


The immediate management of patients with acute coronary syndrome

Most patients who present to primary care with chest pain are unlikely to be experiencing acute coronary syndrome (ACS). However, the consequences of missing ACS are significant, therefore, chest pain should always be considered as if it is an emergency, until another cause can be established. If symptoms and signs consistent with ACS are identified, the next steps are crucial and dependent on the anticipated time for the patient to reach hospital.

KEY PRACTICE POINTS

- Acute coronary syndrome (ACS) encompasses ST-segment-elevation myocardial infarction (STEMI) and non-ST-segment-elevation acute coronary syndromes (NSTEMACS). NSTEMACS includes non-ST-segment-elevation myocardial infarction (NSTEMI) and unstable angina.
- If a patient presents with chest pain that may be due to a cardiac cause, take a symptom history, carry out a clinical examination and perform a 12-lead ECG as soon as possible
- Have a high clinical suspicion for ACS in patients who present with:
 - Chest pain and/or pain in areas such as the upper arms, back or jaw, lasting longer than 15 minutes
 - Chest pain in combination with nausea, vomiting, sweating or dyspnoea
 - New-onset chest pain, or a sudden deterioration in previously stable angina, with chest pain episodes lasting longer than 15 minutes, recurring frequently and following little or no exertion
- Urgently refer patients with suspected ACS based on history and examination findings for acute cardiology assessment
- While awaiting ambulance transfer:
 - Monitor and record the patient's blood pressure, heart rate and oxygen saturation
 - Provide pain relief with sublingual glyceryl trinitrate and/or IV morphine (unless contraindicated)
 - Give aspirin 300 mg (dissolved or chewed), even if taking regular low dose aspirin
- Administer oxygen if the patient is hypoxic (oxygen saturation < 90 – 93%) or has signs of heart failure or cardiogenic shock
- Document all medicines given, including doses and time of administration
- A blood sample for measuring serum troponin levels may be taken in some circumstances, e.g. long transport time to hospital (if IV pain relief is required, this may be an opportune time to take a blood sample)
- In some cases where there will be a significant delay in reaching hospital, it may be appropriate to initiate fibrinolysis in primary care for patients with ST-segment elevation depending on medicines availability; discuss the patient with the on-call cardiologist or emergency department consultant
- Medicines for secondary prevention will likely be initiated in secondary care to reduce the possibility of recurrent events, e.g. antiplatelets, statin, beta blocker, ACE inhibitor/ARB. The patient's medicine regimen should be regularly reviewed to ensure that maximum benefits are being achieved, and that any medicines not intended for long-term use are discontinued.
 - Lifestyle changes should also be recommended, e.g. healthy diet, reduce alcohol consumption, maintain healthy body weight, regular exercise, smoking cessation. Patients may also benefit from referral to a secondary prevention or cardiac rehabilitation service.

 **This is a revision of a previously published article. What's changed for this update:**

- General article revision
- Information added on calculating the Emergency Department Assessment of Chest Pain Score (EDACS) in primary care for patients with lower suspicion of ACS after clinical examination
- Information added on lifestyle changes to reduce cardiovascular risk


An overview of acute coronary syndrome


Acute coronary syndrome (ACS) refers to a spectrum of conditions usually caused by thrombus formation within the coronary arteries.¹ ACS varies in severity and includes:^{1,2}

- ST-segment-elevation myocardial infarction (STEMI)
- Non-ST-segment-elevation acute coronary syndrome (NSTEMACS):
 - Non-ST-segment-elevation myocardial infarction (NSTEMI)
 - Unstable angina

Less commonly, ACS may be caused by myocardial infarction with no obstructive coronary arteries (MINOCA) or spontaneous coronary artery dissection (SCAD).³

Patients may present to general practice currently experiencing chest pain, or they may report recent symptoms, e.g. from the previous evening. In most cases, chest pain is unlikely to be caused by ACS, however, all patients with symptoms consistent with a cardiac origin require prompt assessment and treatment as indicated (see: "Take a focused history and perform a clinical examination").² If the patient has ACS, additional interventions, e.g. intravenous (IV) fibrinolysis, may be appropriate in primary care depending on the type of ACS, location of the practice, transport time to hospital and medicines availability. Having a practice protocol that all staff can initiate for patients with suspected cardiac chest pain may streamline management (see: "Have a practice protocol that all staff can initiate").

