

Chronic Obstructive Pulmonary Disease

Clinical Care Standard

The *Chronic Obstructive Pulmonary Disease (COPD) Clinical Care Standard* aims to reduce potentially preventable hospitalisations and improve overall outcomes for people with COPD by supporting best practice in the assessment and management of COPD, including exacerbations. It also aims to increase consideration of the palliative care needs of people with COPD to support symptom management and improve quality of life.

1 Diagnosis with spirometry

A person over 35 years of age with a risk factor and one or more symptoms of chronic obstructive pulmonary disease (COPD) receives high-quality spirometry to enable diagnosis. Spirometry is also performed for a person with a recorded diagnosis of COPD that has not yet been confirmed with spirometry.

Early recognition and diagnosis of COPD is critical to ensure appropriate management and to reduce the risk of lung function decline, exacerbations and mortality.

A diagnosis of COPD can only be made with spirometry. COPD cannot be diagnosed based on clinical features or chest X-ray alone.

Symptoms of COPD are experienced regularly and include:

- Breathlessness that worsens with exertion
- Chronic cough
- Sputum production
- Recurrent chest infections
- Wheezing
- Chest tightness
- Fatigue.

Current or past tobacco smoking is the most common risk factor for COPD, but COPD also occurs in people who have never smoked. Additional risk factors for COPD include:

- Exposure to environmental tobacco smoke, occupational dusts and fumes (organic and inorganic), indoor air pollution from fuels used for heating and cooking in poorly ventilated areas, and outdoor air pollution, including smoke from bushfires
- Childhood factors such as premature birth or low birthweight
- Asthma and airway hyper-reactivity
- Chronic bronchitis
- Infections, particularly tuberculosis and childhood respiratory infections
- Genetic factors (for example, alpha-1 antitrypsin deficiency).

Conduct spirometry in:

- People over 35 years of age who present with one or more recurrent respiratory symptoms and at least one risk factor for COPD
- Patients in the community or those hospitalised for a suspected COPD exacerbation who have a clinical diagnosis of COPD that has not previously been confirmed with spirometry or for whom results cannot be accessed.

If the patient is too unwell to undergo spirometry at the time of an exacerbation, it should be arranged by the clinician responsible for the patient's ongoing care. Spirometry should be conducted once acute instability has resolved, and no later than eight weeks after a suspected exacerbation.

Do not perform spirometry in patients who are known or suspected to have an active respiratory infection (for example, COVID-19). Refer to the Thoracic Society of Australia and New Zealand (TSANZ) and Australian and New Zealand Respiratory Science (ANZRS) [joint position statement](#) for guidance on infection prevention and control when performing spirometry.

Provide the patient with information on what spirometry involves and how to prepare for the test. See the [Getting ready for spirometry](#) fact sheet for further information.

High-quality spirometry is:

- Performed before and after administration of an inhaled bronchodilator
- Performed and interpreted by clinicians with appropriate training and competency
- Performed using spirometers that undergo regular quality control and calibration to meet current American Thoracic Society (ATS) and European Respiratory Society (ERS) Technical Statement specifications.

If spirometry is unavailable within the healthcare service, refer patients to a respiratory laboratory, respiratory specialist or pathology collection centre that offers spirometry. General practitioners can refer to their local HealthPathways for services that offer spirometry.

A postbronchodilator forced expiratory volume in one second (FEV₁) to forced vital capacity (FVC) ratio (FEV₁/FVC) that is less than 0.7 confirms persistent airflow limitation and is diagnostic of COPD. If spirometry results are close to this threshold, spirometry should be repeated to confirm the results.

Explain the spirometry results to the patient and discuss next steps if a diagnosis of COPD is confirmed. If spirometry results do not indicate COPD, consider alternative tests to investigate the patient's symptoms as appropriate (for example, chest X-ray or full pulmonary function testing).

Record spirometry results in the patient's healthcare record and My Health Record (if available).

Consider the patient's history, clinical context and risk factors when interpreting spirometry results. There is overlap in the clinical features of COPD and other

respiratory conditions such as asthma (including adult-onset asthma) and bronchiectasis, and more than one condition can coexist in some patients. Some patients with asthma can also have persistent airflow limitation on spirometry.

