



## Cardiology Specialist Clinic Referral Guidelines

**The impact of COVID-19 has resulted in high demand for specialist clinic consultations. If there is a concern about the delay of the appointment, or any deterioration in the patient's condition, please send an updated referral with additional information.**

**Please submit all referrals for Cardiology through [BPAC](#).** This is our preferred referral path and all referrals should be submitted via this platform. Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

The clinical information provided in your referral will determine the triage category. The triage category will affect the timeframe in which the patient is offered an appointment.

You will be notified when your referral is received. Your referral may be declined if it does not contain essential information required for triage, or if the condition is not appropriate for referral to a public hospital, or is a condition not routinely seen at Bendigo Health.

**The following conditions are not routinely seen at Bendigo Health:**

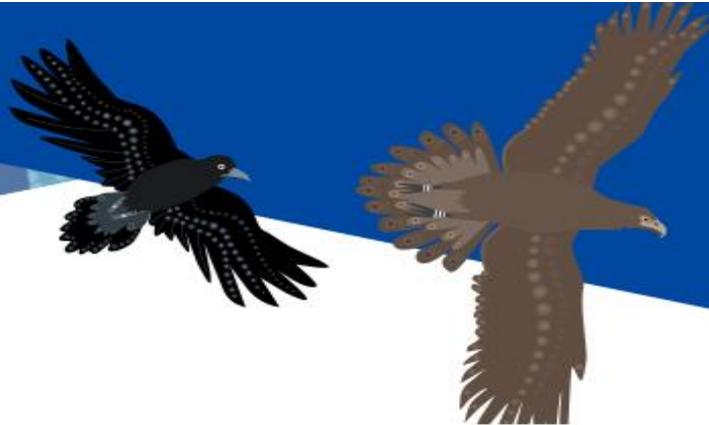
- Patients who are being treated for the same condition at another Victorian public hospital
- Children under 18 years of age

**Referral to Victorian public hospitals is not appropriate for:**

- Patients who are already under the care of a cardiologist
- Isolated event of atrial fibrillation that has resolved (e.g. post-infection).
- Patients with atrial fibrillation who are stable (that is heart rate is stable and the patient is on anticoagulation) and not for further active management.
- Patients with asymptomatic heart failure with a stable ejection fraction > 50% (HF-pEF.)
- Patients with high low-density lipoproteins (LDL) and with a low cardiovascular risk.
- Patients with palpitations < 10 minutes duration without any other cardiac symptoms.
- Patients with sinus arrhythmia.
- Patients with mild or brief orthostatic dizziness.
- Dizziness due to a medicine or hypoglycaemia.
- Dizziness due to chronic fatigue syndrome.

More information is available at the [Bendigo Health Cardiology](#) website

**Please note that the Cardiology Clinic does not have the capacity to monitor stable patients indefinitely. Patients will be stabilized and referred back to the GP with a management plan for ongoing care.**



## Demographic details and clinical information

Please refer to the Department of Health [Statewide Referral Criteria for Specialist Clinics](#) for further information when referring to Cardiology specialist clinics in public hospitals.

**Please include in your referral:**

Demographic details:	Clinical information:
<ul style="list-style-type: none"> <li>• Date of birth</li> <li>• Patient’s contact details including mobile phone number</li> <li>• Medicare number</li> <li>• Referring GP details</li> <li>• If an interpreter is required</li> <li>• If a person identifies as being of Aboriginal or Torres Strait Islander origin</li> <li>• Medical treatment decision-maker, support person or carer (if any)</li> </ul>	<ul style="list-style-type: none"> <li>• Reason for referral</li> <li>• Duration of symptoms</li> <li>• Previous treatment and response to this treatment</li> <li>• Impact on the patients quality of life</li> <li>• Relevant pathology and imaging reports</li> <li>• Relevant past medical history</li> <li>• Relevant family history</li> <li>• Current medications</li> </ul>

Some clinics offer an MBS-billed service. There is no out of pocket expense to the patient. MBS-billed services require a current referral to a **named** specialist – please provide your patient with a 12-month referral addressed to the specialist of your choice.

Please note that your patient may be seen by another specialist in that clinic in order to expedite his or her treatment. The times to assessment may vary depending on size and staffing of the hospital department.

**If you are concerned about the timeframe of the outpatient appointment, or if there is any change or deterioration in the patient’s condition, please send an updated referral with additional information.**

**If you require an urgent specialist opinion - please contact the [Bendigo Health Switchboard on 5454 6000](#) and ask to be put through to the [Cardiology Registrar \(Choose Option 1- external enquiries\)](#)**



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## Cardiac arrhythmias

Atrial fibrillation or flutter

[DHHS Statewide Referral Criteria](#) apply for this condition.