 For information on the management of stable angina, see: bpac.org.nz/2025/angina.aspx

 **ACS immediate management checklist summary**^{2,4,5}

1. Perform a 12-lead ECG as soon as possible
2. If abnormalities consistent with ACS are detected on ECG or if the patient has high-risk features, e.g. ongoing chest pain with dyspnoea, nausea, vomiting, sweating, urgently refer

for acute cardiology assessment (check local HealthPathways for the referral protocol in your area). Referral is also recommended if the ECG is inconclusive/normal but suspicion of a cardiac cause remains.


3. While awaiting hospital transfer:
 - Monitor and record the patient's blood pressure, heart rate and oxygen saturation
 - Provide pain relief unless contraindicated: sublingual glyceryl trinitrate (GTN; up to three doses of one to two sprays, every five minutes) and/or IV morphine (5 – 10 mg in incremental doses) as required
 - Give 300 mg aspirin (dissolved or chewed), even if taking regular low-dose aspirin
 - Administer oxygen if the patient is hypoxic (oxygen saturation < 90 – 93%) or has signs of heart failure or cardiogenic shock
 - Document all medicines given, including doses and time of administration
4. A blood sample for measuring serum troponin levels may be taken in some circumstances, e.g. long transport time to hospital (if IV pain relief is required, this may be an opportune time to take a blood sample)
5. If the patient has ST-segment elevation and will not reach a percutaneous coronary intervention (PCI)-capable centre within 90 minutes of presentation, for a PCI to be performed in under 120 minutes, contact the on-call cardiologist or emergency department consultant who may suggest fibrinolysis in primary care if the required medicines are available

Investigating patients with possible cardiac chest pain

Most patients with ACS present with chest discomfort, described as either pain, pressure, tightness, heaviness or a burning sensation in the chest.^{2,4} Other common symptoms include shoulder, arm, jaw and upper abdominal pain.^{2,6} Patients can also present with non-specific symptoms such as dyspnoea, nausea, vomiting and sweating; these symptoms are reported more frequently in patients who are older, female or who have diabetes or chronic inflammatory conditions.^{2,7} In severe presentations, patients may display symptoms or signs of cardiogenic shock, haemodynamic instability, acute heart failure or cardiac arrest.^{4,7}

Have a high clinical suspicion for ACS in patients who present with:^{5,7}

- Chest pain and/or pain in areas such as the upper arms, back or jaw, that lasts longer than 15 minutes
- Chest pain and nausea, vomiting, sweating or dyspnoea (particularly a combination of these symptoms)
- New-onset chest pain, or a sudden deterioration in previously stable angina, with chest pain episodes lasting longer than 15 minutes, recurring frequently and following little or no exertion

 **Have a practice protocol that all staff can initiate**

If a patient presents to general practice with ACS, a non-clinical member of staff may be their first point of contact. It is therefore important that all staff are aware of the practice protocol for managing patients with unexplained chest pain, and how to initiate it.

Staff members should know where to re-locate patients who require urgent attention. Ideally this room will have an examination table with clear access on all sides and an ECG machine, as well as convenient access for ambulance staff and equipment. Ensure that a defibrillator and emergency resuscitation medicines, e.g. injectable adrenaline, are nearby. All staff should be alerted to the location and status of the patient, who should not be left unattended.

Take a focused history and perform a clinical examination

A team response involving multiple clinical staff may be required when a patient presents with suspected ACS in primary care. Depending on the patient's condition, the following steps may occur concurrently, or the order may differ, e.g. an ECG may be prioritised before detailed history taking and physical examination.

Take a focused history. Consider pain characteristics, including the nature, onset, duration, location, radiation, precipitating and relieving factors and any associated symptoms.⁶ Also ask about any history of ischaemic heart disease, cardiovascular risk factors and prior investigations/treatments for chest pain.⁵ If a patient has a history of cardiovascular disease, it is likely their symptoms have a cardiac origin. However, patient history can also suggest other causes of chest pain, such as gastroesophageal reflux disease or that there is an underlying musculoskeletal origin (Table 1).^{2,6} Have a higher index of suspicion for ACS in patients of Māori, Pacific and South Asian ethnicity presenting with characteristic symptoms and signs as these groups are at increased risk of cardiovascular disease, e.g. myocardial infarction.^{8,9}

Perform a physical examination. This should include assessment of pulse, heart rate and rhythm (including change in rhythm, e.g. new-onset atrial fibrillation), measurement of blood pressure and oxygen saturation, and auscultation of the chest.^{2,4} Assess for signs of heart failure or circulatory compromise.⁴

Table 1. Examples of clinical features that may differentiate ACS from other causes of chest pain.

