Overview of NICE AF Guidelines and their impact on anticoagulant services

Windermere, October 2014

NICE National Institute for Health and Care Excellence

Atrial fibrillation: the management of atrial fibrillation

Issued: June 2014 last modified: August 2014

NICE clinical guideline 180
guidance.nice.org.uk/cg180

NICE has accredited the process used by the Centre for Clinical Practice at NICE to produce guidelines. Accreditation is valid for 5 years from September 2009 and applies to guidelines produced since April 2007 using the processes described in NICE's 'The guidelines manual' (2007, updated 2009). More information on accreditation can be viewed at www.nice.org.uk/accreditation

NICE accredited

National Clinical Guideline Centre

Atrial Fibrillation

Atrial fibrillation: the management of atrial fibrillation

Clinical guideline

Methods, evidence and recommendations

June 2014

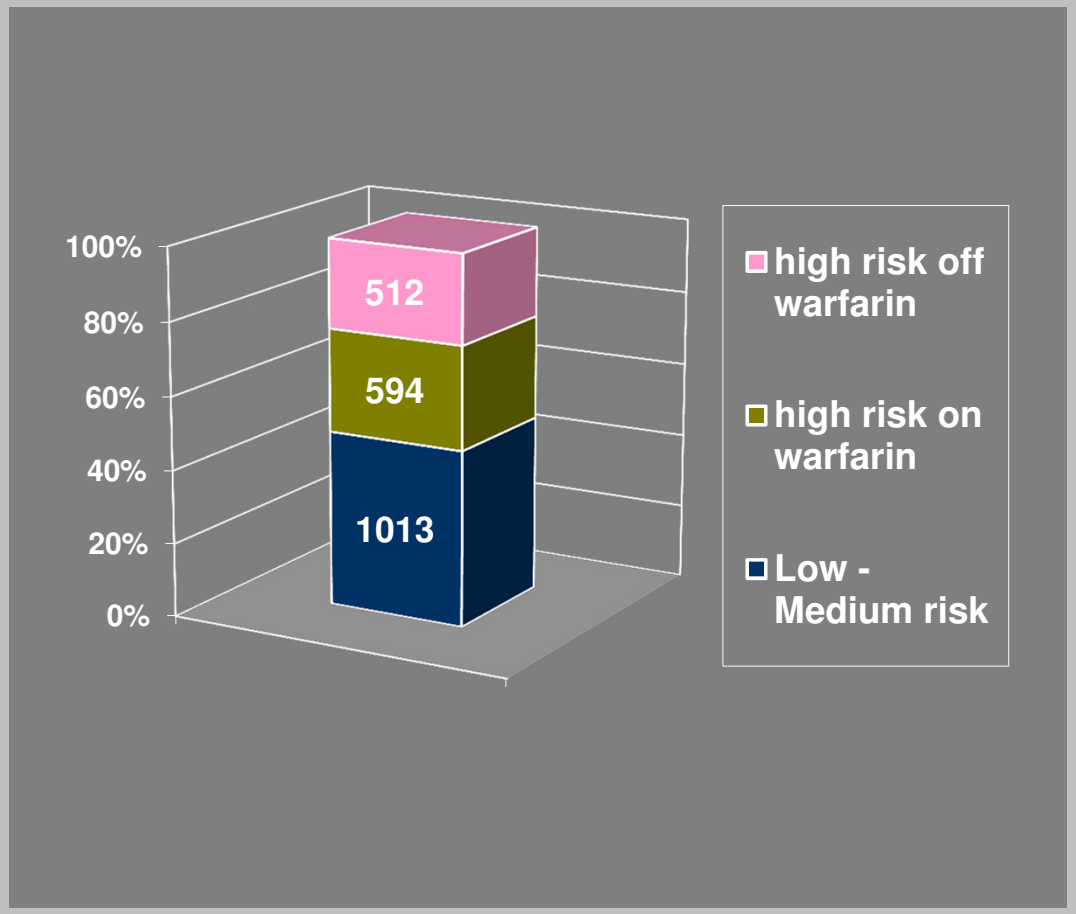
Commissioned by the National Institute for Health and Care Excellence

Royal College of Physicians · The Royal College of Surgeons of England · Royal College of General Practitioners · Royal College of Nursing · NICE accredited

Why did we need a guideline revision?

Leeds Primary Care Stroke Prevention in AF Audit

- Combined practice population of 151000
- 2119 (1.4%) patients with AF
- 1106 (52%) CHADS ≥ 2
- 512 46% CHADS ≥ 2 not on warfarin



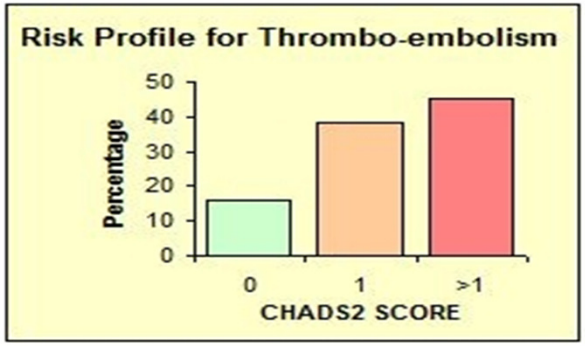
GRASP – AF

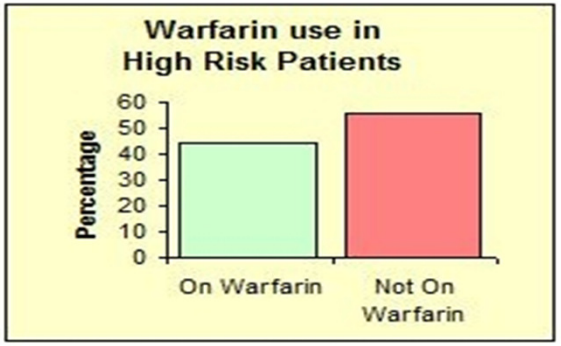
Practice Name Any Practice

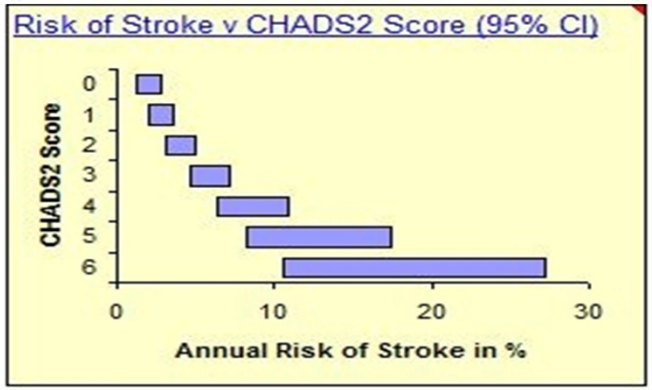
Date of Audit 7th July 2008

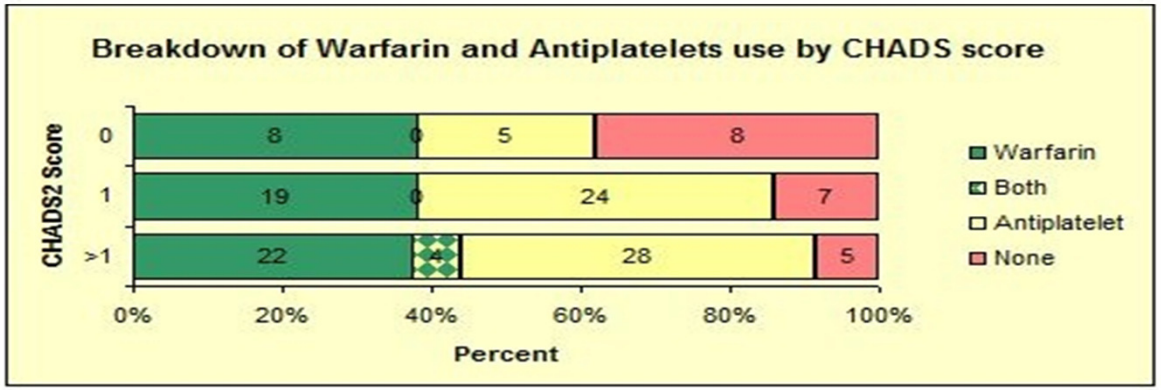
Total Practice Population 9824

No. with Atrial Fibrillation 130 0.32%
No. over 65 with AF 0.85%





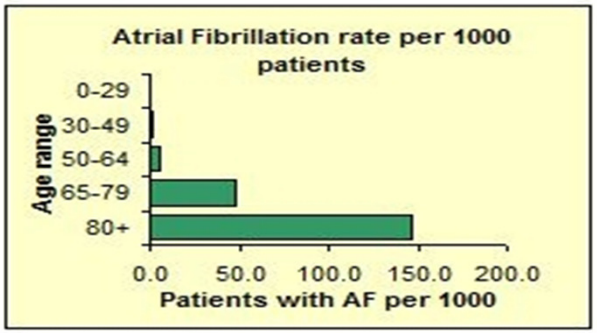


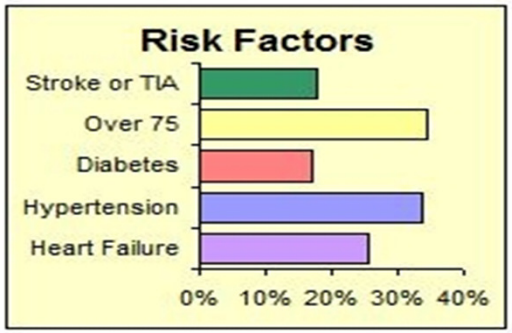


Strokes Expected Annually in untreated group of 33

2.0

(95% CI 1.4 to 2.6)





