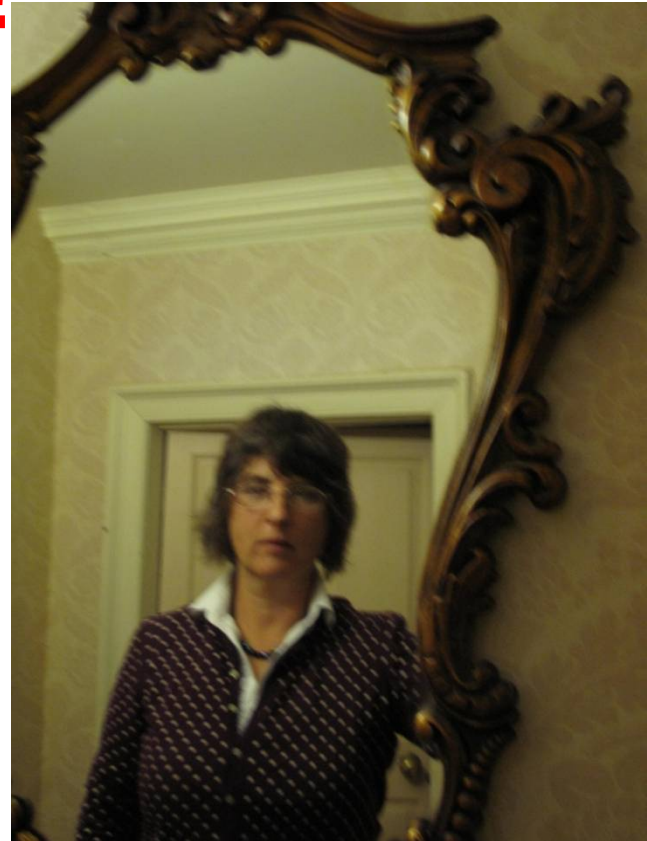
# Summary

Why do High Risk AF patients  
not get warfarin?



# Why do High Risk AF patients not get warfarin?

**Make sure the reason is not  
You!!**



# Access the GRASP Tool via WYC&S Network or NHS Improvement



Delivering tomorrow's  
improvement agenda  
for the NHS

NHS Improvement



Sign up for the  
**GRASP-AF  
Tool**



# Thank you very much

- To Keith, Campbell and Matt in the development of the GRASP tool
- To Adele for keeping us all on track
- For further information please get in touch
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# The Primary Care Cardiovascular Society

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West Yorkshire Cardiovascular Network  
Stroke and Cardiac Networks