	Clinical features	Increases suspicion of ACS	Suggestive of another cause
Character	How is the sensation described?	Pain, pressure, tightness, heaviness or burning sensation in the chest ^{4,6}	Sharp shooting pain or pain only felt on inspiration ^{5,10}
	Are there any associated symptoms?	Dyspnoea, nausea, vomiting, sweating, dizziness, syncope ^{2,7}	Difficulty swallowing ⁵
Cause	What is the patient doing when symptoms begin?	Discomfort at rest or with minimal exertion ^{5,7}	Physical exertion, emotional stress ⁵ Reproducible with palpation ^{6,10} Positional discomfort ^{6,10}
Duration	How long do symptoms last?	Longer than 15 minutes ^{5,7}	A few seconds or hours/days ^{5,10}
Location	Where is the discomfort felt?	Predominantly in the chest ^{5,7}	Right upper quadrant of the abdomen or epigastrium ^{6,10}
	Does it radiate to other parts of the body?	Shoulder, arm, jaw or upper abdomen ^{2,6}	Lower extremities ¹⁰



Urgent referral to hospital

Patients should be urgently referred for acute cardiology assessment (check local HealthPathways for the referral protocol in your area) if they have recent (i.e. past few days) or ongoing chest discomfort with any of the following features:^{2, 4, 5}

- Occurs at rest or on minimal exertion
- Lasting longer than 15 minutes and/or recurrent pain within one hour
- Associated symptoms, e.g. dyspnoea, nausea, vomiting, sweating, dizziness
- Rapidly progressing despite standard treatment
- Haemodynamic compromise, e.g. hypotension, tachycardia

While awaiting transfer, additional management should occur in general practice where possible (see: “Acute treatment in primary care while awaiting transfer”).

Perform a 12-lead ECG as soon as possible

A 12-lead ECG should be performed as soon as possible for all patients presenting with chest pain with a potential cardiac cause.^{1, 4} The ECG may indicate STEMI, but more commonly, acute ECG changes will be absent which may be consistent with NSTEMI, or the ECG may be inconclusive.^{1, 4} It is also possible that there will be delayed cardiac changes not initially detectable on ECG. Check the patient’s medical records for previous ECG recordings as these can be used as a baseline for comparison.⁶



If ST-segment elevation is detected (≥ 2 mm in at least two leads V1 – 3 or ≥ 1 mm in at least two contiguous leads in another area)¹¹, urgently refer the patient for acute cardiology assessment (check local HealthPathways for the referral protocol in your area).¹² Other changes on ECG indicating possible ACS that should prompt urgent referral include:^{2, 4}

- ST-segment depression
- Pathological Q waves
- T wave changes, especially biphasic T waves or prominent negative T waves (Wellens’ sign)
- New bundle branch block

Referral is also recommended for patients where a cardiac cause cannot be reasonably excluded, regardless of their ECG results, i.e. a normal ECG does not exclude the possibility of a cardiac cause.^{4, 10}

Additional investigations should not delay referral

Laboratory testing has a limited role in primary care for the initial investigation of a patient with suspected ACS, and should not delay referral for acute cardiology assessment.^{10, 12} A blood sample could be collected if there will be significant delay in transporting the patient to hospital or if an opportunity arises, e.g. if inserting an IV line for pain relief (see: “Acute treatment in primary care while awaiting transfer”).

Testing may also be considered if the situation is less urgent, e.g. patients:¹²

- Who have been symptom-free for over 24 hours
- Presenting with atypical symptoms
- With unexplained chest pain and a normal ECG (see: “Lower suspicion of ACS? Calculate EDACS”)

Lower suspicion of ACS? Calculate EDACS

Emergency Department Assessment of Chest Pain Score (EDACS) is a tool developed and validated across New Zealand and Australian emergency departments to predict short-term risk of major adverse cardiac events in patients with chest pain.^{13–15} In a primary care setting, some HealthPathways recommend calculating EDACS to assess the likelihood of ACS in patients with lower suspicion (e.g. no significant findings on ECG). The score is calculated based on age, sex and the presence of certain features, and in conjunction with clinical judgement,

helps to determine whether the patient can be managed in the community. Check local HealthPathways for further information.

N.B. The purpose of using EDACS in an emergency department setting is different to primary care. In the community, EDACS is used as a proxy to help inform ACS risk in patients with lower suspicion, and therefore whether community management is appropriate. Whereas in an emergency department setting, EDACS is used in conjunction with ECG and serial troponin results to determine risk of major adverse cardiovascular events and appropriateness for early discharge. Troponin is not required for EDACS in a primary care setting.