ADVICE
REFERENCES
PODCAST

Anticoagulant uptake – $CHADS_2 \geq 2$

Number of patients with $CHADS_2 \geq 2$	132,099 (57.0%)
Number on OAC	72,211 (54.7%)
Number with OAC contra-indicated	12,128 (9.2%)
Number with OAC declined	2,859 (2.2%)
No OAC and not contra-indicated / declined	44,901 (34.0%)
Estimate for England, no OAC and not contra-indicated or declined	169,000

Heart 2013;99:1166-1172

Anticoagulation deficit in patients with known AF and $CHADS_2 \geq 2$

- Estimate of 169,000 patients in England
- Based on a relative risk reduction of 25 to 50 to prevent 1 stroke
- Estimate that treating these patients with OAC could prevent 3380 - 6760 strokes annually

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Clinical audit

Sentinel Stroke National Audit Programme (SSNAP)

Clinical audit first pilot public report

National results

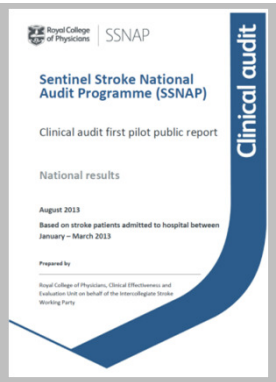
August 2013

Based on stroke patients admitted to hospital between January – March 2013

Prepared by

Royal College of Physicians, Clinical Effectiveness and Evaluation Unit on behalf of the Intercollegiate Stroke Working Party

Sentinel Stroke Audit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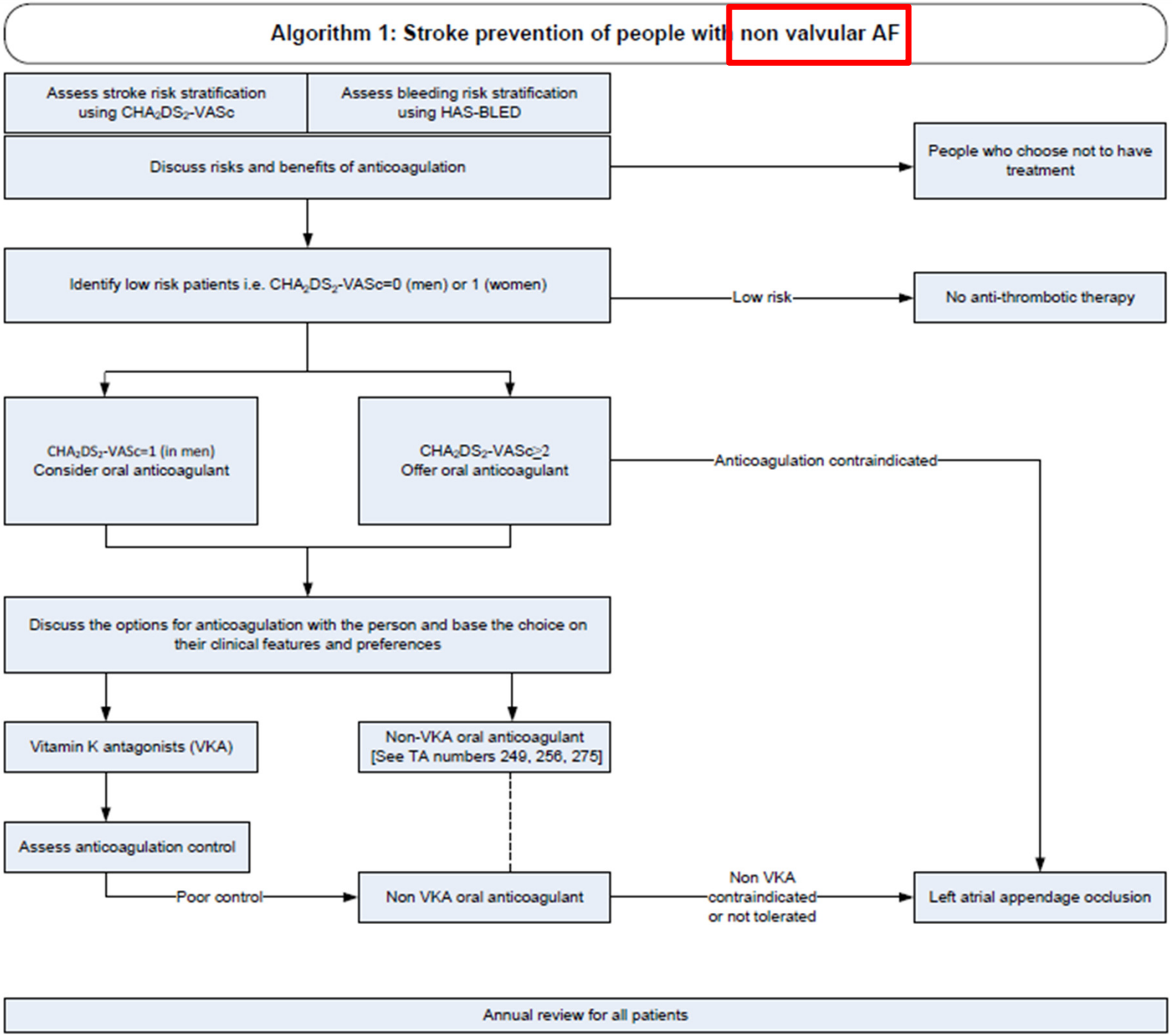
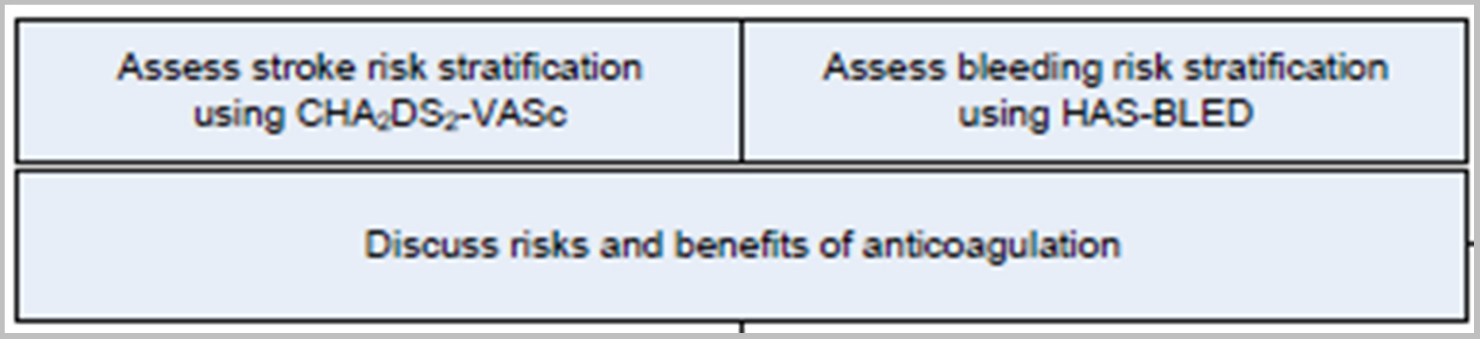
Clinical audit

- 11939 patients with stroke
- 2465 known to be in AF prior to admission
  - 1272 on oral anticoagulant (51.6%)
  - 1193 not on oral anticoagulant (48.4%)
  - 296 contraindicated (12.0%)
- By extrapolation up to 4772 preventable strokes each year in England, Wales and N.Ireland

NICE 2014 Guideline


Algorithm 1: Stroke prevention of people with non valvular AF
Assess stroke risk stratification using CHA2DS2-VASc
Assess bleeding risk stratification using HAS-BLED
Discuss risks and benefits of anticoagulation
People who choose not to have treatment
Identify low risk patients i.e. CHA2DS2-VASc=0 (men) or 1 (women)
Low risk
No anti-thrombotic therapy
CHA2DS2-VASc=1 (in men) Consider oral anticoagulant
CHA2DS2-VASc≥2 Offer oral anticoagulant
Anticoagulation contraindicated
Discuss the options for anticoagulation with the person and base the choice on their clinical features and preferences
Vitamin K antagonists (VKA)
Non-VKA oral anticoagulant [See TA numbers 249, 256, 275]
Assess anticoagulation control
Poor control
Non VKA oral anticoagulant
Non VKA contraindicated or not tolerated
Left atrial appendage occlusion
Annual review for all patients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Assess bleeding risk stratification using HAS-BLED
Discuss risks and benefits of anticoagulation

CHADSVASC

Risk factor	Score
Congestive heart failure/LV dysfunction	1
Hypertension	1
Age ≥75	2
Diabetes mellitus	1
Stroke/TIA/thrombo-embolism	2
Vascular disease[a]	1
Age 65–74	1
Sex category (i.e. female sex)	1
Maximum score	**9**

HASBLED

Letter	Clinical characteristic[a]	Points awarded
H	Hypertension	1
A	Abnormal renal and liver function (1 point each)	1 or 2
S	Stroke	1
B	Bleeding	1
L	Labile INRs	1
E	Elderly (e.g. age >65 years)	1
D	Drugs or alcohol (1 point each)	1 or 2
		Maximum 9 points

Bleeding risk Assessment

Use the HAS-BLED score to assess the risk of bleeding in people who are starting or have started anticoagulation and to highlight, correct and monitor the following modifiable risk factors:

- uncontrolled hypertension
- poor control of INR ('labile INRs')
- concurrent medication, for example concomitant use of aspirin or an NSAID
- harmful alcohol consumption.

