

# Atrial Fibrillation– in an overstretched primary care

Gareth Forbes - Derwentside Healthcare

# Atrial Fibrillation

- What?
- Why?
- How?

# AF Management

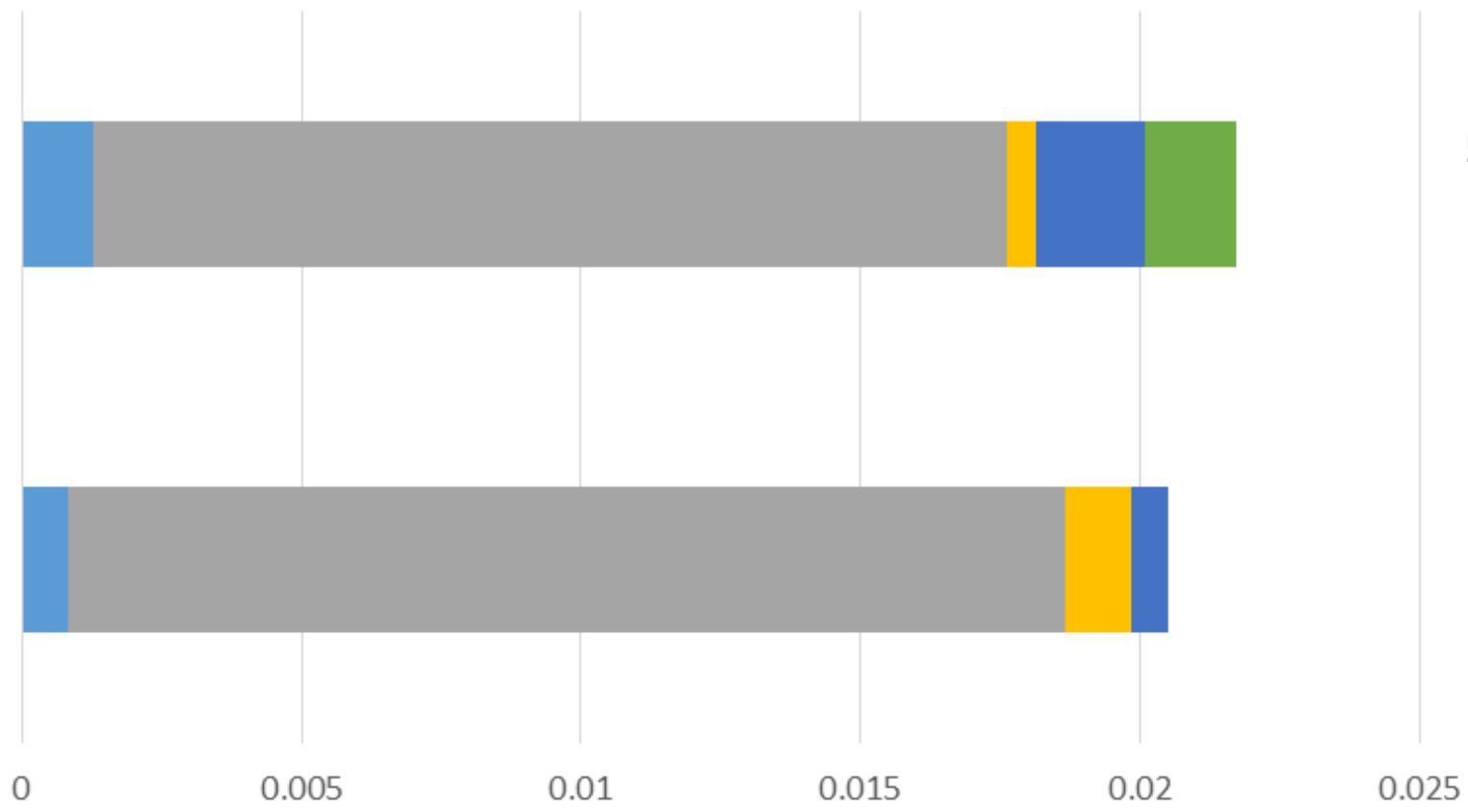
Incorrect or no  
CHADSVAsc

North Durham S1

594/3459

Leadgate

0/122



■ Low Risk ■ H/M Risk Anticoagulated ■ H/M Risk Reason why not anticoagulated ■ H/M Risk Not Anticoagulated ■ No risk score