Cardiac biomarkers, e.g. troponin, are useful for detecting myocardial injury.^{10, 12} Depending on the patient's clinical condition and circumstances, troponin levels may be assayed urgently in a community laboratory, or the blood sample can be sent with them to hospital. Some rural practices may have access to point-of-care troponin testing. An elevated serum troponin (above the 99th percentile) is a typical finding in patients with acute myocardial infarction.^{2,4} Whereas unstable angina can be distinguished from other types of ACS by the absence of significantly elevated serum troponin.^{3,4} Troponin levels can also be raised due to other reasons, e.g. decreased clearance due to renal dysfunction, pulmonary embolism, myocarditis.²

Additional laboratory tests may be requested as indicated, e.g. full blood count, renal and liver function, C-reactive protein, thyroid function.

Acute treatment in primary care while awaiting transfer



Offer pain relief as soon as possible. Sublingual GTN is often used initially for symptom relief (unless contraindicated: see below).^{5,7} Administer one to two sprays, repeat in five minutes, and then repeat again in another five minutes if pain persists.^{1,2} Monitor the patient's blood pressure as rapid hypotension can occur. In general, a systolic drop of ≥ 30 mmHg can be suggestive of a right ventricular myocardial infarction as these patients are more sensitive to the vasodilatory effects of GTN.

This GTN dosing regimen is appropriate when patients are under the supervision of a clinician and is consistent with guidance from the National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand (2025) and local HealthPathways.² Up to three doses are also recommended in the 2025 American ACS guideline.¹ This differs to the instructions given for patients during an episode of angina, in which up to two doses may be given at five minute intervals before calling an ambulance.¹⁶ Use clinical judgement when assessing the risk (e.g. hypotension) versus benefit of additional GTN doses (i.e. three or more) when managing patients with suspected ACS.

Caution with GTN. There are some scenarios where GTN may not be appropriate to use: caution or avoidance is recommended for patients with haemodynamic instability, phosphodiesterase-type 5 inhibitor (e.g. sildenafil) use within the last 24 – 48 hours or those who have an inferior/right ventricular infarction on ECG (see **NZF** for a full list of cautions and contraindications).^{1,16}



IV opioids (e.g. morphine 5 – 10 mg in incremental doses) may be administered for pain if the

patient does not respond to GTN, particularly in those with acute myocardial infarction.⁴ Opioids are not routinely recommended for all patients because they can cause nausea and vomiting and delay the onset of action of oral antiplatelets (e.g. ticagrelor) by slowing gastrointestinal absorption.⁴ If administered, an IV antiemetic, e.g. metoclopramide 10 mg, may be given as needed.



Give aspirin 300 mg (dissolved or chewed) as soon as possible unless contraindicated (see **NZF**), including in patients already taking low-dose aspirin.^{1,2} Aspirin lowers the risk of further cardiovascular events, e.g. myocardial infarction, stroke, and can reduce STEMI mortality.^{7,12}



Dual antiplatelet treatment, i.e. aspirin plus ticagrelor (usually preferred)* or clopidogrel.⁷ The need to give aspirin to all patients with ACS as soon as possible is universally acknowledged. However, whether or not to give an additional antiplatelet in primary care to these patients is more complex and depends on expected transport time to hospital and clinical context.

It is unlikely that most general practices will have ready access to either of these medicines at short notice as neither ticagrelor nor clopidogrel are available on PSO. Furthermore, in most urban areas there should not be significant delays in transporting patients by ambulance to hospital, therefore, the decision regarding dual antiplatelet treatment will usually be made in secondary care. In remote communities where there are often significant delays in transporting patients to hospital, it may be necessary to initiate dual antiplatelet treatment (for patients with STEMI or NSTEMI) and to thrombolysed some patients with ACS (STEMI) in primary care if the medicines are available (see: "If a patient with STEMI cannot be transported to hospital immediately"). Discuss the need for administering dual antiplatelet treatment in the community with the accepting clinician in the department the patient will be transferred to.

* Ticagrelor has shown superior efficacy to clopidogrel in combination with aspirin for patients with ACS, however, it is associated with a higher risk of bleeding.^{2,4} **June 2025 – Concerns are emerging** about the validity of these studies, watch this space.