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Stroke versus bleeding risk

When discussing the benefits and risks of anticoagulation, tell the person that:

- for most people the benefit of anticoagulation outweighs the bleeding risk
- for people with an increased risk of bleeding the benefit of anticoagulation may not always outweigh the bleeding risk, and careful monitoring of bleeding risk is important.

NICE June 2014

2014 NICE Patient Decision Aid

- Emphasises the importance of informed decision making
- Patient decision aid to help patients (and doctors) make a more informed judgement.
- Calculate CHADSVASC and HASBLED scores together
- Patient takes booklet away to read about risks and benefits of anticoagulation

NICE National Institute for Health and Care Excellence

Patient decision aid

Atrial fibrillation: medicines to help reduce your risk of a stroke – what are the options?

http://guidance.nice.org.uk/CG180/PatientDecisionAid/pdf/English

Published: June 2014

About this decision aid

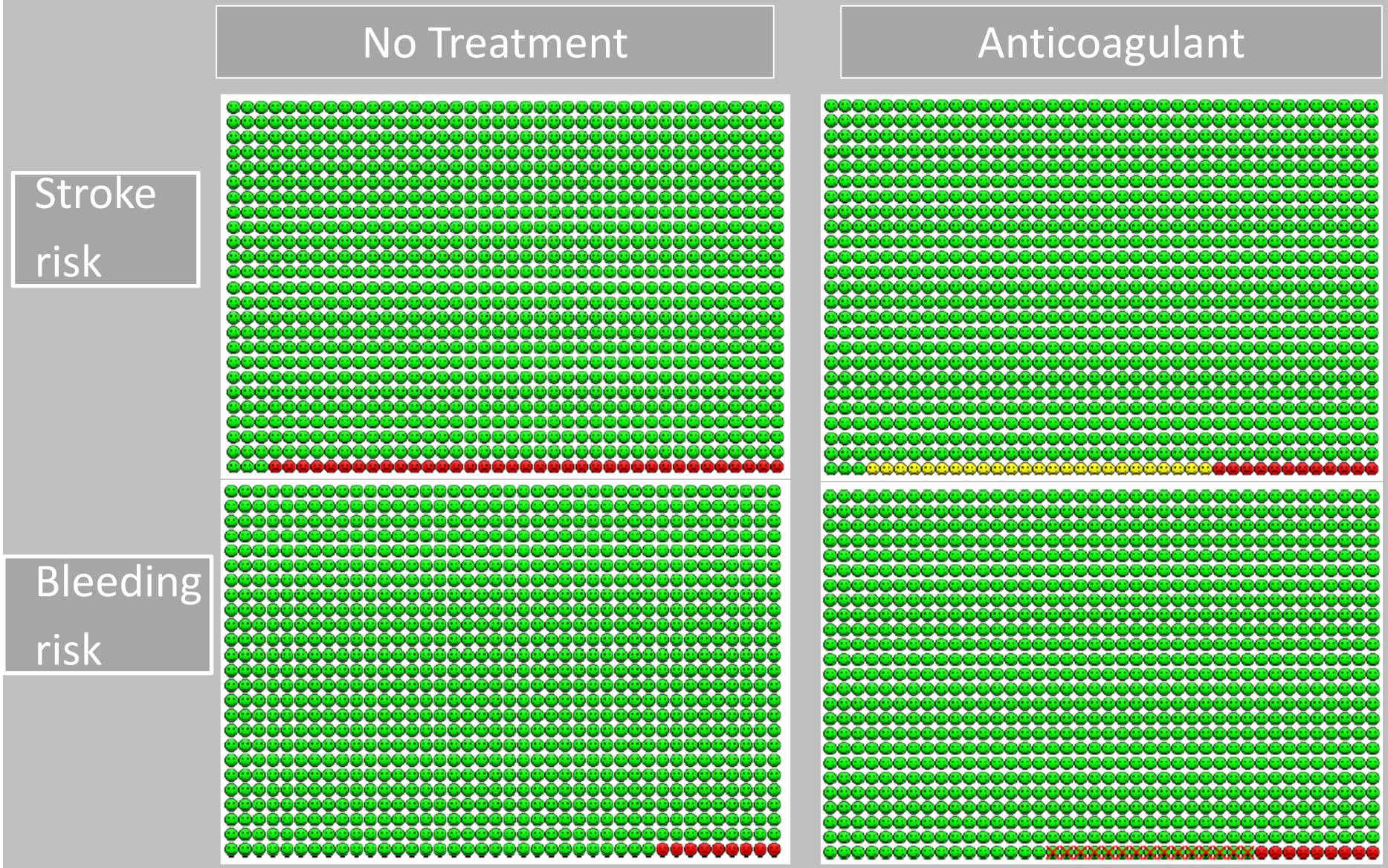
This information is intended to help you reach a decision about whether to take an anticoagulant to reduce your risk of stroke, and which one to take if you decide to do so. Your decision depends on several things that this decision aid will help explain. Different people will feel that some of these things are more important to them than others, so it's important that you make a decision that is right for you personally.

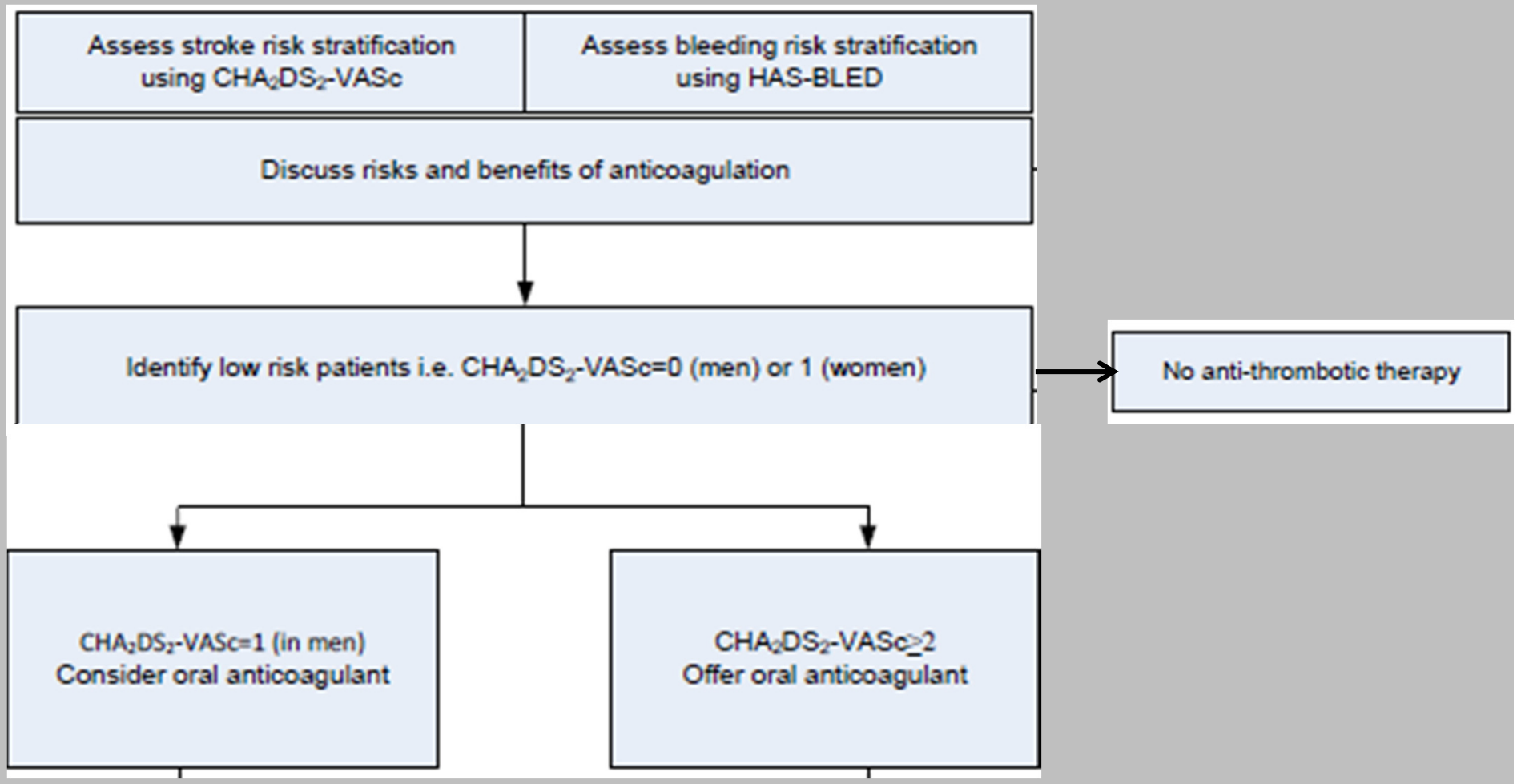
You may have just been diagnosed with atrial fibrillation (AF for short) or may be considering changing anticoagulant treatment. This decision aid is designed for you to work through with the healthcare professional who is helping you make this decision. You might also find it helpful if you want to talk your decision over with your family or friends.