# What?

- *?Preventing atrial fibrillation*
- Detecting atrial fibrillation
- Offering anticoagulation to appropriate patients
- Anticoagulant safety

# Why: Drivers and Motivation

- Altruism and enthusiasts
- Competition and reputation
- QoF
- CQC
- Fear of litigation
- Financial support

# What We Don't Want

- Short term funding
- New software
- New logins/portals/toolkits
- An app!
- A new system that doesn't integrate with existing pathways
  - i.e. we don't want different systems for AF, hypertension, familial hypercholesterolaemia, COPD, dementia etc etc.

# How?

- Three basic interventions
  - Screening
  - Case finding
  - Management
- Four potential routes to intervention
  - Systematic
  - Opportunistic
  - Part of routine review
  - Real-time triggers

# How? – AF as an example

- Screening
  - DCC project (patient >75 – who haven't had a pulse check in the last year)
  - NHS Health checks – Pulse every 5 years from 40
  - Check pulse at all LTC reviews
- Case-finding
  - Drug to disease audits (also good for other diseases)
  - 'Missed' diagnostic codes e.g. h/o AF
  - 'Missed' diagnostic values e.g. CHADSVASc
  - Flag all patients (not diagnosed with AF) whose last pulse was irregular but no subsequent ECG
  - Target NHS Health Checks at those with high risk





**Eligible for pulse check**  
Eligible for pulse check

- 31 Annual Review HCA10 SW20
- CC Coordinated Care
  - In coordinated care cohort
- DCS At high risk of diabetes
  - Patient is at high risk of diabetes (IGR, PCOS, gestational diabetes)
- DCS Cancer
  - Patient has a record of cancer
- DCS Frail (Mild)
  - Patient coded with mild frailty
- DCS Gout (not on treatment)
  - Patient has gout and not on repeat medication
- DCS Pulmonary Fibrosis
  - Patient has pulmonary fibrosis
- Eligible for pulse check
  - Eligible for pulse check
- Imms - Varicella Zoster Vaccination Recommended
  - Eligible for varicella zoster vaccination
- Online Services
  - Not Using Online Services

Page 1 Urinalysis

BP  mmHg

Pulse rate  bpm

Pulse Rhythm

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Weight  Kg

Height  m

BMI

30 Apr 2018	O/E - Systolic BP reading (2469.)
30 Apr 2018	O/E - Diastolic BP reading (246A.)
<b>DCS BP (latest with monitoring requirements view ha</b>	
1234 567	Weight 51 Kg (8 st)
1234 567	Height 1.68 m (5 ')
1234 567	BMI 18.07 Kg/m
1234 567	Waist circumference 100 cm (39

Name ▼	Count	%
? AF101 Medication that might be for AF but no AF code	11	0.2 %
? AF102 AF potential indicator but no AF code	0	0.0 %
? AF103 - Irregular pulse but no subsequent ECG	3	0.1 %
? AF104 AF marked as resolved	9	0.2 %

? AF101 Medication that might be for AF but no AF code	543	0.3 %
? AF102 AF potential indicator but no AF code	108	0.1 %
? AF103 - Irregular pulse but no subsequent ECG	291	0.2 %
? AF104 AF marked as resolved	246	0.1 %

# How? – AF as an example

- Case Management - AF
  - Interactive AF template
  - Identify those eligible for anticoagulation
  - Triggers when CHADSVASc changes or is incorrect
- Case Management – Anticoagulation
  - Interactive anticoagulation template
  - Safety checking protocol
  - Safety searches

? AF201 AF without CHADSVASc or possibly incorrect score

1 0.8 %

16 May 2019 06:05



? AF201 Consider Anticoagulation

4 0.1 %

16 May 2019 06:05



? AF104 AF treated as received

240 0.1 %

? AF201 AF without CHADSVASc or possibly incorrect score

599 17.1 %

? AF201 Consider Anticoagulation

331 0.2 %

? ATHERO101 Medication that might be for atherosclerosis but no code

2005 4.2 %

## Atrial Fibrillation

**AF** Old Template - Atrial Fibrillation 2013

[NICE AF Pathway](#)

**AF** Atrial Fibrillation Overview

AF Review

### Pulse Control

Pulse rate  b...

