



# CLINICAL PERFORMANCE MEASURES FOR ANTICOAGULATION IN PATIENTS WITH ATRIAL FIBRILLATION OR FLUTTER IN PRIMARY CARE SETTINGS

## Background

These performance improvement (PI) measures are based on the clinical practice guidelines published in *Circulation* in 2008<sup>1</sup> and the 2011 focused update to these guidelines.<sup>2</sup> In 2012, the published measures were modified to: (1) integrate oral anticoagulants approved after 2008 for thromboembolic risk reduction in patients with nonvalvular atrial fibrillation; and (2) add measures for patients with atrial fibrillation/flutter who are at moderate or low risk of stroke (the published guidelines<sup>1</sup> only included a measure for patients in the highest risk category).

The modifications were made by a group of clinical, educational, and quality improvement experts. A faculty committee consisting of cardiologists, hospitalists, and hospital-based pharmacists approved these modifications for use in the primary care PI projects. These PI projects were launched in 2012 as part of The Evolution of Anticoagulation Management—Atrial Fibrillation (TEAM-A) initiative (<http://www.teamanticoag.com/>).

Note: All measures assume using CHADS<sub>2</sub> to assess the stroke risk. If desired, these measures may be adjusted to include CHA<sub>2</sub>DS<sub>2</sub>-VASc.

## Measure Specifications

### Measure 1: Assessment of Thromboembolic Risk Factors

**Denominator:** All patients 18 years of age and older with nonvalvular atrial fibrillation or atrial flutter, except those in a defined exclusion category. Patients excluded from the denominator include:

- ▶ Patients with mitral stenosis or prosthetic heart valves
- ▶ Patients with transient or reversible causes of atrial fibrillation (e.g., pneumonia, hyperthyroidism)
- ▶ Postoperative patients
- ▶ Patients who are pregnant
- ▶ Patients with a documented medical reason for not using an oral anticoagulant (e.g., allergy to warfarin, risk of bleeding)

**Numerator:** Patients included in the denominator for whom all of the thromboembolic risk factors are documented. The risk factors include:

- ▶ Prior stroke or TIA
- ▶ Age > 75
- ▶ Diabetes
- ▶ Heart failure
- ▶ Hypertension

### Measure 2a: Chronic Anticoagulation Therapy for High-Risk Patients

**Denominator:** All patients 18 years of age and older with nonvalvular atrial fibrillation or atrial flutter with a CHADS<sub>2</sub> score = 2 or more, except those in a defined exclusion category. Patients excluded from the denominator are the same as for Measure #1.

**Numerator:** Patients included in the denominator who are prescribed warfarin or another indicated FDA-approved antithromboembolic medication.



## Measure 2b: Chronic Anticoagulation Therapy for Moderate-Risk Patients

**Denominator:** All patients 18 years of age and older with nonvalvular atrial fibrillation or atrial flutter with a CHADS<sub>2</sub> score = 1, except those in a defined exclusion category. Patients excluded from the denominator are the same as for Measure #1.

**Numerator:** Patients included in the denominator who are prescribed aspirin, warfarin, or another indicated FDA-approved antithromboembolic medication.

## Measure 2c: Chronic Anticoagulation Therapy for Low-Risk Patients

**Denominator:** All patients 18 years of age and older with nonvalvular atrial fibrillation or atrial flutter with a CHADS<sub>2</sub> score = 0, except those in a defined exclusion category. Patients excluded from the denominator are the same as for Measure #1.

**Numerator:** Patients included in the denominator who are prescribed aspirin. Also includes patients in the denominator who receive no anticoagulation therapy.

## REFERENCES

1. Estes NA, 3rd, Halperin JL, Calkins H, et al. ACC/AHA/Physician Consortium 2008 clinical performance measures for adults with nonvalvular atrial fibrillation or atrial flutter: a report of the American College of Cardiology/American Heart Association Task Force on Performance Measures and the Physician Consortium for Performance Improvement (Writing Committee to Develop Clinical Performance Measures for Atrial Fibrillation): developed in collaboration with the Heart Rhythm Society. *Circulation*. 2008;117(8):1101-1120.
2. Wann LS, Curtis AB, January CT, et al. 2011 ACCF/AHA/HRS focused update on the management of patients with atrial fibrillation (updating the 2006 guideline): a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *Circulation*. 2011;123(1):104-123.