This conversation tool is an online tool intended for use by a patient and clinician together in a clinical encounter in which they are discussing how to respond to the patient's risk of stroke due to nonvalvular atrial fibrillation (AF). The tool is intended to provide a supportive structure and information that patient and clinician may draw on during clinical conversations in various settings e.g. primary care, emergency department, cardiology and other specialty practices.

The tool begins by orienting patient and clinician to the conversation in which it will be used—the management of AF. The tool then moves to a CHA_2DS_2-VASc calculator that is used to review the medical situation with the patient. Based on the calculation, the tool then presents the patient's current risk of stroke without anticoagulation over 5 years (default) or 1 year (optional) through a prose description of natural frequencies and a pictogram. This presentation works to develop an initial appreciation of the problem facing patient and clinician—the patient's risk of stroke.

Next, the patient's risk of stroke with anticoagulation (without identifying a particular agent) is presented again through prose description and pictograph. This presentation works to introduce anticoagulation as an option, or hypothesis, for meeting the threat of AF.

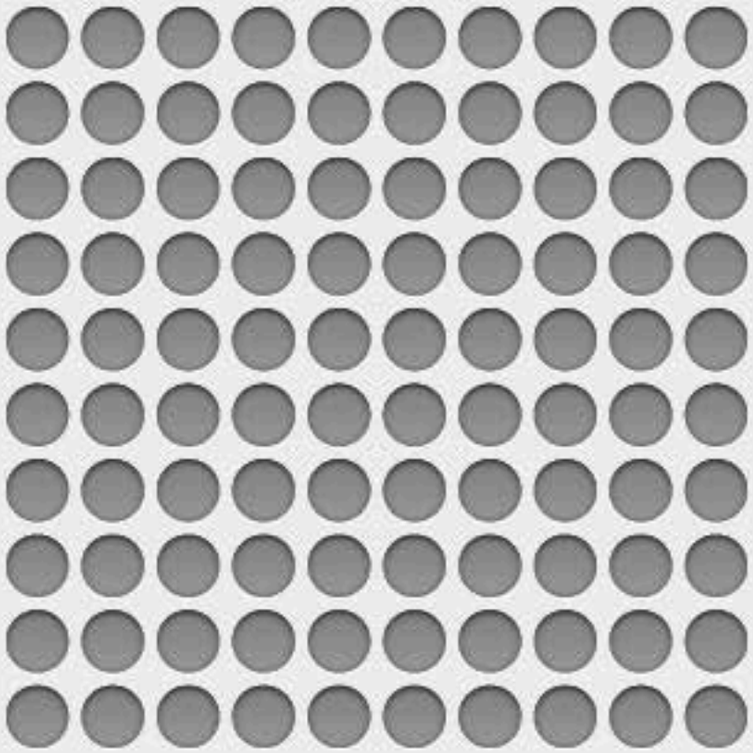
Patient and clinician can then make an initial appraisal of this hypothesis and if this appraisal suggests that anticoagulation is worth considering then the tool moves on to introduce two approaches to anticoagulation—Warfarin and Direct Anticoagulants.

Whether and how to anticoagulate as an option or hypothesis is further tested in conversation with support from the tool through consideration of the practical issues involved in bringing anticoagulation into the patient's life (issues of bleeding with anticoagulation, anticoagulation and INR testing in the patient's routine, reversal of anticoagulation, cost, diet and other medications).

These issues are presented through panels that compactly orient patient and clinician to the implications of the two approaches to anticoagulation. The issue of bleeding is supported through four levels of discussion—not all of which need be explored. The first level describes the bleeding events associated with anticoagulation ranging from bruising to the need for emergency treatment for life-threatening bleeding. As the latter is a very serious occurrence, the second level qualifies what this threat means. It does this through presentation of the increased occurrence with anticoagulation, for the average person (HAS-BLED 2), of emergency treatment for bleeding through a prose description and a pictogram. The third level invites reflection on risk factors in the patient's environment and activities. If warranted, a fourth level supports consideration of the patient medical factors that may affect the patient's bleeding risk. This discussion may be handled through review of the HAS-BLED factors, or through use of the included HAS-BLED calculator to determine if the patient is at lower than average risk (HAS-BLED<2], average risk, or higher than average risk.