Pulse rhythm

### Stroke Risk

**AF** Calculate CHADSVasc Score

**AF** Calculate HASBLED Score

**AF** Stroke Prevention for Atrial Fibrillation

Anticoagulation Template

Anticoagulation Exceptions

Atrial Fibrillation Overview 15 May 2019 18:01

Entered by FORBES, Gareth (Dr) (General Medical Practitioner)  
 Finished by FORBES, Gareth (Dr) (General Medical Practitioner) [15 May 2019 18:01]

**Atrial Fibrillation Overview**

Valvular/Non-valvular	Non-valvular AF
AF Type	Permanent
Pulse control strategy	Rate control
Seen by specialist?	No
Currently under specialist?	No

### Medication Timeline

**On beta blocker**

---

1834 567 **CHA2DS2 - vascular disease, ag... 1** 15 May 2019 **Qof - Achieved**

---

**HASBLED not recorded** **Not done in the last year**


---

**Current Antiplatelets/Anticoagulants** **QoF - not applicable (low CHADSVasc)**

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**No record of repeat antiplatelet or anticoagulant**

Question ×

 This patient's CHADSVASc score has probably changed.

[Go to AF Template](#) [Close](#) [Pause](#)

*line Services* [Action](#) [More](#)



Medication Timeline

**On beta blocker**

1234  
567 CHA2DS2 - vascular disease, ag... 1 15 May 2019

**Current recorded score is different to estimated score**

**HASBLED not recorded**

**Current Antiplatelets/Anticoagulants**

**No record of repeat antiplatelet or anticoagulant**



**Qof - Achiev**

**Not done in 1**

**QoF - not ap**

ation

# HASBLED Score

[More info](#)

Hypertension (uncontrolled, >160 systolic)	N/A
Renal Disease (Dialysis,transplant,Cr> >200)	N/A
Liver Disease (Cirrhosis, Bilirubin >2% Normal, AST/ALT/AlkP >3x normal)	N/A
Stroke History	N/A
PHx Major bleeding/predisposition to bleeding	N/A
Labile INR (unstable/high INRs), TTR<60%	N/A
Elderly (age >65)	N/A
Medication predisposing to bleeding (Antiplatelet agent, NSAIDs)	N/A
Alcohol intake (>= 8 drinks/week)	N/A
Hyperten, abnorm renal/liver funct, stroke, BLEED score <input type="text"/> <input type="text"/>	

Annual risk of major haemorrhage when anticoagulated

Score	Risk
0	1.1%
1	1.0%
2	1.8%
3	3.7%
4	8.7%
5	12.5%
6	>10
7	>10
8	>10
9	>10

**BP**

04 Jan 2017 O/E - Systolic BP reading (2469.) 90 mmHg QOF

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**Renal function**

1234 567 Serum creatinine level 200 umol/L 04 Jan 2017

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**Liver Function**

1234 567 Serum total bilirubin level Not recorded.

1234 567 Serum alanine aminotransferase I... Not recorded.

1234 567 AST serum level Not recorded.

1234 567 Serum alkaline phosphatase level Not recorded.

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**No record of stroke/TIA**

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**Haemoglobin**

1234 567 Haemoglobin concentration 17.1 g/L 04 Jan 2017

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**Alcohol Consumption**

1234 567 Alcohol intake 0 Units/Week 18 Jul 2018

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**NSAID and antiplatelet use**

HASBLED Score





**CHA2DS2-VASc**1234  
567

CHA2DS2 - vascular disease, a... 1

15 May 2019

Current recorded score is different to estimated score

**Annual stroke risk**

Score	Risk	Risk after Rx with OAC	NNT
0	0.84%	0.27%	175
1	1.75%	0.5%	87
2	2.69%	1.0%	56
3	3.2%	1.4%	47
4	4.0%	2.1%	38
5	6.7%	3.3%	23
6	9.8%	4.1%	15
7	9.6%	4.6%	16
8	6.7%	4.7%	
9	15.2%	5.25	10