Oxygen is not routinely required unless the patient is hypoxic (oxygen saturation $< 90 - 93\%$) or has signs of heart failure or cardiogenic shock.^{1,7} If oxygen is indicated, do not exceed an oxygen saturation $> 96\%$.² In people who are not hypoxic, oxygen supplementation does not improve outcomes and can cause harm.^{2,7}

Transfer all relevant information with the patient

Ensure all relevant information from the patient's record is available to staff upon arrival at hospital. If the patient's ECG

If a patient with STEMI cannot be transported to hospital immediately

Fibrinolytic treatment is recommended (unless contraindicated; see NZF) for patients with STEMI if they cannot be transported to a PCI-capable centre within 90 minutes of presentation, for a PCI to be performed in under 120 minutes.^{7,11} This period includes the waiting time before the ambulance arrives, the transportation time, the time taken to triage the patient both in primary and secondary care and to perform the PCI. If the total time is expected to be longer than 90 – 120 minutes, it is appropriate to discuss the patient with the on-call cardiologist or emergency department consultant who may suggest fibrinolysis in primary care if the required medicines are available. Patients presenting in rural areas are therefore most likely to be considered for these treatments. N.B. Fibrinolysis is not required for patients with ACS without ST-segment elevation.⁴

Fibrinolytic medicines are not routinely available in general practice, however, IV tenecteplase may be available in some rural practices, and is stocked in ambulance and Primary Response In Medical Emergency (PRIME) kits.¹¹ An anticoagulant (enoxaparin/heparin) and antiplatelet (clopidogrel) are usually administered after fibrinolysis.^{4,11}

N.B. Medicines and doses administered in the community for patients with STEMI may differ to what is administered in a hospital setting. For further information on STEMI fibrinolysis in the community, see the **St John Clinical Practice Guidelines**.

shows ST-segment elevation, alert the on-call cardiologist or emergency department consultant to prevent delays in accessing the catheterisation laboratory. Include the following information where possible:

- Time of symptom onset and duration
- ECGs (current and previous if available)
- Blood pressure, heart rate and oxygen saturation levels
- Co-morbidities
- Medicines given acutely, including time and dose
- Medicines currently prescribed and any over-the-counter products
- Allergies
- Relevant family history and personal details such as an advance care plan

Secondary prevention post-ACS

Most patients post-ACS will be taking additional medicines after being discharged from hospital to reduce the possibility of recurrent events (see: “Pharmacological secondary prevention”).² Lifestyle changes are also a fundamental component of secondary prevention in addition to risk factor modification, e.g. diabetes management (see: “Lifestyle changes to reduce cardiovascular risk”).⁴ Influenza and COVID-19 vaccinations should also be recommended.^{*1,4}

- * Influenza vaccination can reduce mortality risk and major adverse cardiovascular events in people post-ACS.^{1,4} Data supporting routine administration of other vaccines, e.g. COVID-19, post-ACS are lacking,¹ but are still recommended for eligible patients.

Patients may benefit from referral to a secondary prevention or cardiac rehabilitation service.² For a list of cardiac rehabilitation programmes throughout New Zealand, see: **hhdirectory.heartfoundation.org.nz**.

- 👁️ A post-ACS checklist guide for healthcare professionals is available from the Heart Foundation New Zealand: **www.heartfoundation.org.nz/resources/post-acute-coronary-syndrome-checklist**

Pharmacological secondary prevention

Cardiovascular event risk can be reduced with pharmacological intervention.^{2,4} Patients may be initiated on the following medicines in secondary care; set a recall as a reminder for when a medicine needs to be discontinued:

- **Aspirin.** Aspirin is usually continued indefinitely after ACS, with regular dosing of 75 – 150 mg per day.^{1,2,4} However, there are some clinical situations in which aspirin is discontinued early, e.g. patients with an indication for anticoagulation.¹ A proton pump inhibitor may be needed for patients at increased risk of gastrointestinal bleeding.⁴



- **Ticagrelor (usually preferred) or clopidogrel, i.e. dual antiplatelet treatment.** In patients who have had ACS, in particular those who have received a stent, dual antiplatelet treatment with aspirin and ticagrelor or clopidogrel is required for up to 12 months.^{1, 2, 4} Ticagrelor is preferred, but clopidogrel may be used in patients with high bleeding risk (e.g. those who are older, taking oral anticoagulants). The choice and duration of dual antiplatelet treatment (or triple antithrombotic treatment if oral anticoagulation is used; see below), should be clearly described on the hospital discharge documents; seek clarification if it is not. Clopidogrel monotherapy may be used for patients taking long-term antiplatelet treatment who do not tolerate aspirin.¹⁷ A proton pump inhibitor may be needed for patients at increased risk of gastrointestinal bleeding.^{2, 4}