The information is based on the recommendations on anticoagulants in NICE's guideline on atrial fibrillation. The guideline covers all the care and treatment that you can expect, and is explained in our information for the public about the guideline.

NICE guidelines give advice to healthcare professionals on the care and support that should be offered to people who use health and care services. You have the right to be involved in discussions and make informed decisions about your treatment and care with your healthcare team. You should be given relevant information that explains the options in a way you can understand. For more information see About care in the NHS on the NICE website.

Example of CHADSVASC=3, HASBLED =3

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CHA_2DS_2-VASc=1 (in men)
Consider oral anticoagulant
CHA_2DS_2-VASc≥2
Offer oral anticoagulant

Warfarin or NOAC?

- Anticoagulation may be with apixaban, dabigatran etexilate, rivaroxaban or a vitamin K antagonist
- Discuss the options for anticoagulation with the person and base the choice on their clinical features and preferences.

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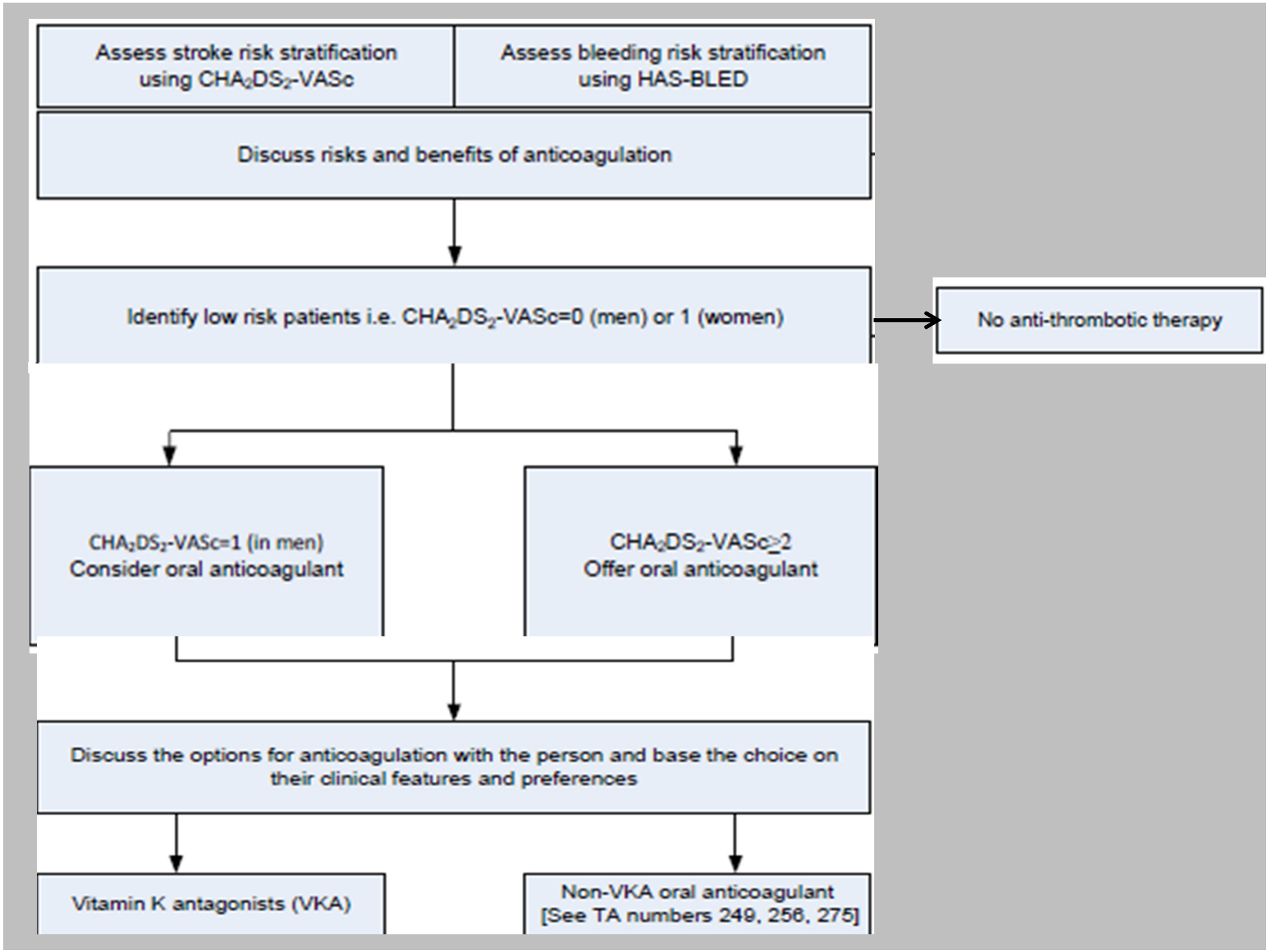
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Non-VKA oral anticoagulant
[See TA numbers 249, 256, 275]

Importance of quality of anticoagulation in patients on vitamin K antagonists

Assessing anticoagulant control I

Calculate the person's time in therapeutic range (TTR) at each visit. When calculating TTR:

- use a validated method of measurement such as the Rosendaal method for computer-assisted dosing or proportion of tests in range for manual dosing
- exclude measurements taken during the first 6 weeks of treatment
- calculate TTR over a maintenance period of at least 6 months.

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Assessing anticoagulant control II

Reassess anticoagulation for a person with poor anticoagulation control shown by any of the following:

- 2 INR values higher than 5 or 1 INR value higher than 8 within the past 6 months
- 2 INR values less than 1.5 within the past 6 months
- TTR less than 65%.

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Assessing anticoagulant control III

When reassessing anticoagulation, take into account and if possible address the following factors that may contribute to poor anticoagulation control:

- cognitive function
- adherence to prescribed therapy
- illness
- interacting drug therapy
- lifestyle factors including diet and alcohol consumption.

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Assessing anticoagulant control IV

If poor anticoagulation control cannot be improved, evaluate the risks and benefits of alternative stroke prevention strategies and discuss these with the person.