**HASBLED**

HASBLED not recorded

**Annual risk of major haemorrhage when anticoagulated**

Score	Risk
0	1.1%
1	1.0%
2	1.8%
3	3.7%
4	8.7%
5	12.5%
6	>10
7	>10
8	>10
9	>10

NICE recommends considering anticoagulation in patients with non-valvular AF if:

CHA2DS2Vasc  $\geq$ 1 for men

CHA2DS2Vasc  $\geq$ 2 for women

[NICE AF Pathway](#)

[NICE AF Guideline 2014](#)

[Online CHADSVASC/HASBLED tool.](#)

[CDD AF Guideline](#)

[NICE Patient Decision Aid](#)

Anticoagulation Safety - ?Not reviewed in the past 6 months and no further safety a

Anticoagulation Safety - ?Poor Concordance #	7	0.1 %	09
Anticoagulation Safety - Apixaban - consider reduced dose #	0	0.0 %	15
Anticoagulation Safety - Apixaban - Contraindicated/not recommended drugs #	0	0.0 %	15
Anticoagulation Safety - Apixaban - High GI Bleed Risk #	16	0.3 %	15
Anticoagulation Safety - Apixaban - High GI Bleed Risk - not on gastroprotectio...	8	0.1 %	15
Anticoagulation Safety - Apixaban - No apparent licensed indication #	0	0.0 %	15
Anticoagulation Safety - Apixaban - Severe renal impairment - consider stoppi...	0	0.0 %	15
Anticoagulation Safety - Dabigatran - Consider reduced dose age/Cr/verapam...	0	0.0 %	15
Anticoagulation Safety - Dabigatran - Contraindicated/not recommended drug...	0	0.0 %	15
Anticoagulation Safety - Dabigatran - High GI Bleed Risk #	0	0.0 %	15
Anticoagulation Safety - Dabigatran - High GI Bleed Risk - not on gastroprotec...	0	0.0 %	15
Anticoagulation Safety - Dabigatran - No apparent licensed indication #	0	0.0 %	15
Anticoagulation Safety - Dabigatran - Severe renal impairment - consider stop...	0	0.0 %	15
Anticoagulation Safety - DOAC - Consider Reduced Dose #	0	0.0 %	15
Anticoagulation Safety - DOAC - Contraindicated/not recommended drugs #	0	0.0 %	15
Anticoagulation Safety - DOAC - High GI Bleed Risk #	29	0.5 %	15
Anticoagulation Safety - DOAC - High GI Bleed Risk - no gastroprotection #	14	0.2 %	15
Anticoagulation Safety - DOAC - No apparent licensed indication #	1	0.0 %	15
Anticoagulation Safety - DOAC - Severe renal impairment - consider stopping #	0	0.0 %	15

Anticoagulation Safety - ?Not reviewed in the past 6 months and no further safety a

Question



**There is no record of an estimate of GFR using the Cockcroft-Gault method.**

**Decisions about dosing should use this eGFR.**

Calculate eGFR using CG method

Continue without CG eGFR

Close

Pause



## Cockcroft-Gault eGFR

1. Check weight recorded around last creatinine
2. Record Cockcroft-Gault eGFR using same date as the most recent creatinine.

 Cockcroft-Gault Calculator

GFR Cockcroft-Gault

...

▶ 	18 Jul 2018	O/E - weight (22A..)	90 Kg (14 ...	QOF	^
▶ 	04 Jan 2017	Serum creatinine level (XE2q5)	200 umol/L	QOF	^
<b>eGFR Never Recorded</b>					^

**Cockcroft-Gault eGFR Not Recorded**

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Question

?

There is no record of FBC, U+E and LFTs in the last 12 weeks.


Do you want to continue?

Yes No Pause

Online Services Action More

s without Total white blood count test in last 12 weeks: *Patient requires Total white blood count test* Action More

Question ×

 **Most recent eGFR using Cockcroft Gault method is <30**

Most recent CG eGFR	29
Most recent CG eGFR (within 12w)	29

**CG eGFR <15**  
Avoid apixaban


**CG eGFR 15-29**  
Non-valvular AF - reduce apixaban dose to 2.5mg bd

Do you want to continue with apixaban 5mg?