Differentiating asthma from COPD is important for correct pharmacological management. For example, inhaled corticosteroids are important in asthma management, but in COPD should be limited to patients with severe symptoms and exacerbations.

In primary care, consider referral to a respiratory physician if spirometry results are unclear or there is diagnostic uncertainty.



Cultural safety and equity

Clinicians can:

- Consider historical, social and cultural factors that may limit patient access to assessment of their respiratory symptoms
- Consider personal biases that may influence communication with patients regarding their care
- Recognise that Aboriginal and Torres Strait Islander people may have a higher likelihood of risk factors for COPD, including smoking, premature birth and chronic lung infections
- Use culturally safe language when discussing any identified risks with the patient and when explaining the rationale for spirometry and other investigations
- Recognise that some people with COPD may feel stigmatised by the diagnosis, particularly people who have smoked, due to a perception that they are responsible for their condition.



2 Comprehensive assessment

A person with a confirmed COPD diagnosis receives a comprehensive assessment to determine their individual care needs. This includes assessing their symptoms and disease severity using a validated assessment tool, history and risk of exacerbations, and comorbidities. Follow-up assessment occurs at least annually.

A person with COPD requires a comprehensive assessment at the time of diagnosis and at least every 12 months thereafter to ensure all their care needs are met.

The assessment should be completed by the person's general practitioner or other specialist physician with multidisciplinary input as appropriate. Depending on the person's needs, this may include respiratory nurses, allied healthcare professionals (for example, pharmacists, physiotherapists, exercise physiologists, speech pathologists, dietitians or psychologists) or other medical specialists (such as palliative care) where required.

Although critical for determining the presence of airflow limitation, spirometry results alone do not accurately indicate the severity of COPD symptoms or their impact on the person.

Comprehensive assessment should comprise:

- A detailed medical history that encompasses COPD risk factors (see [Quality statement 1](#))
- A review of symptoms, their severity and impact on daily living using a validated assessment tool (see 'Related resources' in the *COPD Clinical Care Standard* for relevant assessment tools).
- Identifying risk of exacerbations, including the severity and frequency of past exacerbations
- An assessment of general physical and mental health (see 'Related resources' in the *COPD Clinical Care Standard*)
- A review of all current medicines, including whether any change (step up or step down) of therapy is required
- An assessment of inhaler device technique for inhaled therapies and appropriateness of the inhaler device for the person.

To assess risk of future exacerbations, obtain and document the person's history of exacerbations including their frequency, severity, and any associated hospitalisations. Severe and worsening airflow obstruction based on spirometry results and a history of exacerbations requiring hospitalisation are associated with a higher risk of exacerbations, which become more frequent and severe as COPD progresses.

Assess for, and actively manage undiagnosed comorbidities or existing comorbidities that may require adjustment to treatment. Common comorbidities include heart failure, diabetes, anxiety and depression. Investigate or refer the patient as appropriate (see [COPD-X Guidelines](#) for other comorbidities to consider).

As COPD symptoms can limit mobility and opportunities for social engagement, people with limited sources of social support may experience social isolation and loneliness. Consider the person's social care needs and help organise access to relevant assessment and supports as appropriate (for example, My Aged Care assessment or Commonwealth Home Support Programme).

Also consider whether the person may benefit from individualised symptom management and palliative care support. Advance care planning should be considered for any patient who has been admitted to hospital for a COPD exacerbation (see [Quality statement 10](#)).

Complete and document the outcomes of the comprehensive assessment as soon as possible after diagnosis and repeat at least annually. Document the outcomes in the patient's healthcare record (and My Health Record where available). Share the results of any tests of investigations undertaken with the patient and explain what they mean.

Although not required annually, repeat spirometry is warranted if there are significant changes in the person's health status, including after admission to hospital for a COPD exacerbation.

3 Education and self-management

A person with COPD is supported to learn about their condition and treatment options. They participate in developing an individualised self-management plan that addresses their needs and treatment goals and includes an action plan for COPD exacerbations.