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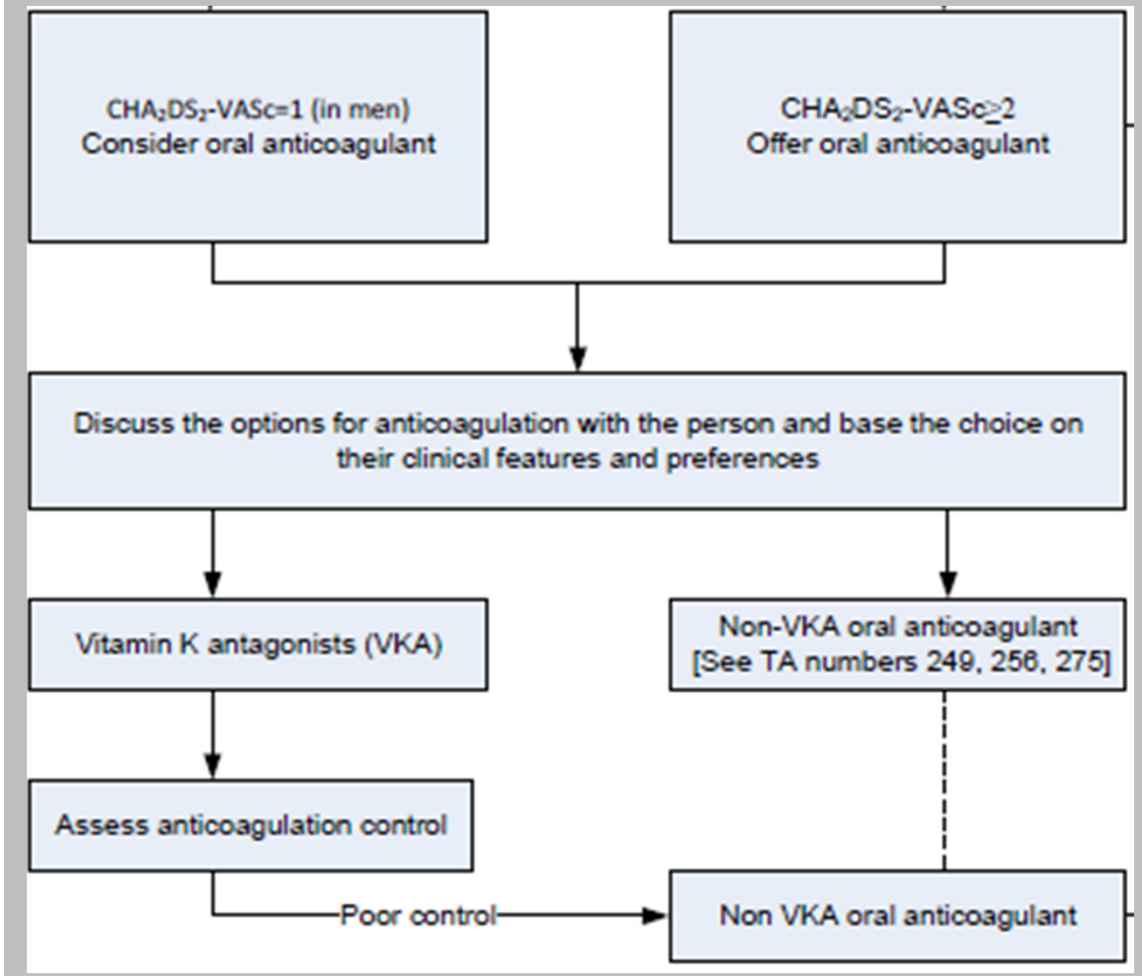
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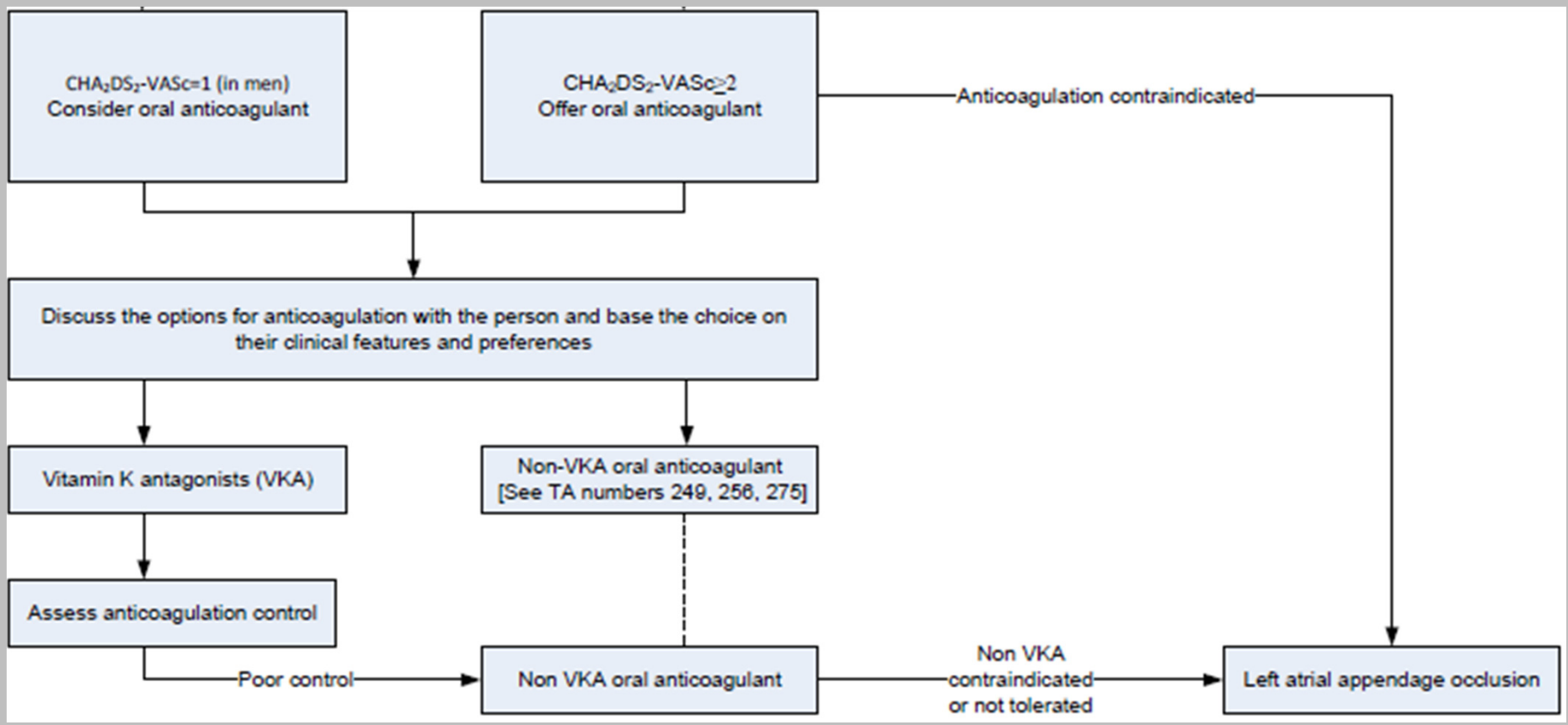
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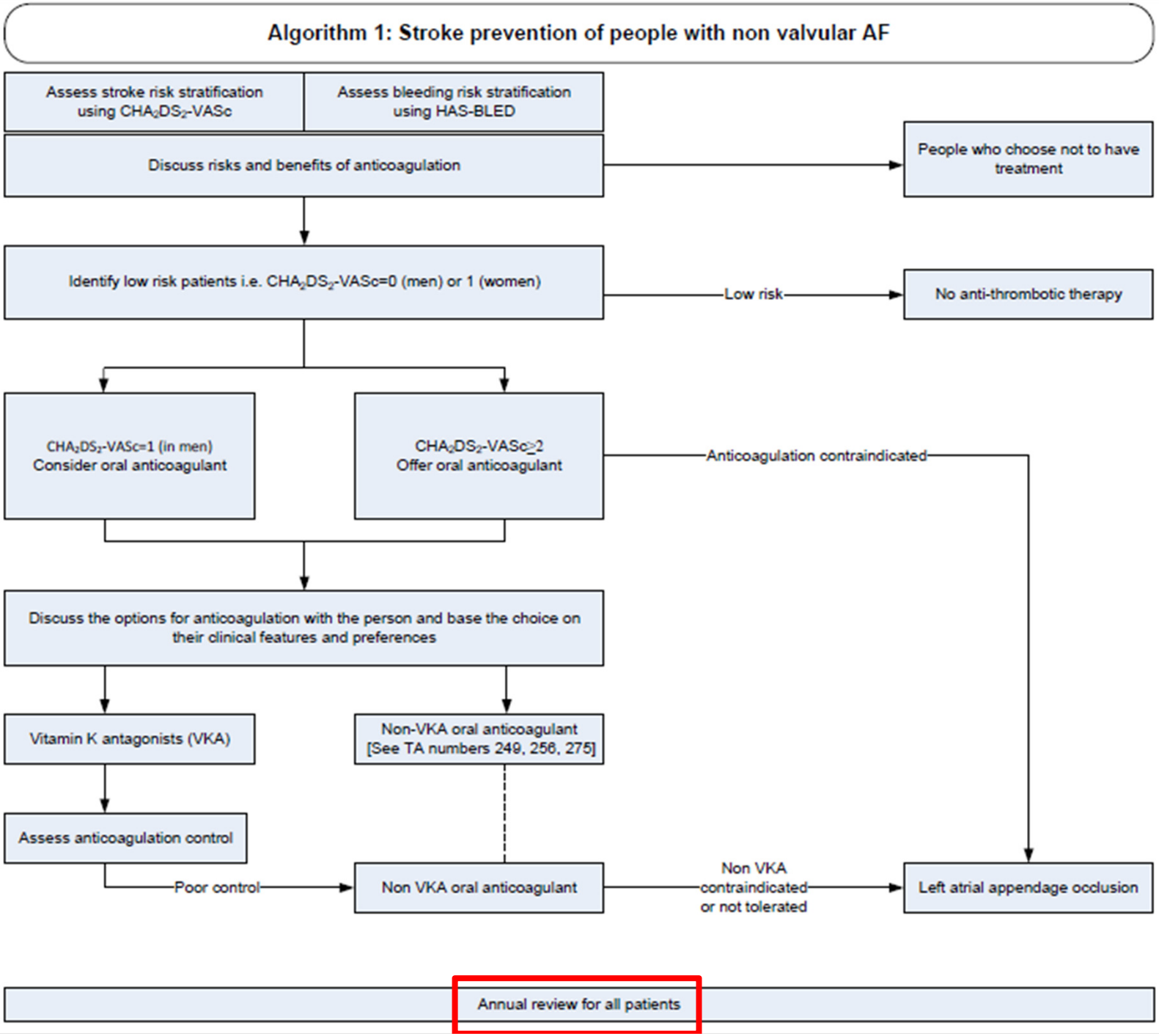
or not tolerated
Left atrial appendage occlusion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Annual review for all patients

Do not offer aspirin monotherapy solely for stroke prevention to people with atrial fibrillation. **[new 2014]**