[Home Services](#) [Action](#) [More](#)

without Total white blood count test in last 12 weeks: *Patient requires Total white blood count test* [Acti](#)

Question ×

 **This patient appears to be taking a potentially interacting drug  
Carbamazepine, phenytoin, phenobarbital or rifampicin**

Apixaban is contraindicated in patients taking these medications.

Do you want to continue with apixaban?

[Online Services](#) [Action](#) [More](#)

**without Total white blood count test in last 12 weeks: *Patient requires Total white blood count test*** [Action](#) [More](#)

## Apixaban Safety

Anticoagulation is usually contraindicated if there has been recent eye, spine or brain surgery

## 1 Risk of bleeding discussed

- Yes
- No
- Not known



## 2 Need to monitor kidney Fx discussed

- Yes
- No
- Not known



## 3 Antacids to be taken at different time - discussed

- Yes
- No
- Not known



## 4 St John's Wort interaction discussed

- Yes
- No
- Not known



## 5 Anticoagulation card issued

- Yes
- No
- Not known

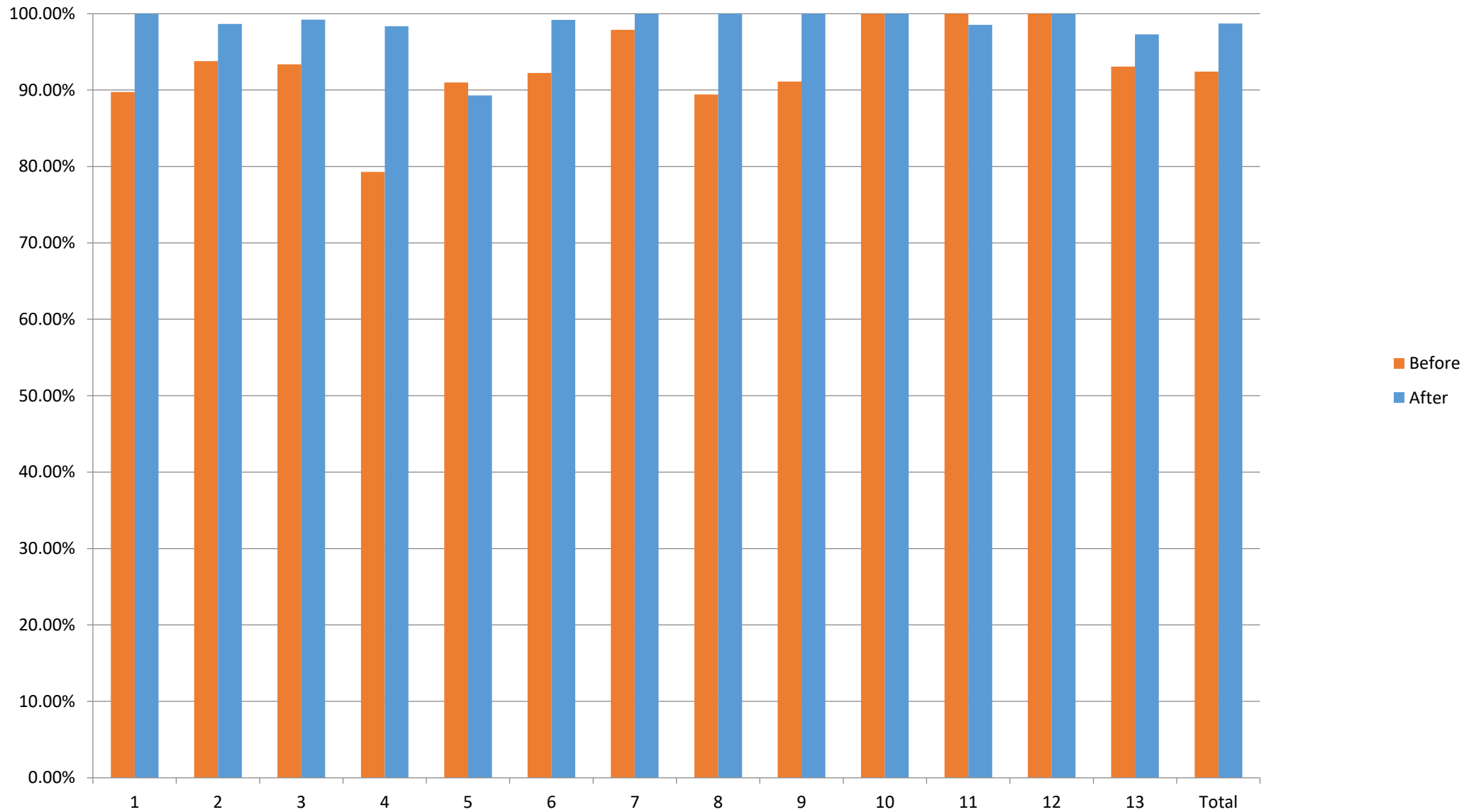