### Direct to the Emergency Department:

- Recent onset atrial fibrillation with any of the following:
  - Haemodynamic instability
  - Shortness of breath
  - Chest pain
  - Heart failure
  - Current syncope or pre-syncope
  - Sustained heart rate > 150 beats per minute
  - Known Wolff-Parkinson-White syndrome.

### Criteria for referral to public hospital Specialist Clinic services:

- Recurrent paroxysmal atrial fibrillation.
- Atrial fibrillation where anticoagulation is contraindicated
- Atrial fibrillation with reduced left ventricular function or moderate valvular disease
- Atrial fibrillation that is unresponsive to medical management and that requires further advice on, or review of, the current management plan.

### Information to be included in the referral.

Information that **must** be provided:

- Details of all relevant signs and symptoms
- Current and previous 12 lead electrocardiogram (ECG) tracings, particularly those demonstrating the arrhythmia
- Details of previous medical management including the course of treatment and outcome of treatment
- Current and complete medication history (including non-prescription medicines, herbs and supplements)
- Past medical history and comorbidities
- Liver function tests
- Urea and electrolyte results
- Full blood examination results
- Thyroid stimulating hormone (TSH) level.

### Provide if available:

- Any family history of cardiac disease or sudden cardiac death
- Results of other investigations (e.g. echocardiogram, chest x-ray, Holter monitor, sleep studies)
- International normalised ration (INR) result
- CHA2DS2-VA risk score
- If the person has a limited life expectancy
- If the person identifies as an Aboriginal and/or Torres Strait Islander
- If symptoms are thought to be linked to probable or confirmed SARS CoV-2 (COVID-19) infection or Long COVID.

**Additional comments:**

Please include the essential [demographic details and clinical information](#) in the referral. The referral should note if the request is for a second or subsequent opinion.

Note: there are also cardiology statewide referral criteria for Palpitations. Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

**Referral to a public hospital is not appropriate for:**

- Isolated event of atrial fibrillation that has resolved (e.g. post-infection).
- Patients that are stable (that is heart rate is stable and the patient is on anticoagulation) and not for further active management.
- Patients that are already under the care of a cardiologist.

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## Supraventricular tachycardia

**Direct to the Emergency Department:**

- If acute and symptomatic.

**Immediately contact the cardiology registrar to arrange an urgent cardiology assessment for:**

- Recurrent episodes, depending on the severity and associated symptoms.

**Evaluation****Key Points:**

- History:
  - Associated cardiac symptoms, particularly syncope, angina and dyspnoea
  - Provoking and aggravating factors
  - Known cardiac history
  - Other non-cardiac history, particularly thyroid dysfunction

**Investigations:**

- ECG [BPAC](#)
- Echocardiogram [BPAC](#)
- Holter monitor [BPAC](#)
- If available:
  - TFTs
  - CXR [BPAC](#)

**Additional information:**

Please include the essential [demographic details and clinical information](#) in the referral. Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

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## Palpitations

[DHHS Statewide Referral Criteria](#) apply for this condition.

### **Direct to the Emergency Department for:**

- Palpitations with any of the following:
  - Shortness of breath
  - Chest pain
  - Heart failure
  - Syncope, pre-syncope or loss of consciousness
  - Persisting tachyarrhythmia on electrocardiogram (ECG).

### **Criteria for referral to public hospital specialist clinic services:**

Palpitations with any of the following:

- Abnormal electrocardiogram (ECG)
- Abnormal echocardiogram
- Other cardiac disease
- Functional impact of symptoms on daily activities including impact on work, study or carer role.

### **Information to be included in the referral.**

Information that **must** be provided:

- Details of all relevant signs and symptoms including the duration and frequency of the episodes of palpitations
- Current and previous 12 lead electrocardiogram (ECG) tracings, particularly those during the episodes of palpitations
- Current and complete medication history (including non-prescription medicines, herbs and supplements)
- History of underlying cardiac disease
- Any family history of sudden cardiac death
- Urea and electrolyte results
- Liver function tests
- Thyroid stimulating hormone (TSH) level.

### **Provide if available:**

- Details of previous hospital admissions or presentations to emergency department for palpitations
- Holter monitor report
- Echocardiogram report

- If the person identifies as an Aboriginal and /or Torres Strait Islander
- If symptoms are thought to be linked to probable or confirmed SARS CoV-2 (COVID-19) infection or Long COVID.