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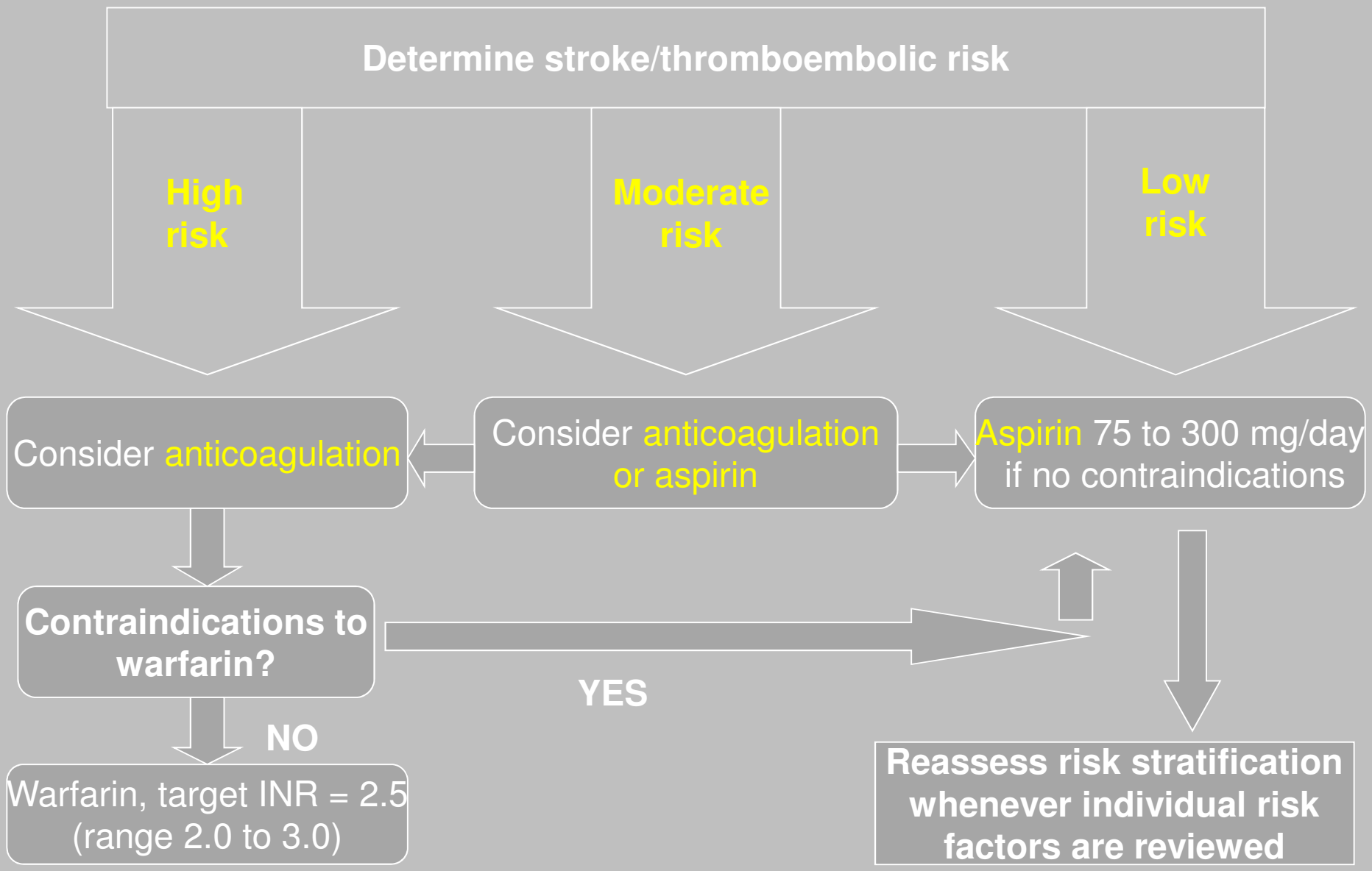
NICE 2006 Guideline



Overcoming Barriers

- The guideline has been simplified
- Aspirin removed

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- Aspirin removed
- “Faff factor” of warfarin

“Faff factor” of anticoagulation

- Need to make it easier for patients
- Reduce inconvenience of warfarin clinics
- Self monitoring

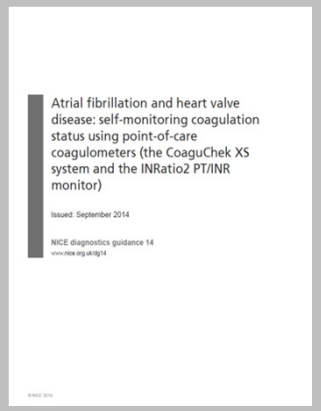
Atrial fibrillation and heart valve disease: self-monitoring coagulation status using point-of-care coagulometers (the CoaguChek XS system and the INRatio2 PT/INR monitor)

Issued: September 2014

NICE diagnostics guidance 14

www.nice.org.uk/dg14

NICE self monitoring guidance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Issued: September 2014

NICE diagnostics guidance 14
www.nice.org.uk/dg14

Self monitoring of coagulation status in adults and children on long term vitamin K antagonist therapy who have AF or heart valve disease is recommended if:

- *"the person prefers this form of testing*

  and
- *the person or their carer is both physically and cognitively able to self monitor effectively"*

“Faff factor” of anticoagulation

- Make it easier for patients
- Reduce inconvenience of warfarin clinics
- Home monitoring
- NOACs

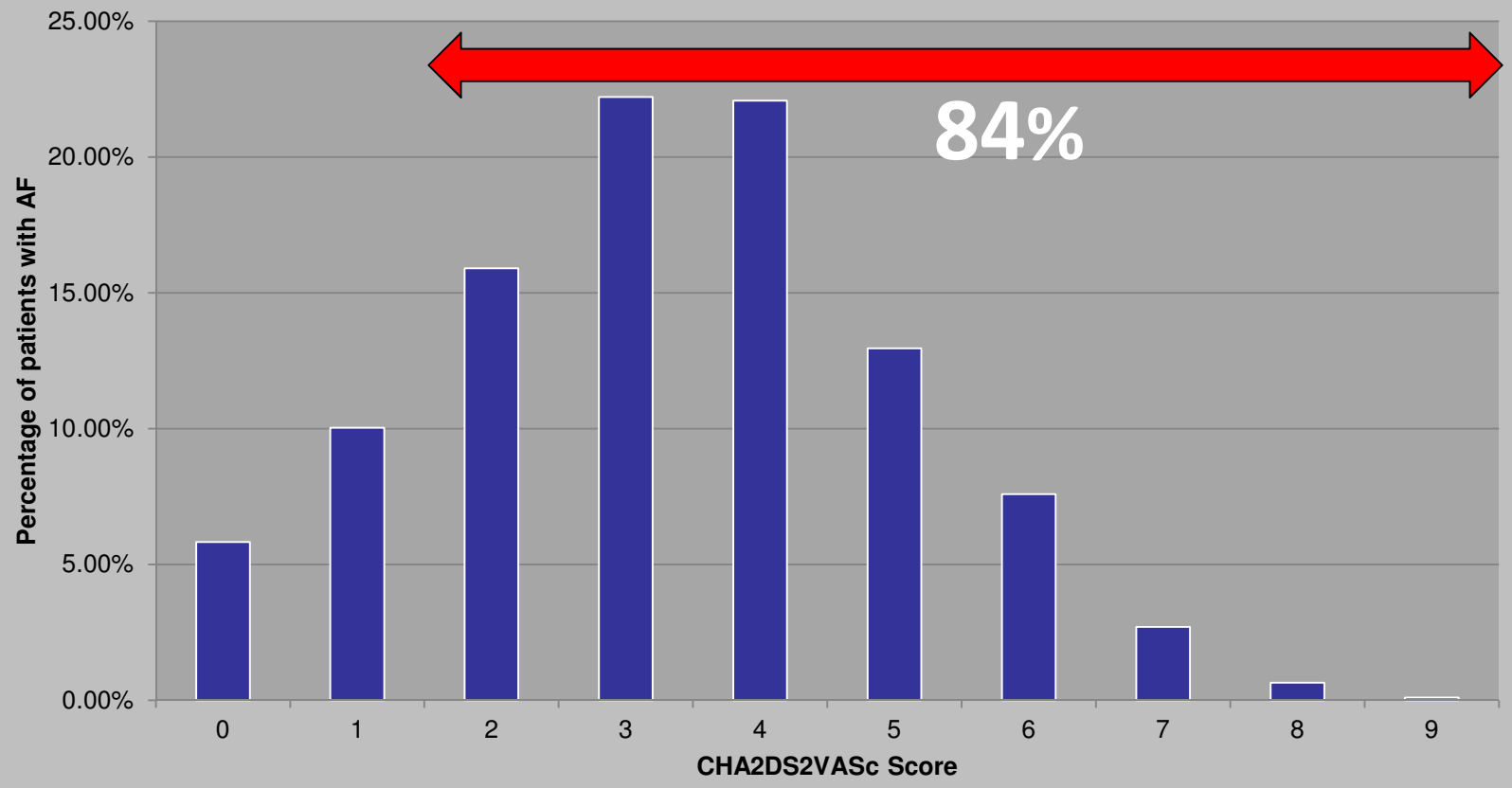
Overcoming Barriers

- The guideline has been simplified
- Aspirin removed
- “Faff factor” of warfarin
- Safety concerns

Safety concerns with anticoagulation

- Physicians are naturally concerned lest the therapy they initiate causes a serious bleed
- Can't identify patients who have been prevented from having a stroke – but can identify anticoagulant related bleeds
- 2014 guidance represents a paradigm shift towards anticoagulation being the "norm"
  - 84% of AF patients are CHADSVASC $\geq$ 2

Distribution of CHA_2DS_2VASc scores



What is the potential increase in numbers as a result of the new guideline?