Read Code

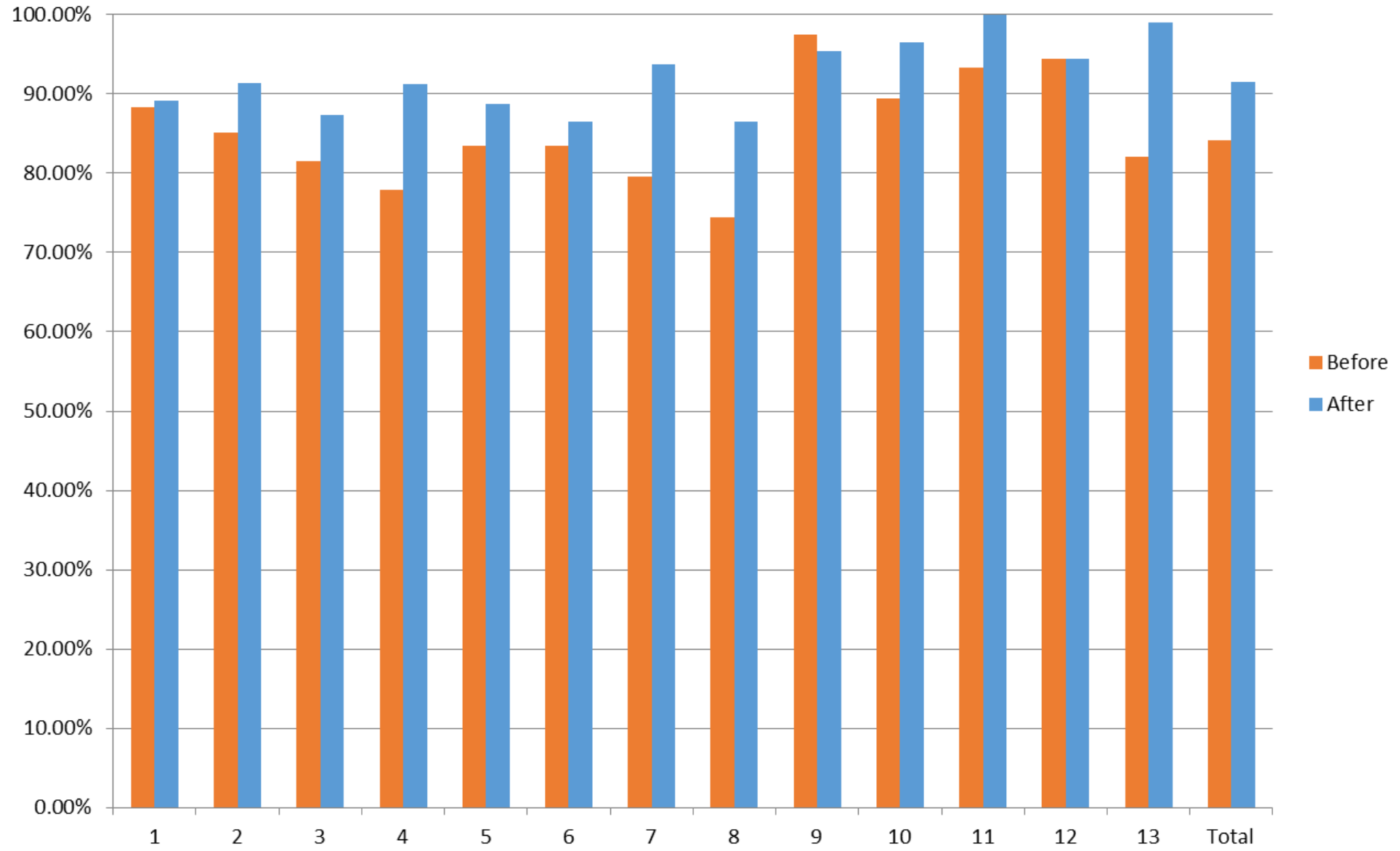
Code	Des
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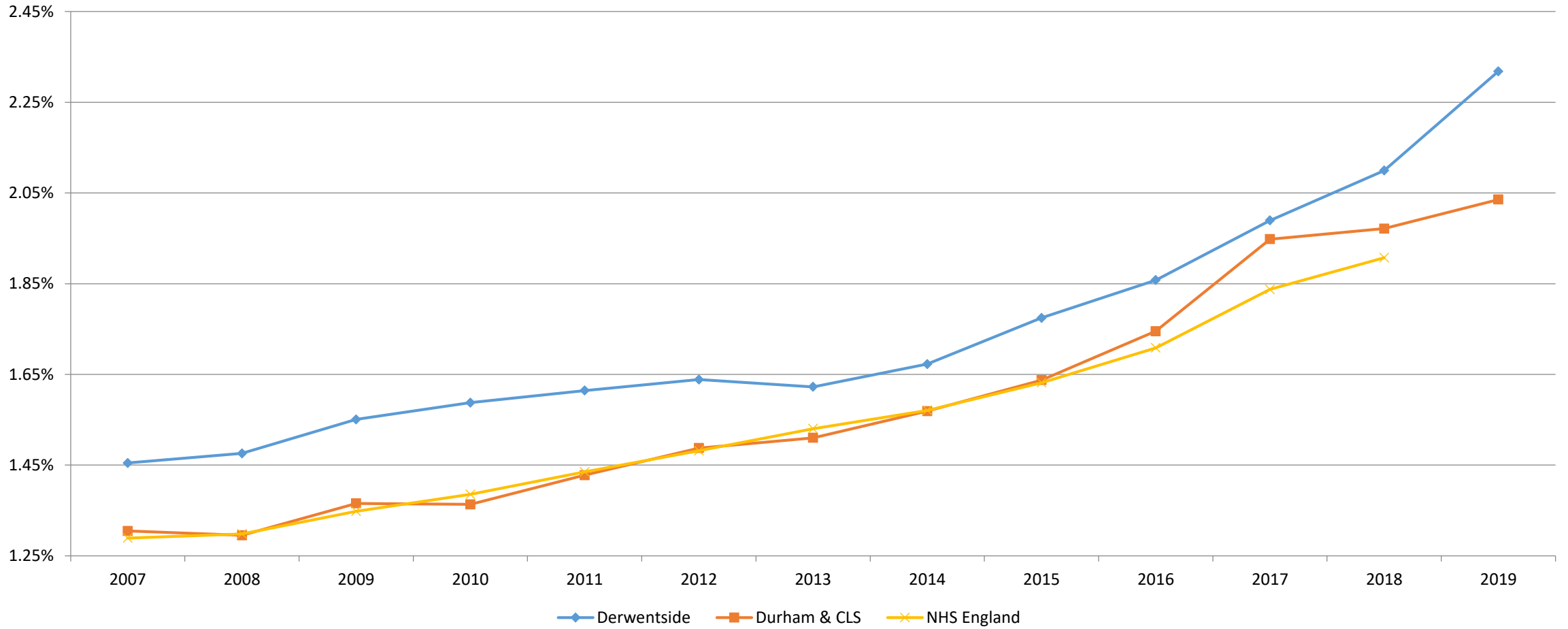
## Proportion of Patients with AF with CHADSVASc



## High/Mod Risk AF - Anticoagulated or Reason Why Not



# Atrial Fibrillation



# Anticoagulant Safety

	Before	After
VKA – no INR within 12 weeks	297	96
VKA – no TTR within 1 year	950	95
DOAC – no indication	189	126
DOAC – severe renal impairment	3	4
DOAC – consider dose reduction	148	107
DOAC – Interacting drugs	11	12