**Additional comments:**

Please include the essential [demographic details and clinical information](#) in the referral. The referral should note if the request is for a second or subsequent opinion as requests for a second opinion will not be accepted.

Note: there are also [cardiology statewide referral criteria for atrial fibrillation](#). Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

**Referral to a public hospital is not appropriate for:**

- Patients with palpitations < 10 minutes duration without any other cardiac symptoms
- Patients with sinus arrhythmia
- Patients that are already under the care of a cardiologist.

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## Syncope/presyncope

[DHHS Statewide Referral Criteria](#) apply for this condition.

**Direct to the Emergency Department for:**

- Syncope or pre-syncope with any of the following:
  - Exertional onset
  - Chest pain
  - Persistent hypotension (systolic blood pressure < 90 mmHg) or bradycardia (< 50 beats per minute) on electrocardiogram (ECG)
  - Evidence of second, or third-degree block on electrocardiogram (ECG)
  - Severe, persistent headache
  - Focal neurological deficits
  - Preceded by, or associated with, palpitations
  - Known ischaemic heart disease or reduced left ventricular systolic function
  - Associated with supraventricular tachycardia (SVT) or paroxysmal atrial fibrillation
  - 'Pre-excited' QRS wave on electrocardiogram (ECG)
  - Suspected malfunction of a pacemaker or implantable cardioverter defibrillator (ICD)
  - Absence of prodrome
  - Associated injury
  - Occurs while supine or sitting.

**Criteria for referral to public hospital specialist clinic services:**

- New episode(s) of syncope or pre-syncope (after any emergency assessment)
- Recurrent syncope with undetermined cause.

**Information to be included in the referral.**

Information that **must** be provided:

- Description of syncopal or pre-syncopal events and associated features
- Lying or sitting/standing blood pressure
- Relevant medical history
- Any family history of sudden cardiac death or cardiac disease
- Recent electrocardiogram (ECG) tracings, relevant to syncopal or pre-syncopal events
- Current and complete medication history (including non-prescription medicines, herbs and supplements and recreational or injectable drugs).

**Provide if available:**

- Any imaging results that show the presence of impaired left ventricular function
- Holter monitor report
- Echocardiogram report
- Recent urea and electrolytes
- Recent full blood examination
- Recent thyroid stimulating hormone (TSH) level
- If the person identifies as an Aboriginal and Torres Strait Islander.

**Additional comments:**

Please include the essential [demographic details and clinical information](#) in the referral.

Note: there are also neurology and ENT statewide referral criteria for Vertigo.

Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

**Referral to a public hospital is not appropriate for:**

- Patients with mild or brief orthostatic dizziness
- Dizziness due to a medicine or hypoglycaemia
- Dizziness due to chronic fatigue syndrome.

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## Cardiac failure

[DHHS Statewide Referral Criteria](#) apply for this condition.

### Direct to the Emergency Department for:

- New acute, or chronic heart failure that is rapidly deteriorating, with any of the following:
  - Ongoing chest pain
  - Acute pulmonary oedema
  - Oxygen saturation < 94% (in the absence of any other reasons)
  - Haemodynamic instability
  - Syncope or pre-syncope
  - Recent myocardial infarction (within 2 weeks)
  - Pregnant or post-partum woman
- New heart failure that has not responded to initial and escalated treatment with diuretic therapy.

### Criteria for referral to public hospital specialist clinic services:

- Known heart failure with symptoms unresponsive to medical management (e.g. symptoms at rest, or on minimal exertion)
- New onset heart failure with reduced ejection fraction < 50% (HF-rEF) and structural or valvular heart disease
- New onset heart failure with preserved ejection fraction (HF-pEF) that have failed maximum tolerated diuretic treatment.

### Information to be included in the referral.

Information that **must** be provided:

- Details of all relevant signs and symptoms
- 12 lead electrocardiogram (ECG) tracings from the last 12 months
- Echocardiogram report
- Any medicines previously tried, duration of trial and effect
- Current and complete medication history (including non-prescription medicines, herbs and supplements)
- Past medical history and comorbidities
- Liver function tests
- Urea and electrolyte results
- Full blood examination
- Thyroid stimulating hormone (TSH) level
- Fasting lipid profile results
- If diabetic, current and previous HbA1c.