The tool closes in the decision of whether to respond to this patient's threat of stroke through anticoagulation or not, and if anticoagulation is selected, how anticoagulation will be brought into the patient's life (Warfarin, or a direct anticoagulant). This final screen also contains an editable description of the decision for the medical record, along with the option to print a summary report of the discussion for the patient.

Details on the full developmental process of the ANTICOAGULATION CHOICE conversation tool is described elsewhere.



Welcome to the **Anticoagulation Choice** Decision Aid.

This tool will help you and your doctor discuss how to manage your Atrial Fibrillation

Let's get started

Caution: This application is for use exclusively during the clinical encounter with your clinician

MAYO CLINIC **Anticoagulation Choice**
Decision Aid

1 Year Risk
5 Year Risk

Medical Situation Risk of Stroke Anticoagulation Issues

CHA_2DS_2-VASC **2**

To begin, let's review your medical situation

Gender	M F
Age	68
History of Hypertension	III No
Congestive Heart Failure	III No
Stroke / TIA / Thromboembolism	III No
History of Vascular Disease	III No
Diabetes Mellitus	III No

Continue to consider your risk of stroke

○ 1 Year Risk
◉ 5 Year Risk

CHA$_2$DS$_2$-VASC **2**

Over the next 5 years

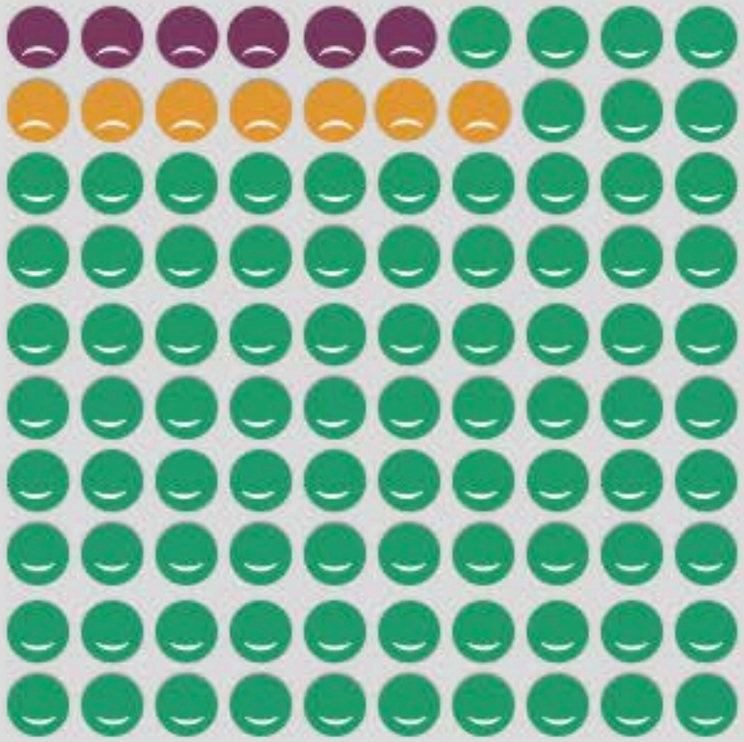
87 people will have no stroke

6 people will have a fatal or disabling stroke

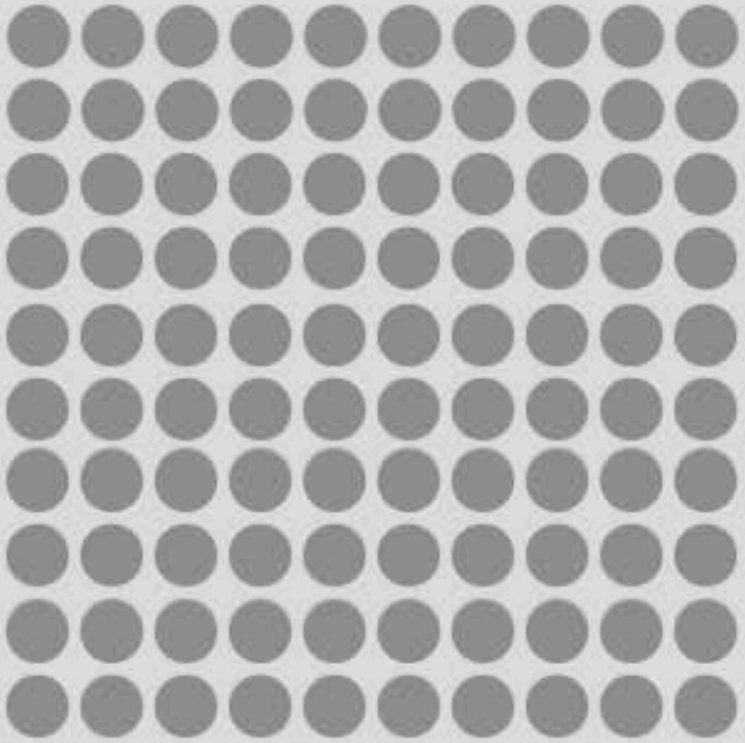
7 people will have a non-disabling stroke

Current Risk
of Stroke without Anticoagulation

In 100 people like you who **are not** taking an anticoagulant



With Anticoagulation



MAYO CLINIC

Anticoagulation Choice
Decision Aid

○ 1 Year Risk
◉ 5 Year Risk

Medical Situation | Risk of Stroke | **Anticoagulation** | Issues

CHA_2DS_2-VASC **2**

Current Risk
of Stroke without Anticoagulation

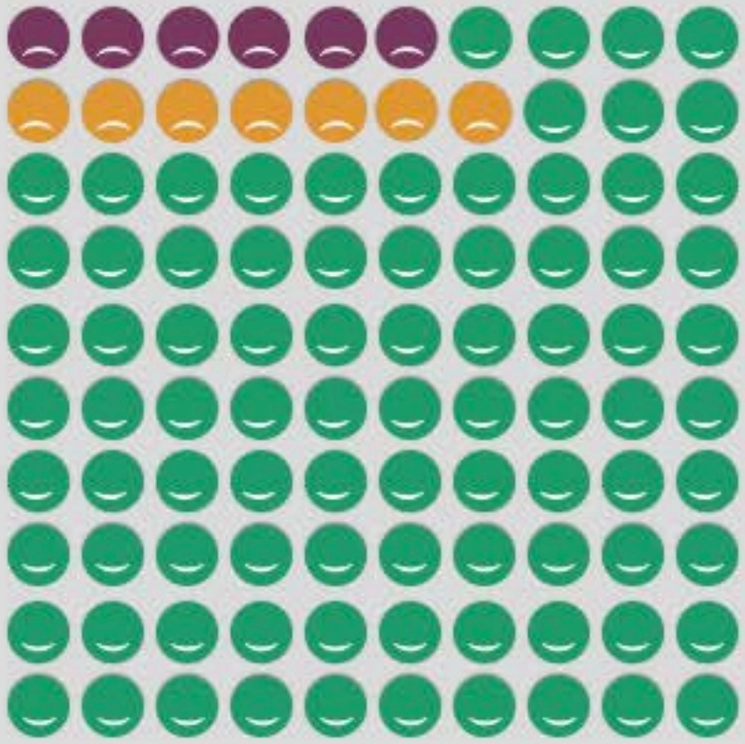
In 100 people like you who **are not** taking an anticoagulant