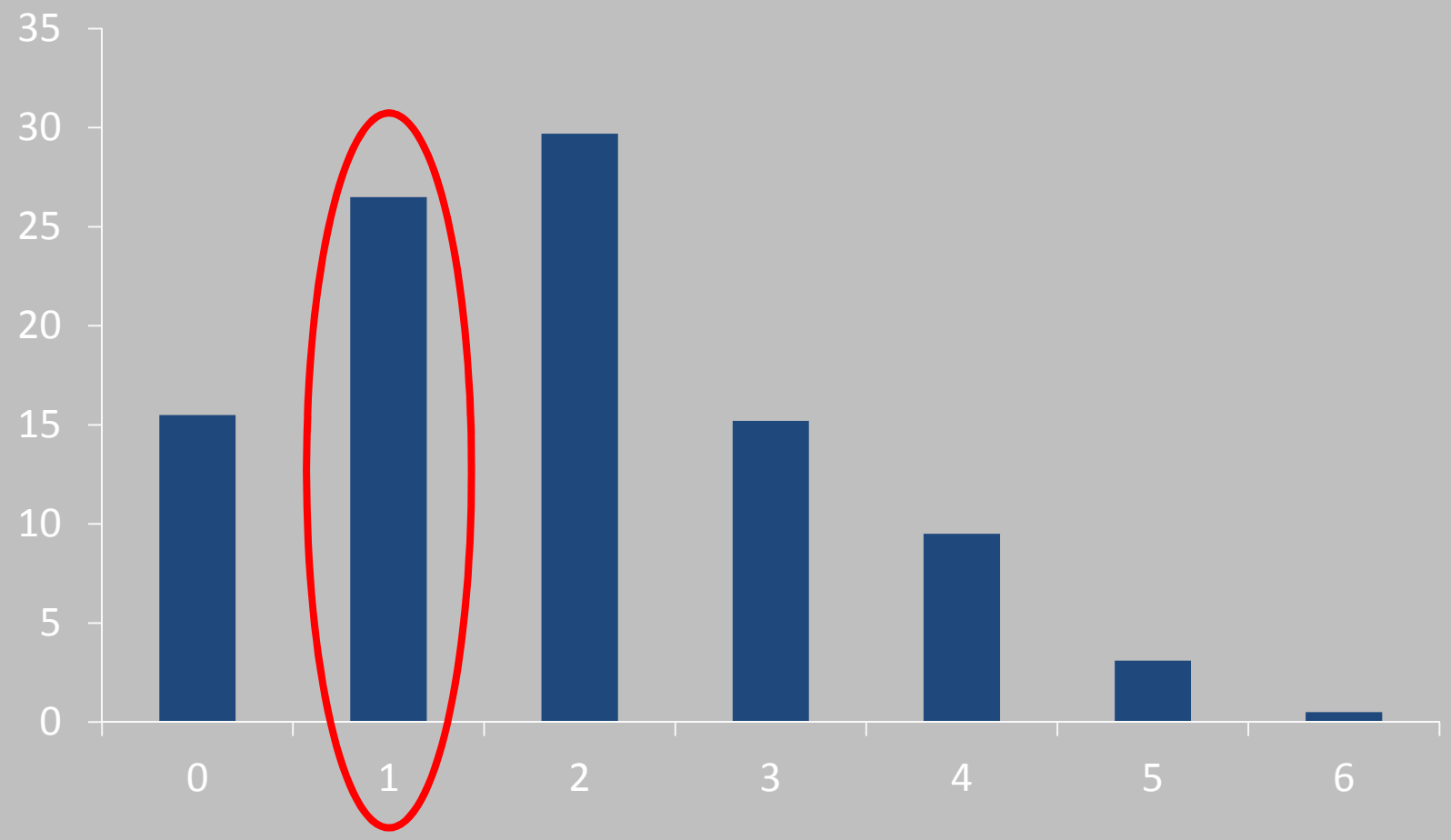
Total anticoagulation deficits

Conforming to 2006 recommendations, but currently untreated with oral anticoagulant (80% on aspirin)	169,000

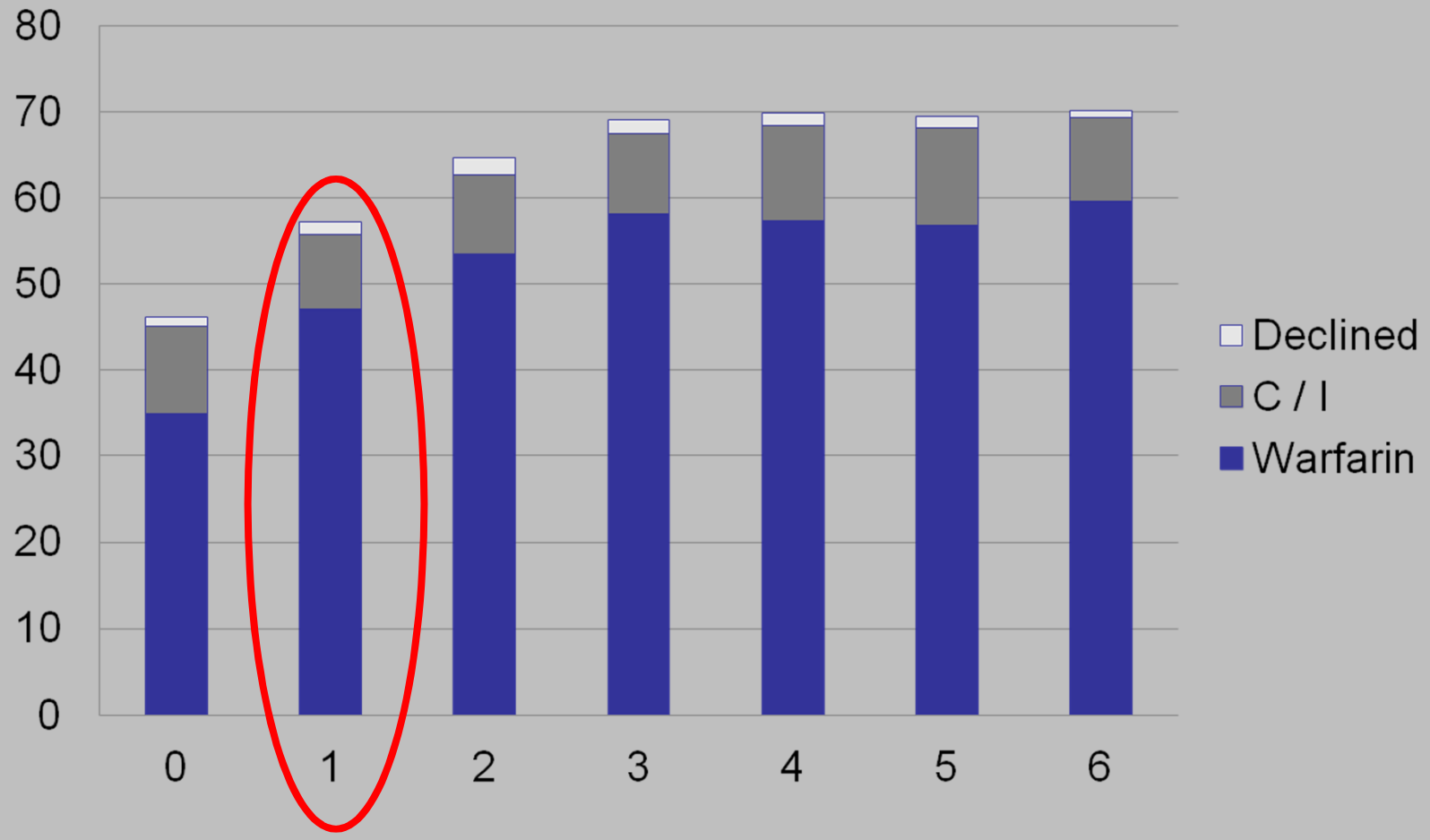
Total anticoagulation deficits

Conforming to 2006 recommendations, but currently untreated	169,000
Conforming to new recommendations, currently untreated	

Distribution of CHADS score



Warfarin treatment by CHADS Score



Total anticoagulation deficits

Conforming to 2006 recommendations, but currently untreated	169,000
Conforming to new recommendations, currently untreated	112,468

What else do we need to do to implement the 2014 guideline?

What else do we need to implement the 2014 guideline?