Provide information to the patient about COPD, including the nature and likely progression of the condition, the treatments available and self-management strategies. Explain that self-management is an important part of COPD care and can help to improve symptoms, reduce the risk of exacerbations, and support the patient's overall wellbeing.

Discuss the patient's expectations about the management of their condition and their treatment goals. Work with the patient to develop a self-management plan that aligns with their individual needs and treatment goals. The self-management plan should include a written summary of the patient's medicines and directions for use, and other agreed self-management strategies. In general practice, a [General Practitioner Management Plan](#) or a [Team Care Arrangement](#) may be appropriate to help the patient to achieve their treatment and self-management goals.

Discuss self-management strategies, including:

- Smoking cessation (see [Quality statement 4](#))
- Keeping up to date with vaccinations (see [Quality statement 4](#))
- Regular physical activity and exercise
- Pulmonary rehabilitation (see [Quality statement 5](#))
- Using medicines as prescribed, including correct storage, and inhaler and spacer technique (if relevant) (see [Quality statement 6](#))
- Nutrition and weight optimisation
- Maintaining good hand hygiene, social distancing and using face masks where appropriate.

Discuss non-pharmacological management strategies for episodes of breathlessness, such as handheld fans, breathing techniques, and breathlessness recovery positions. Consider referral to pulmonary rehabilitation or other clinicians (for example, physiotherapist, respiratory nurse or respiratory physician) for advice on further strategies such as airway clearance techniques, activity pacing and energy conservation techniques.

Consider palliative care needs, including symptom support and advance care planning (see [Quality statement 10](#)).

Provide information about other services that may support the implementation of self-management strategies and organise referral where appropriate. This may include smoking cessation services, respiratory education programs or community exercise programs. Provide information on where to obtain further information about COPD (for example, organisations such as [Lung Foundation Australia](#) or local support groups).

Ensure the person has an up-to-date written COPD action plan for exacerbations which clearly addresses how to recognise and respond to deteriorating symptoms. The COPD action plan should include clear instructions for using medicines (including their name, dose and how and when to use them), and when to seek medical attention. See the [COPD Action Plan](#) developed by Lung Foundation Australia.

Discuss the self-management plan with the patient and ask if they have any questions or concerns. Document the patient's self-management plan in their healthcare record (and My Health Record where available).

Review the patient's self-management plan and COPD action plan regularly, and whenever there is a deterioration in symptoms, a change in medicines is being considered, or if a patient has a hospital admission (see [Quality statement 9](#)).



Cultural safety and equity

Clinicians can:

- Ensure the information and education provided to patients about COPD is culturally safe and appropriate to the patient's language and literacy needs
- Allow longer appointment times for patients who prefer face-to-face education, as required
- Consider the National Aboriginal Community Controlled Health Organisation's [Chronic Obstructive Pulmonary Disease \(COPD\) Action Plan](#) when developing an action plan with the patient.

4 Vaccination and tobacco-smoking cessation

A person with COPD is offered recommended vaccinations for respiratory and other infections including influenza, pneumococcal disease and COVID-19. They are asked about their tobacco-smoking status and, if currently smoking, offered evidence-based tobacco-smoking cessation interventions.

Explain that vaccination and smoking cessation are important for improving COPD symptoms, limiting disease progression, reducing exacerbations and improving long-term outcomes.

Vaccination

Explain that people with COPD are more susceptible to complications (for example, pneumonia) as a result of infections such as influenza. Discuss the importance of vaccinations to decrease the risk of infection, and if affected, the risk of complications and COPD exacerbations.

Offer all patients with COPD vaccinations for respiratory and other infections in line with the recommendations in the [Australian Immunisation Handbook](#). This includes an annual influenza vaccination, and vaccinations for pneumococcal disease and COVID-19, according to their vaccination history and age.

Consider vaccinations for other vaccine-preventable conditions as appropriate (for example, herpes zoster), in line with the [Australian Immunisation Handbook](#).

Explain to the patient that not all vaccinations may be available free of charge under the [National Immunisation Program](#). Keep the patient's vaccination record up to date in their healthcare record and on the Australian Immunisation Register.