- **Patients with an indication for long-term oral anticoagulation,** e.g. atrial fibrillation, may be discharged on triple antithrombotic treatment: dual antiplatelets (aspirin and clopidogrel) plus an anticoagulant.^{1, 4} The choice and duration of triple antithrombotic treatment is determined by the cardiologist, but in general, triple treatment is continued for up to one month post-ACS, before aspirin is discontinued.^{1, 4} Clopidogrel is usually continued for 12 months and then discontinued, with the patient remaining on the anticoagulant indefinitely.⁴

- **Statin, e.g. atorvastatin, rosuvastatin.** Patients will either be initiated on a high-intensity statin, or treatment optimised for those already taking a statin, e.g. addition of ezetimibe.^{1, 2} Treatment is usually continued indefinitely.² Aim for a LDL-C target of < 1.4 mmol/L and ≥ 50% LDL-C reduction from baseline.²

- 👁️ For commentary on LDL-C monitoring post-ACS, see: “**Paper of the Week: Optimising LDL-C post-ACS – is there room for improvement**”, Best Practice Bulletin 129, Aug, 2025

- **Beta blocker, e.g. bisoprolol, metoprolol.**^{2, 4} It has previously been standard practice to prescribe beta blockers to most patients post-ACS, however, newer guidelines now recommend only initiating beta blockers in select patients, e.g. those with reduced left ventricular ejection fraction (LVEF).²

- Evidence increasingly supports the withdrawal of beta blockers one year post-myocardial infarction in patients with a LVEF ≥ 50%, no (or minor) regional wall motion abnormalities on echocardiogram and no other indications for treatment, e.g. heart failure, arrhythmias, as treatment beyond this period has not been associated with improved cardiovascular

outcomes.^{4, 17, 18} A beta blocker is usually required indefinitely for patients with reduced left ventricular ejection fraction or evidence of considerable myocardial damage.¹⁷

- **ACE inhibitor/ARB.** An ACE inhibitor/ARB is usually initiated and continued long-term in some patients post-ACS, e.g. those with diabetes, hypertension, chronic kidney disease, heart failure (some patients with heart failure may instead be taking an ARNI).^{2, 4}

Additional medicines may be initiated in secondary care depending on patient co-morbidities. For example, a calcium channel blocker for patients with angina or hypertension, a mineralocorticoid receptor antagonist and SGLT-2 inhibitor for patients with heart failure.^{4, 17}

Lifestyle changes to reduce cardiovascular risk



Body weight. Support patients to achieve and maintain a healthy body weight;¹⁷ target a BMI of < 25 kg/m² or a reduction in waist circumference.



For information on weight loss, see: [bpac.org.nz/2022/weight-loss.aspx](https://www.bpac.org.nz/2022/weight-loss.aspx)



Diet.² Recommend patients follow a Mediterranean-style diet and reduce daily alcohol consumption.^{4, 17}



For information on managing alcohol misuse, see: [bpac.org.nz/2018/alcohol.aspx](https://www.bpac.org.nz/2018/alcohol.aspx)



Physical activity.² Patients who were not previously active should reduce sedentary behaviour and gradually introduce regular physical activity based on their clinical condition, co-morbidities and physical capability.^{4, 17} Resistance (strength) training should also be incorporated, if appropriate.



Smoking cessation.² Use behavioural and pharmacological interventions, e.g. nicotine replacement therapy, as needed.^{4, 17} Patients should also avoid passive exposure to tobacco smoke.



For information on smoking cessation, see: [bpac.org.nz/2024/smoking.aspx](https://www.bpac.org.nz/2024/smoking.aspx)



Mental health.² Identify and address any mental health concerns that may influence cardiovascular outcomes.⁴ Use pharmacological and non-pharmacological management options as appropriate. Experiencing ACS is likely to be traumatic for many patients, and they may need regular mental health and wellbeing check-ins.

Acknowledgement: Thank you to **Dr John Edmond**, Consultant Interventional Cardiologist, Health New Zealand (Te Whatu Ora), Clinical Senior Lecturer, University of Otago and Director, Otago Clinical Skills Laboratory and **Dr Sarah Beatty**, FACEM, Health New Zealand (Te Whatu Ora), for expert review of this article.



Article supported by the South Link Education Trust

N.B. Expert reviewers do not write the articles and are not responsible for the final content. bpac™ retains editorial oversight of all content.

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