## CARDIOLOGY REFERRAL RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Diagnosis / Symptomatology</th>
<th>Evaluation</th>
<th>Management Options</th>
<th>Referral Guidelines</th>
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<tbody>
<tr>
<td>General problems include:</td>
<td>These general symptoms may include any and/or all of the general or specific problems noted. A thorough history and physical examination is required to determine the diagnosis. All case histories should include alcohol and tobacco use, drug and allergy history.</td>
<td>Specific treatments depend on the specific problem identified, as noted below.</td>
<td>Evaluation results should be included with referral information provided to hospital.</td>
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<tr>
<td>- Atrial Fibrillation / Flutter</td>
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<tr>
<td>- Bradyarrhythmias</td>
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<td>- Chest pain</td>
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<td>- Heart failure / breathlessness</td>
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<td>- Hyperlipidaemia</td>
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<td>- Hypertension</td>
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<td>- Murmurs</td>
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<tr>
<td>- Other</td>
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<td>- Palpitation</td>
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<td>- Supraventricular Tachycardia (SVT)</td>
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<td>- Syncope or presyncope</td>
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<td>- Ventricular tachyarrhythmias</td>
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| Atrial Fibrillation/Flutter | History – duration of symptoms.  
Evidence of underlying lung disease/HT/cardiac disease/thyroid disease/strokes/TIAs/diabetes.  
Drug history including alcohol and tobacco.  
Associated symptoms, eg. angina, dyspnoea, syncope and presyncope.  
  - ECG.  
  - Thyroid Function Tests, UEC.  
  - CXR.  
  - Echocardiogram | Chronic or recurrent paroxysmal.  
  - Consider anti-arrhythmia and anticoagulation therapy after discussion with specialist, as required.  
  - Acute AF/Atrial Flutter.  
  - Discuss or refer immediately for management. | Refer all patients for assessment after discussing options.  
Acute AF – Urgent – admission for haemodynamic compromise.  
Admission may not be required if stable.  
Chronic AF – Routine. |
| Bradyarrhythmias, eg:  
  - Heart block  
  - Sinus Bradycardia  
  - Sick Sinus syndrome | History – duration of symptoms.  
Evidence of underlying cardiac disease.  
Drug history (including eye drops).  
Associated symptoms, eg. syncope, SOB, dizziness, palpitations.  
  - Consider 24 hour ambulatory ECG recording or event recorder if paroxysmal.  
  - ECG.  
  - Thyroid function tests.  
  - Consider echocardiography. | Asymptomatic:  
  - Discuss.  
Symptomatic:  
  - Refer for outpatient assessment.  
  - Consider acute assessment if symptoms severe. | Complete heart block and syncope – Urgent.  
Bradyarrhythmia with dizziness – Semi-urgent. |
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- ECG.  
- Cardiac enzymes if acute.  
- Lipids.  
- FBC.  
- UEC.  
- Glucose.  
- CXR.  
- Exercise stress testing.  
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<tr>
<td>Heart failure/breathlessness</td>
<td>History – duration, PND, orthopnoea, NYHA class.</td>
<td>If acute heart failure, refer for assessment/admission. Oxygen, nitrate patch and IV Frusemide prior to transfer.</td>
<td>Acute heart failure – Urgent</td>
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<td></td>
<td>Evidence of underlying cardiac/respiratory/thyroid disease.</td>
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<td>All non-acute patients – initial assessment – Routine.</td>
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<td>Drug history.</td>
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<td>Associated symptoms, eg. angina, palpitations.</td>
<td>If evaluation suggests heart failure, commence diuretics and other treatment as appropriate. This includes ACE (if no aortic stenosis), carvedilol, spironolactone, and digoxin with atrial fibrillation.</td>
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<tr>
<td></td>
<td>▪ ECG.</td>
<td>Management of precipitating conditions, eg. obesity, thyroid disease, alcohol consumption and anaemia.</td>
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<td>▪ FBC, U&amp;E, blood glucose, lipid profile, TFTs, LFTs.</td>
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<td>▪ CXR.</td>
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<td>▪ Echocardiography.</td>
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<td>▪ Weight.</td>
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<td>▪ Risk factor evaluation.</td>
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<td>▪ Alcohol history.</td>
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<tr>
<td>Hyperlipidaemia</td>
<td>Risk factor evaluation:</td>
<td>Refer to current guidelines – National Heart Foundation, particularly dietary advice.</td>
<td>Referral letter for consideration of lipid lowering therapy according to NHF guidelines.</td>
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<td>▪ Family history, particularly age of onset.</td>
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<td>▪ Smoking.</td>
<td>Management of other risk factors.</td>
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<td>▪ Hypertension.</td>
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<td></td>
<td>▪ Diabetes.</td>
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<td>▪ Cardio-vascular disease.</td>
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<td>▪ Obesity.</td>
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<td>▪ Age.</td>
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<td>▪ Fasting lipids (at least two specimens).</td>
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<td>▪ Blood sugar.</td>
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<td></td>
<td>▪ Thyroid function / Liver function</td>
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### Hypertension

**History** – duration.
- Evidence of underlying cardiac/renal/endocrine disease.
- Drug history, including alcohol.
- Family history.
- Associated symptoms, eg. angina, SOB, palpitations, neurological.
- ECG.
- FBC, U&E, blood glucose, lipid profile.
- CXR.
- MSU.
- Risk factor evaluation.
- Consider investigation of secondary causes, eg. co-arctation, phaeochromocytoma, Cushing’s, Conn’s syndrome, renal artery stenosis.