Tobacco-smoking cessation

Recognise that some patients who currently smoke (or have previously smoked) tobacco may experience stigma as a result of their COPD diagnosis. Always approach discussions about smoking cessation using careful and sensitive language. Ask the patient about their tobacco-smoking status at every appointment, including use of cigarettes, electronic cigarettes (vapes) or water pipes (shisha), and whether they smoke substances other than tobacco.

For patients who currently smoke (or have previously smoked) tobacco, obtain a detailed smoking history. Explain that tobacco-smoking cessation is one of the most effective ways to improve symptoms, slow disease progression and prevent exacerbations in COPD.

Support the patient to stop smoking by using evidence-based approaches, such as the three-step 'Ask, Advise, Help' model. This model is outlined in [Supporting Smoking Cessation: A guide for health professionals](#).

Explain to the patient that the most effective way to manage nicotine dependence is through a combination of behavioural strategies and pharmacotherapy. Provide information about:

- Behavioural support and counselling (for example, [referral to Quitline](#))
- Pharmacotherapy (for example, nicotine replacement therapy, bupropion or varenicline).

Consider comorbidities and current medicines when selecting pharmacotherapy.

Monitor the patient's progress at every visit and offer access to further tobacco-smoking cessation information or support services if required. Ensure smoking status is recorded in the patient's healthcare record and My Health Record (if available) and kept up to date.



Cultural safety and equity

Clinicians can:

- Recognise there are differences in the recommended vaccination schedule for Aboriginal and Torres Strait Islander patients compared to non-Indigenous patients
 - refer to the [Australian Immunisation Handbook](#) for details, including which vaccinations are provided free of charge under the [National Immunisation Program](#)
- Ensure cultural safety for Aboriginal and Torres Strait Islander patients accessing smoking cessation services in line with their needs and preferences.

5 Pulmonary rehabilitation

A person with COPD is referred for pulmonary rehabilitation. If the person has been hospitalised for a COPD exacerbation, they are referred to a pulmonary rehabilitation program on discharge and commence the program within four weeks.

Refer all patients with COPD for pulmonary rehabilitation, including those who have been hospitalised for a COPD exacerbation.

Refer to local pathways (for example, HealthPathways) or use the Lung Foundation Australia's [location search](#) to find pulmonary rehabilitation programs in your local area.

Explain that pulmonary rehabilitation is a structured six-to-eight-week program that combines exercise, education and self-management techniques designed for patients with COPD and demonstrated to:

- Reduce breathlessness and fatigue
- Improve fitness levels and muscle strength
- Reduce anxiety and depression
- Reduce the likelihood of hospitalisation for exacerbations.

Explain that pulmonary rehabilitation involves the following key aspects:

- Exercises tailored to the patient's needs and abilities
- Education about COPD and its treatments, including self-management strategies
- Advice on managing breathlessness
- Advice on using inhaled medicines, including correct inhaler technique
- Advice on healthy eating
- Access to psychological support if appropriate.

Any patient admitted for a COPD exacerbation should have access to pulmonary rehabilitation arranged on or before discharge, and commenced within four weeks. This reduces the short-term risk of readmission and improves exercise capacity and quality of life following an exacerbation. The clinician or care team responsible for the patient's ongoing care should follow up to ensure that the patient commences pulmonary rehabilitation within this timeframe.

If access to hospital-based pulmonary rehabilitation programs is limited, discuss the suitability of alternative options with the patient. These may include referral to pulmonary telerehabilitation programs if available, local exercise programs, or a clinician with expertise in pulmonary rehabilitation such as a physiotherapist or accredited exercise physiologist who can offer advice on suitable exercises and breathing techniques. In primary care, consider the suitability of a Team Care Arrangement to enable access.

Once a patient has completed a pulmonary rehabilitation program, offer them access to exercise maintenance programs. Emphasise the importance of continuing to exercise and staying physically active to maintain the benefits of the program.

Consider the patient's eligibility for local community-based exercise programs or programs such as the Lung Foundation Australia's [Lungs in Action](#).