### Provide if available:

- New York Heart Association Functional Classification (NYHA) class status
- Chest x-ray
- Sleep studies
- Stress test
- Respiratory function tests (if the patient is a smoker or has chronic obstructive pulmonary

disease or asthma)

- Previous 12 lead electrocardiogram (ECG) tracings
- Iron studies
- If the person identifies as an Aboriginal and Torres Strait Islander.

**Additional information:**

Please include the essential [demographic details and clinical information](#) in your referral. The referral should include if this is a request for a second or subsequent opinion. Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

**Referral to a public hospital is not appropriate for:**

- Patient with asymptomatic heart failure with a stable ejection fraction > 50% (HF-pEF)\*
- Patients that are already under the care of a cardiologist.

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## Cardiac murmurs

### Direct to the Emergency Department:

- If endocarditis is suspected.

### Immediately contact the cardiology registrar to arrange an urgent cardiology assessment:

- If symptomatic

### Evaluation

#### Key Points:

- History:
  - Associated cardiac failure
  - Rapidly progressive symptoms
  - Associated angina or syncope
  - History of rheumatic fever

#### Investigations:

- ECG [BPAC](#)
- CXR [BPAC](#)

#### Additional information:

Please include the essential [demographic details and clinical information](#) in your referral.

Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

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## Hypertension

[DHHS Statewide Referral Criteria](#) apply for this condition.

### Direct to the Emergency Department for:

- Hypertensive emergency (blood pressure > 220/140)
- Severe hypertension with systolic blood pressure > 180 mmHg with any of the following:
  - Headache
  - Confusion
  - Blurred vision
  - Retinal haemorrhage
  - Reduced level of consciousness
  - Seizure(s)
  - Proteinuria
  - Papilloedema
- A pregnant woman with pre-eclampsia with uncontrolled severe hypertension (i.e. diastolic blood pressure > 110 mmHg or systolic blood pressure > 170 mmHg).

### Criteria for referral to public hospital specialist clinic services:

- Severe persistent hypertension > 180/110
- Refractory hypertension (blood pressure > 140/90) in patients:
  - Taking three or more antihypertensive medicines
  - Unable to tolerate maximum treatment.

### Information to be included in the referral.

Information that **must** be provided:

- Blood pressure measurements, preferably taken on both arms
- Details of all relevant signs and symptoms
- Relevant medical history and comorbidities
- Any treatments previously tried, duration of trial and effect
- Current and complete medication history (including non-prescription medicines, herbs and supplements and recreational or injectable drugs).

### Provide if available:

- History of smoking and alcohol intake
- Liver function tests
- Full blood examination results
- Fasting lipids profile results
- Estimated glomerular filtration rate (eGFR)
- Urinalysis results
- Urine protein tests results
- Renal artery duplex report (if renal artery stenosis is suspected and report is available)
- Previous 12 lead electrocardiogram (ECG) tracings
- Echocardiogram report
- If the person is pregnant or planning pregnancy
- If the person identifies as an Aboriginal and Torres Strait Islander.

**Additional comments:**

Please include the essential [demographic details and clinical information](#) in the referral.

Consider the possibility of secondary hypertension in younger patients.

See also obstetrics statewide referral criteria for [Pre-Eclampsia](#) and [Maternal medical conditions](#) (which includes referrals for severe refractory hypertension).

Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

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## Lipid disorders

[DHHS Statewide Referral Criteria](#) apply for this condition.

### Criteria for referral to public hospital specialist clinic services:

- Total triglyceride > 5 mmol/L unresponsive to medical management
- Low density lipoproteins (LDL) > 3.5 mmol/L in patients on treatment with high-risk cardiovascular disease (e.g. prior acute coronary syndrome)
- Difficult to control low-density lipoproteins (LDL) > 3.3 mmol/L in patients with coronary heart disease and with familial hypercholesterolaemia.

### Information to be included in the referral.

Information that **must** be provided:

- Recent fasting lipid profile results
- Relevant medical history and comorbidities, especially cardiovascular diseases
- Any treatments previously tried, duration of trial and effect
- Current and complete medication history (including non-prescription medicines, herbs and supplements).

### Provide if available:

- History of smoking and alcohol intake
- Any family history of hyperlipidaemia
- Creatine kinase levels
- Liver function tests
- Thyroid stimulating hormone (TSH) level
- If diabetic current and previous HbA1c results
- Any imaging results that show the presence of cardiovascular disease
- Coronary artery calcium score (if already performed)
- If the person identifies as an Aboriginal and Torres Strait Islander.

### Additional comments:

Please include the essential [demographic details and clinical information](#) in the referral.

Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

### Referral to a public hospital is not appropriate for:

Patients with high low-density lipoproteins (LDL) and with a low cardiovascular risk.

