



# Clinical fact sheet: atrial fibrillation screening and diagnostic work up<sup>1</sup>



- Atrial fibrillation (AF) occurs in 2-4% of the population in developed nations like Australia.
- 10% of all ischaemic strokes are associated with previously unknown AF

## The basics of screening for AF

- ✓ Screen all patients over 65 AND confirm suspected AF with electrocardiogram (ECG)
- ✓ Complete diagnostic work-up with echocardiography and thyroid function tests
- ✓ Identify and manage intercurrent risk factors and comorbidities

### 1. Screen all patients over 65 and confirm AF with ECG

*Stroke risk is similar for asymptomatic and symptomatic patients with AF.*

- Opportunistic point-of-care screening in the clinic or community should be conducted in people aged 65 years or more.
- This is most easily accomplished by pulse palpation, followed by a 12-lead ECG if irregular (to confirm the diagnosis)
- This screening can be incorporated into standard consultations or undertaken by practice nurses during chronic care consultations or immunisations.

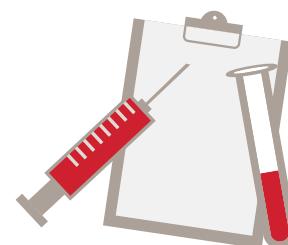
*AF meets the justification for screening, which is to find patients with unknown asymptomatic AF at high-enough risk of stroke to result in a reduction in stroke burden from combined screening and treatment*

***Patients with pacemakers and defibrillators will have their device interrogated regularly by their cardiologist***

### 2. Complete diagnostic work-up with echocardiography and thyroid function tests

Initial diagnostic work-up should include:

- **Full blood count**
- **Electrolytes**
- **Renal function**
- **Thyroid function**
  - A thyroid stimulating hormone test should be undertaken in patients with newly diagnosed AF but should be delayed in acutely ill patients.
- **Transthoracic echocardiography**
  - This can assist patient management by identifying valvular heart disease, and quantifying left ventricle function and atrial size.
  - Transoesophageal echocardiography can be considered when findings might affect patient management, primarily where electrical or pharmacological cardioversion is indicated



### 3. Identify and manage intercurrent risk factors and comorbidities

Cardiovascular risk factors are recognised contributors to the development of AF - the more risk factors that an individual has, the greater the likelihood that a person will develop AF and more persistent AF.

*Intercurrent risk factors and comorbidities—including hypertension, diabetes, heart failure, valvular heart disease and alcohol excess—should be identified and their management considered an important component of treatment in patients with AF.*

Treatment targets for risk factors shown to improve outcomes in AF include:



- **Intensive weight management** to a target of greater than or equal to 10% body weight loss, aiming for a body mass index below 27 kg/m<sup>2</sup>—and concomitant management of associated cardiovascular risk factors to target levels



- **Screening and management of sleep apnoea**, including maximal compliance with continuous positive airway pressure therapy if the apnoea-hypopnoea index is equal to or greater than 15/hour



- **Exercise** that improves aerobic capacity for up to 210 minutes per week



- **Blood pressure** of less than or equal to 130/80 mm Hg at rest



- **Diabetes** - an HbA1c of less than or equal to 6.5%



- **Lipids** - targets per overall cardiovascular risk profile



- **Smoking cessation**



- **Alcohol consumption** – limit to less than or equal to three standard drinks per week

#### References

1. Brieger D, et al. Heart, Lung and Circulation, 2018; 27(10): 1209-1266
2. Gattellari M, et al. Cerebrovascular Diseases, 2011; 32: 370-382



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