Over the next 5 years

87 people will have no stroke

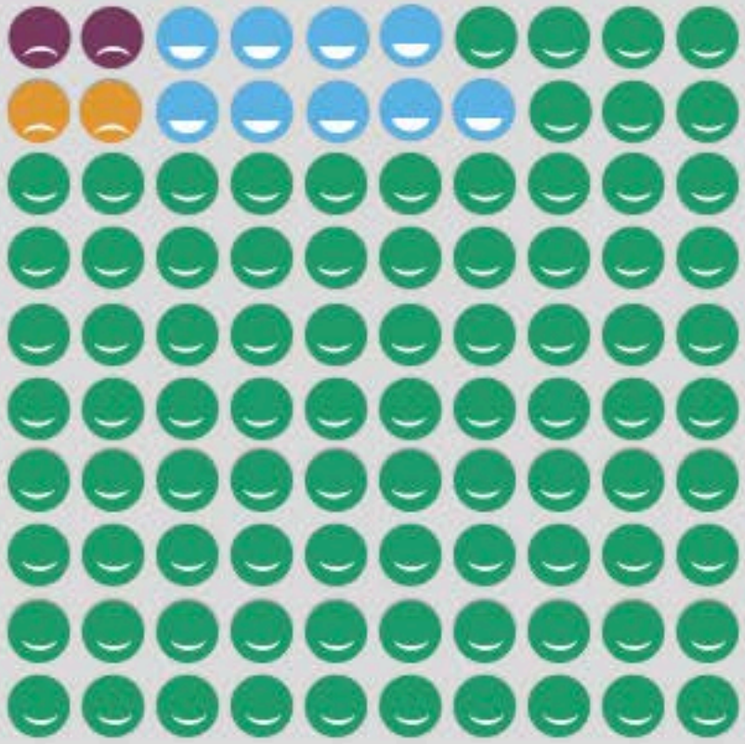
6 people will have a fatal or disabling stroke

7 people will have a non-disabling stroke



Future Risk
of Stroke with Anticoagulation

In 100 people like you who **are** taking an anticoagulant



Over the next 5 years

96 people will have no stroke

2 people will have a fatal or disabling stroke

2 people will have a non-disabling stroke

9 people will avoid a stroke by taking anticoagulation

MAYO CLINIC

Anticoagulation Choice
Decision Aid

1 Year Risk
5 Year Risk

Medical Situation | Risk of Stroke | Anticoagulation | **Issues**

CHA_2DS_2-VASC **2**

- Risk of Bleeding
- Anticoagulation Routine
- Reversing Anticoagulation
- Cost
- Diet & Medication Interactions

Diet & Medication Interactions

Warfarin ✚✚✚✚

Requires a stable diet.

Interacts with common foods, medications, and supplements.

Direct Anticoagulants ✚

Few interactions with food or medications.

Can you maintain the stable diet that Warfarin requires?

Anticoagulation Routine

Warfarin

Once daily — Regular blood tests

Direct Anticoagulants

Apixaban	*Eliquis*	AM	PM
Dabigatran	*Pradaxa*	AM	PM
Edoxaban	*Savaysa*	Once daily	
Rivaroxaban	*Xarelto*	Once daily	

Are you available to do the regular blood tests that Warfarin requires?

1 Year Risk
5 Year Risk

Medical Situation | Risk of Stroke | Anticoagulation | **Issues**

CHA2DS2-VASC **2**

- Risk of Bleeding
- Anticoagulation Routine
- Reversing Anticoagulation
- Cost
- Diet & Medication Interactions

Risk of Bleeding

When taking an Anticoagulant you may...

- bruise more easily
- bleed more easily
- require emergency treatment for life-threatening bleeding