- Initial decision to commence anticoagulation
- Review recommendations

Decision to commence anticoagulation

- Explanation of stroke in AF
- CHADSVASC evaluation
- HASBLED evaluation
- Discussion of risks and benefits with patient

Decision to commence anticoagulation

- Explanation of stroke in AF
- CHADSVASC evaluation
- HASBLED evaluation
- Discussion of risks and benefits with patient

Choice of anticoagulant

- Assessment of clinical features
- Explanation of advantages / disadvantages of NOAC / Vit K
  - Convenience / Monitoring requirements
  - Compliance issues
  - Quality of anticoagulation
  - Safety / reversibility
  - Side effects
- Patient decision

? Extended anticoagulant clinic role

- Not just warfarin monitoring
- Initial clinical assessment and discussion to guide anticoagulant choice
- Continuing care for Vit K antagonist patients but NOAC care handed back to GP with advice on renal monitoring

Implications of NICE 2014 recommendations for annual review

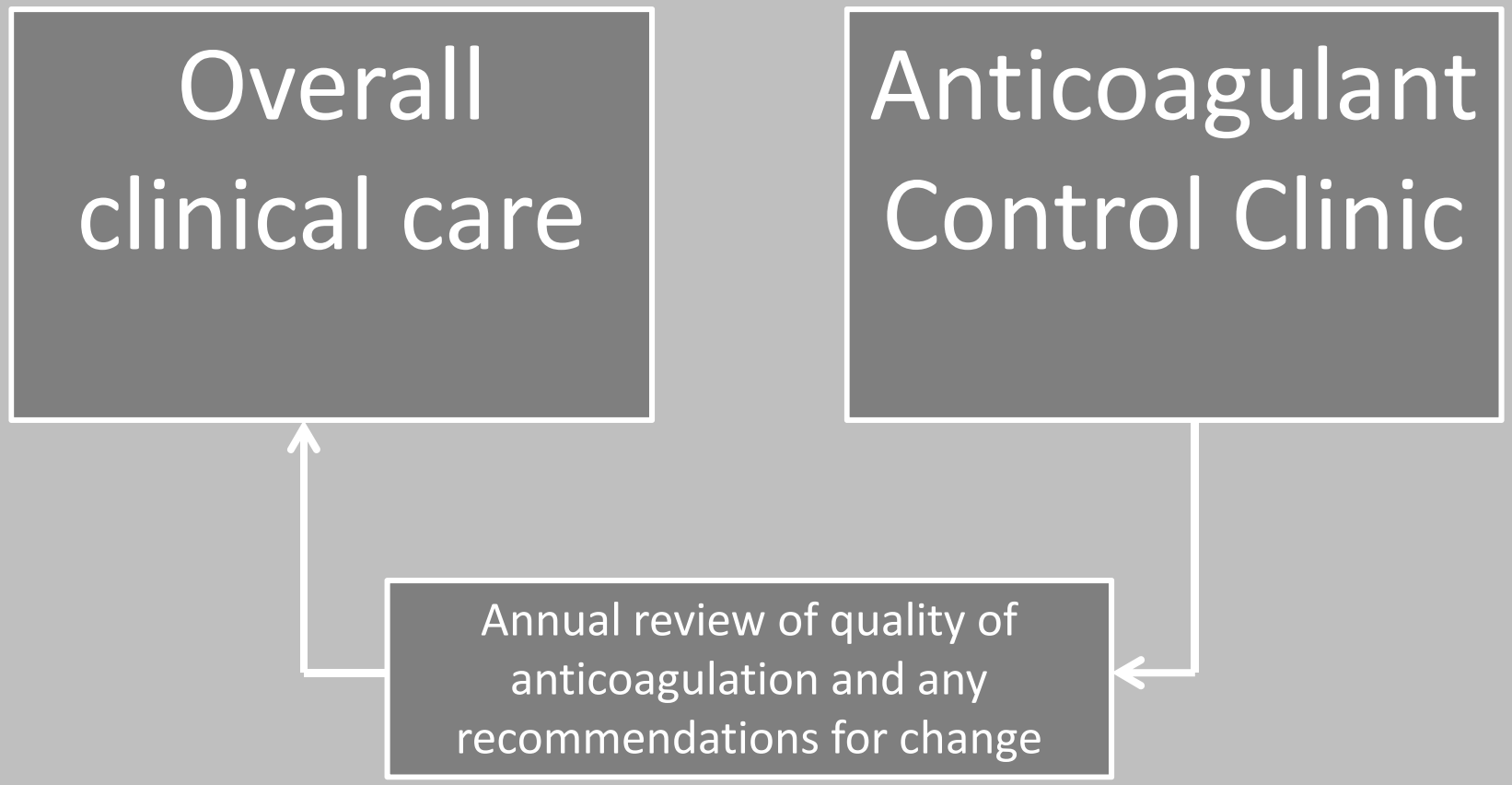
NICE 2014 annual review recommendations

– patients on an anticoagulant

- For people who are taking an anticoagulant, review the need for anticoagulation and the quality of anticoagulation at least annually, or more frequently if clinically relevant events occur affecting anticoagulation or bleeding risk.

NICE June 2014

Vitamin K antagonists annual review



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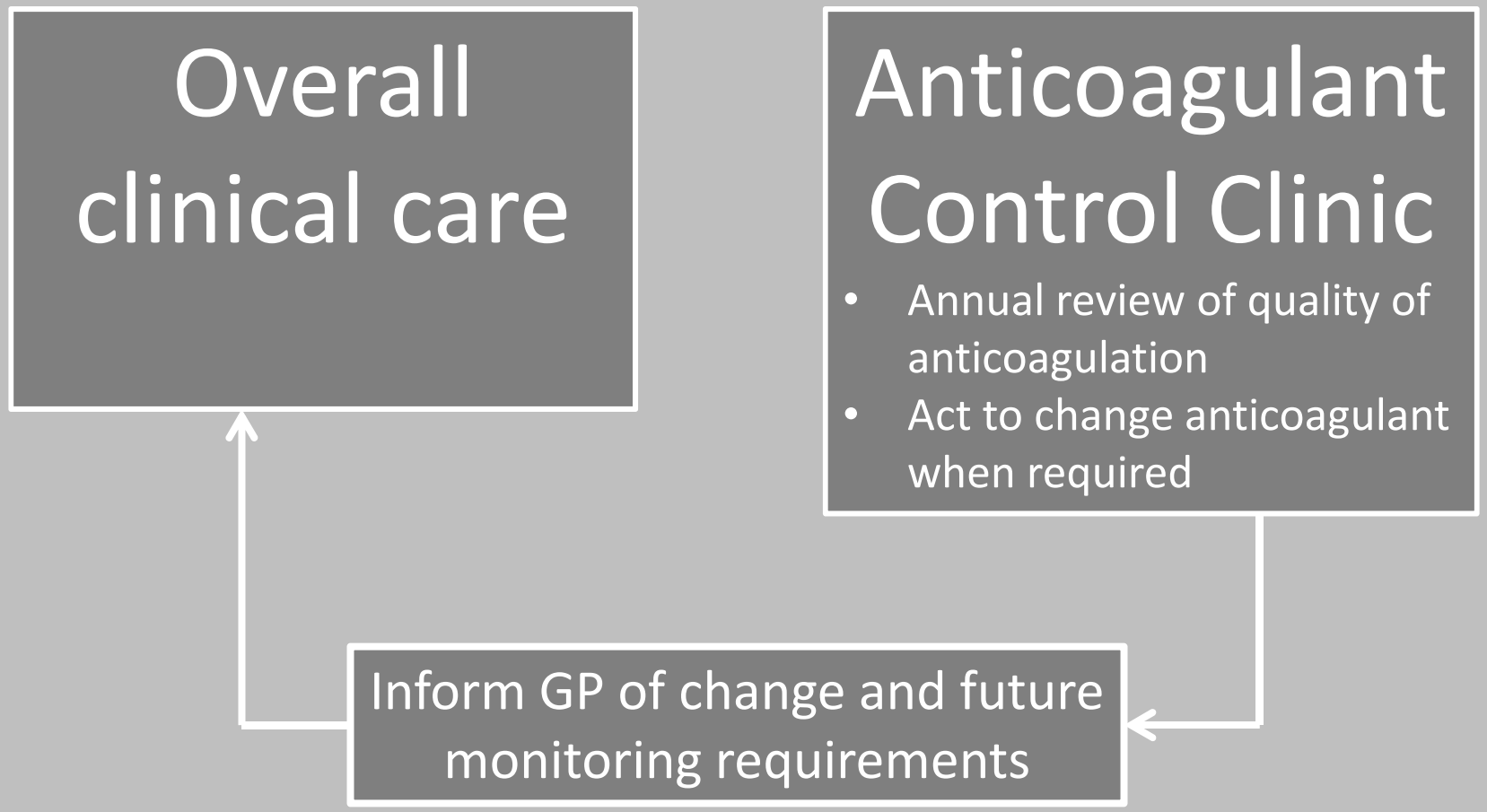

Conclusions I

The new NICE guidance helps address poor uptake of anticoagulation in AF in a number of ways

- Simplification of algorithms
- Removal of aspirin
- Change of paradigm so that anticoagulation is regarded as the norm
- Involvement of the patient in decision making
- Greater accessibility to NOACs
- Identifying low TTRs in warfarin patients and promoting change to NOACs
- Annual review of all patients with AF

Conclusions II

In addition there is a need for commissioners to address:

- Arrangements for commencing anticoagulation and choice of anticoagulant
- Arrangements for annual review of patients with AF most particularly those already receiving anticoagulants