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## Chest pain

### Acute chest pain

[DHHS Statewide Referral Criteria](#) apply for this condition.

#### **Direct to the Emergency Department for:**

- Suspected pulmonary embolism or aortic dissection
- Suspected acute coronary syndrome with any of the following:
  - Severe or ongoing chest pain
  - Chest pain lasting 10 minutes or more
  - Chest pain that is new at rest, or with minimal activity
  - Chest pain with any of the following:
    - Severe dyspnoea
    - Syncope or pre-syncope
    - Respiratory rate > 30 breaths per minute
    - Tachycardia > 120 beats per minute
    - Systolic blood pressure < 90 mmHg
    - Heart failure or suspected pulmonary oedema
    - ST segment elevation or depression
    - Complete heart block
    - New left bundle branch block.

#### **Criteria for referral to public hospital specialist clinic services:**

- New or recurrent cardiac chest pain without any current acute concerning features.

#### **Information to be included in the referral.**

Information that **must** be provided:

- Description of relevant signs or symptoms
- Relevant medical history and comorbidities
- Relevant electrocardiogram (ECG) tracings
- Current and complete medication history (including non-prescription medicines, herbs and supplements and recreational or injectable drugs).

#### **Provide if available:**

- Treatments previously tried, duration of trial and effect
- Any family history of sudden cardiac death or cardiac disease
- History of smoking and alcohol intake
- Cardiovascular disease risk assessment
- Functional status assessment
- Any relevant x-ray, imaging or investigation results (e.g. cardiac imaging, stress test, myocardial perfusion scan, troponin test)
- Liver function tests
- Full blood examination results
- Fasting lipid profile results

- If diabetic current and previous HbA1c results
- If the person identifies as an Aboriginal and/or Torres Strait Islander
- If symptoms are thought to be linked to probable or confirmed SARS CoV-2 (COVID-19) infection or Long COVID.

**Additional information:**

Please include the essential [demographic details and clinical information](#) in your referral.

The referral should include if this is a request for a second opinion.

Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

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## Chronic chest pain

### Evaluation

**Key Points:**

- Coexisting disease
- Associated symptoms
- Risk factors
- Family history
- Medications
- Fasting lipids.

**Investigations:**

- If available:
  - FBE
  - U&E, Cr
  - Blood glucose
  - ECG [BPAC](#)

**Additional information:**

Please include the essential [demographic details and clinical information](#) in your referral.

Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

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## Angina pectoris

### Direct to the Emergency Department:

- AMI or acute unstable angina.

### Immediately contact the cardiology registrar to arrange urgent cardiology assessment for:

- New onset angina
- Stable angina, depending on severity
- If prolonged, severe worsening pattern.

## Evaluation

### Key Points:

- Risk factors
- Family history
- Medications
- Fasting lipids.

### Investigations:

- If available:
  - FBE
  - U&E, Cr
  - Blood glucose
  - ECG [BPAC](#)

### Additional information:

Please include the essential [demographic details and clinical information](#) in your referral.

Where appropriate and available, the referral may be directed to an alternative specialist clinic or service.

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## Tests and procedures

Further Information regarding Cardiology Investigations and eligibility criteria is available on [Murray Health Pathways](#).

**Please review the criteria and ensure your patient meets these prior to referral.**

### ECGs

Direct referrals for ECGs can be made without review by a Cardiologist.

### Echocardiography

Direct referrals for echocardiography can be made without review by a Cardiologist.

### Exercise tests

Direct referrals for exercise testing can be made without review by a Cardiologist.

### Cardiac Catheterization

Patients must be reviewed by a cardiologist prior to undergoing testing.

### Electrophysiological Studies

Patients must be reviewed by a cardiologist prior to undergoing testing.

### Holter Monitoring

Direct referrals for Holter monitoring can be made without review by a Cardiologist.

### Ambulatory Blood Pressure

Patients must be reviewed by a Cardiologist prior to undergoing testing. Direct referrals for ambulatory blood pressure monitoring are not accepted.

### Cardiac MRI

Patients must be reviewed by a Cardiologist prior to undergoing testing. Direct referrals for cardiac MRI are not accepted.

### Coronary CT angiography

Patients must be reviewed by a Cardiologist prior to undergoing testing.

### Structural Heart procedures e.g. TAVI

Patients must be reviewed by a Cardiologist prior to undergoing testing.

### Pacemaker implant

Patients must be reviewed by a Cardiologist prior to undergoing testing.

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