Risk of needing emergency treatment

Reversing Anticoagulation

Warfarin

Medications to reverse the effects of Warfarin are

commonly available

Direct Anticoagulants

Medications to reverse the effects of Direct Anticoagulants are

not commonly available

1 Year Risk
5 Year Risk

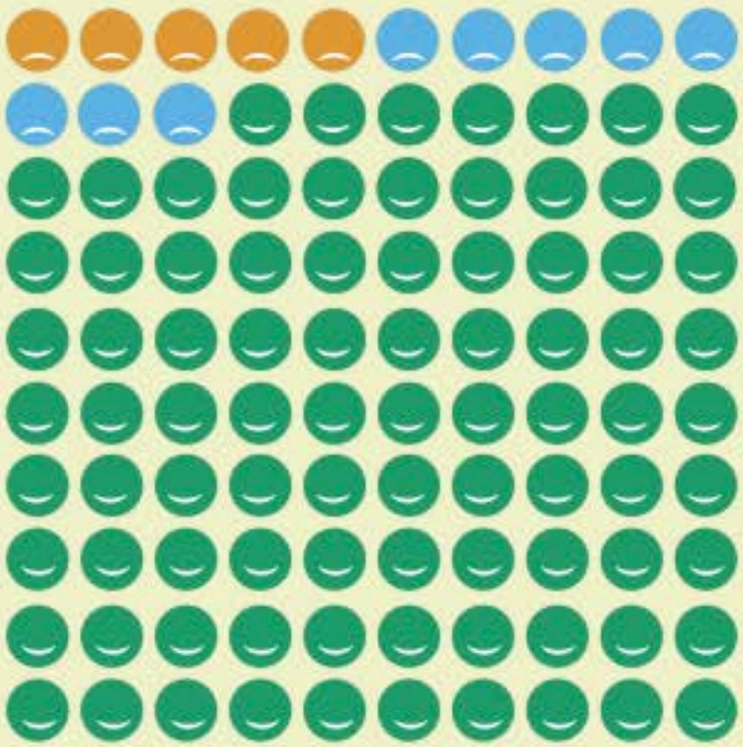
Medical Situation | Risk of Stroke | Anticoagulation | **Issues**

CHA_2DS_2-VASC **2**
HAS-BLED **1**

- Risk of Bleeding
- Anticoagulation Routine
- Reversing Anticoagulation
- Cost
- Diet & Medication Interactions

Five Year Risk of Bleeding

For Average Risk



In 100 people, over the next 5 years…

87 people will not need emergency treatment for bleeding

5 will need emergency treatment whether they take an anticoagulant or not

8 more people will need emergency treatment because they take an anticoagulant

Some bleeds are fatal

Your risk may be different
Discuss your risk factors

Exit

Risk of Bleeding

Anticoagulation Routine

Reversing Anticoagulation

Cost

Diet & Medication Interactions

Five Year Risk of Bleeding

Risk factors in your day-to-day life

Are there activities at work, home or during recreation where you might fall or hurt yourself?

Exit

Discuss your medical risk factors

1 Year Risk
5 Year Risk

CHA2DS2-VASC **2**
HAS-BLED **1**

Risk of Bleeding

Risk factors in your medical situation

Age	
Uncontrolled Hypertension	No
Renal Disease	No
Liver Disease	No
History of Stroke	No
Prior, or Predisposition to Bleeding	No
Unstable or High INR	No
Medication Predisposing Bleeding	No
More than 8 Drinks per Week	No

Exit

Medical factors associated with bleeding may put you at

- Lower than Average Risk
- Average Risk
- Higher than Average Risk

MAYO CLINIC

Anticoagulation Choice
Decision Aid

1 Year Risk
5 Year Risk

Medical Situation | Risk of Stroke | Anticoagulation | **Issues**

CHA_2DS_2-VASC **2**
HAS-BLED **3**

- **Risk of Bleeding**
- Anticoagulation Routine
- Reversing Anticoagulation
- Cost
- Diet & Medication Interactions

Five Year Risk of Bleeding

Risk factors in your medical situation

Age	68
Uncontrolled Hypertension	Yes / No
Renal Disease	Yes / **No**
Liver Disease	Yes / No
History of Stroke	Yes / **No**
Prior, or Predisposition to Bleeding	Yes / **No**
Unstable or High INR	Yes / **No**
Medication Predisposing Bleeding	Yes / **No**
More than 8 Drinks per Week	Yes / **No**

Exit

Higher than Average Risk

Over 5 years
18 more people out of 100 will need emergency treatment for bleeding because they take an anticoagulant
Some bleeds are fatal

serious bleed **without** anticoagulation
additional serious bleed **with** anticoagulation