**Evaluation**

**Management Options**
- Lifestyle modification.
- Anti hypertensive treatment should be individualised according to comorbid conditions eg. angina and hypertension (B-Blocker).
- Diabetes and hypertension – ACE inhibitors.

**Referral Guidelines**
- Refractory hypertension – patients on three or more medications with BP greater than 140/90.
- Secondary hypertension should be referred to appropriate service, ie. endocrinology, renal or cardiac service.
- Hypertension in pregnancy should be referred initially to obstetricians.
- Malignant hypertension – Urgent.
- Severe hypertension > 200/120 – Semi-urgent.
- Other hypertension – Routine.

### Murmurs

**Developmental, gestational history.**
- History – duration, rheumatic fever.
- Associated symptoms, eg. angina.
- Family history.
- SOB, palpitations, syncope.
- Any other stigmata of congenital anomaly?
  - ECG.
  - CXR (if not pregnant).
  - Echocardiography.

**Evaluation**

**Management Options**
- If evaluation suggests innocent (benign flow) murmur – reassure.
- Otherwise, refer.

**Referral Guidelines**
- Suspected endocarditis – Urgent.
- Cardiac enlargement } Routine.
- Non-innocent murmurs }

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Updated December 2014
### Diagnosis / Symptomatology

#### Other, eg.
- Asymptomatic cardiomegaly.
- Asymptomatic patients with abnormal ECGs.
- Transfers of patients from other hospitals into local care.

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- ECG.  
- CXR.  
- Consider echocardiography.  
- Weight.  
- Risk factor evaluation. | Discuss with cardiologists if required. | Referral if appropriate – Routine. |

#### Palpitation – including SVT

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</table>
| Palpitation – including SVT | History – duration of symptoms (careful description of attack, onset/offset, character of palpitation etc). Evidence of underlying cardiac/thyroid disease/HT. Drug history including caffeine and alcohol. Associated symptoms, eg. syncope, presyncope, chest pain and dyspnoea.  
- ECG (during if possible).  
- Thyroid Function Tests, FBC and U&E.  
- Consider 24 hour ambulatory ECG recording and echocardiography. | If evaluation negative or suggests only ectopic beats or sinus tachycardia – reassurance. Letter of referral for ECG if prolonged or ECG to be sent/faxed from GP practice for opinion. | In the presence of underlying cardiac disease, significant symptoms, abnormal ECG, or ongoing palpitations, refer to Cardiologist – Routine – routine.  
(Semi-urgent – semi-urgent if syncope present.) |
## Supraventricular Tachycardia (SVT)

- **History** – duration of symptoms.
- Evidence of underlying cardiac/thyroid disease.
- Drug history.
  - Consider 24 hour ambulatory ECG recording or event recorder if paroxysmal.
  - ECG.
  - Thyroid function tests.
  - Echocardiography.

### Evaluation

- **ECG.**
- **Thyroid function tests.**
- **Echocardiography.**

### Management Options

- If isolated in the absence of syncope/haemodynamic compromise:
  - Reassure.
  - Consider vagolytic manoeuvres.
- If recurrent or abnormal ECG – refer.

### Referral Guidelines

- In the presence of underlying cardiac disease, significant symptoms, abnormal ECG, or ongoing palpitations, refer to cardiologist.
- SVT – continuous – Urgent.
- SVT – other – Routine.

## Syncope or presyncope

- **History** – duration of symptoms, precipitants (eg. cough, micturition)
- Evidence of underlying cardiac disease/GI bleeding.
- Drug history especially diuretics.
- Associated symptoms, eg angina, SOB, palpitations, neurological signs/postural hypotension.
  - ECG.
  - Full blood count.
  - Consider 24 hour ambulatory ECG recording or event recorder if paroxysmal.
  - Thyroid function tests. UEC, Mg.
  - Consider echocardiography.

### Evaluation

- **ECG.**
- **Full blood count.**
- **Consider 24 hour ambulatory ECG recording or event recorder if paroxysmal.**
- **Thyroid function tests. UEC, Mg.**

### Management Options

- Isolated event and negative findings – reassure.
- History suggests vaso-vagal event in young and otherwise fit – reassure (vasovagal or neurocardiogenic syncope – recommend hydration, liberal with salt intake and avoid prolonged immobilisation).
  - (refer if recurrent).
- If recurrent – refer.

### Referral Guidelines

- Syncope – Urgent or 2.
- Presyncope – Routine.
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<tr>
<td></td>
<td>Evidence of underlying cardiac disease.</td>
<td>Draw blood for UEC, Mg, CK. (May be useful if need DCV – send with ambulance).</td>
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<td>Drug history.</td>
<td>IV cannula.</td>
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<td>• Associated symptoms, eg angina and syncope, SOB.</td>
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