Cultural safety and equity

Clinicians can:

- Recognise potential barriers to patients participating in pulmonary rehabilitation programs, including
 - personal or cultural preferences about exercising in group settings or mixed gender environments
 - limited access to programs, especially in rural and remote areas
- Consider virtual pulmonary rehabilitation programs where available, or referral to a clinician with expertise in pulmonary rehabilitation who can provide advice on exercises tailored to the patient's individual needs
- For Aboriginal and Torres Strait Islander patients, consider referral to culturally safe pulmonary rehabilitation programs offered through Aboriginal Community Controlled Health Organisations (ACCHOs) where available and in line with the patient's needs and preferences.

6 Pharmacological management of stable COPD

A person with a confirmed COPD diagnosis is offered individualised pharmacotherapy in line with the COPD-X stepwise approach. Inhaler technique is demonstrated, assessed and corrected when starting treatment and regularly thereafter, including after any change in treatment or a COPD exacerbation.

COPD-X stepwise approach

For patients with a spirometry-confirmed COPD diagnosis, offer pharmacotherapy to manage symptoms and prevent exacerbations according to the COPD-X stepwise approach. Individualise treatment according to symptom severity, exacerbation history and findings from the comprehensive assessment (see [Quality statement 2](#)).

Information about the COPD-X stepwise approach is available in the Lung Foundation Australia's [COPD-X Handbook](#). Briefly, this approach involves stepping up (or stepping down) therapy in response to symptoms and exacerbations, and includes:

- A short-acting inhaled bronchodilator – either a short-acting beta₂-agonist (SABA) or short-acting muscarinic antagonist (SAMA) – for as-needed short-term relief of acute breathlessness
- Adding a long-acting bronchodilator – either a long-acting beta₂-agonist (LABA) or long-acting muscarinic antagonist (LAMA) – for regular use in patients with persistent troublesome dyspnoea despite SABA/SAMA use
 - note that the use of a LAMA is contraindicated in patients using a SAMA, but not a SABA
- Dual therapy with a LABA and a LAMA for patients who remain symptomatic despite using either one alone, and after assessment of adherence and inhaler technique
- Considering the addition of an inhaled corticosteroid for patients who meet both of the following criteria
 - history of a severe exacerbation (requiring hospitalisation) or at least two moderate exacerbations in the previous 12 months
 - experiencing severe symptoms despite dual long-acting bronchodilator therapy (LABA plus LAMA).

Macrolide antibiotics

Long-term, low-dose, oral macrolide antibiotics may be an option to reduce the frequency of exacerbations in patients with severe symptoms and recurrent exacerbations requiring hospitalisation despite maximal non-pharmacological and pharmacological therapy. However, there are significant risks. Do not start treatment without review by a respiratory specialist to ensure existing therapy is maximal and potential adverse effects of the macrolide antibiotics (for example, cardiac toxicity, ototoxicity or developing antibiotic resistance) have been adequately considered. Review the need for ongoing therapy after six months, and after each COPD exacerbation.

Inhaler and spacer technique

Up to 90% of patients do not use their inhalers correctly, and clinicians may also be unfamiliar with correct techniques. Ensure current knowledge of inhaler technique before discussing correct use with the patient.

All clinicians involved in the patient's care have a role in checking and correcting inhaler technique. Inhaler technique should be assessed and corrected by pharmacists whenever an inhaler device is dispensed.

Provide clear instructions on inhaler technique and demonstrate correct inhaler use, including the use of a spacer if applicable. Explain how to clean and maintain these devices. Ask the patient to demonstrate using their inhaler (and spacer if applicable) and correct if necessary. Consider using an inhaler technique checklist when assessing and correcting inhaler technique and provide the patient with a copy as a reminder (see 'Related resources').

Check inhaler technique regularly, and always:

- Before considering an escalation of therapy
- After a change in treatment
- After an exacerbation.

Consider a [Home Medicines Review](#) (HMR) or a [Residential Medication Management Review](#) (RMMR) to support assessment of inhaler device technique and adherence.

To reduce the complexity of device use, consider the type of inhaler device prescribed and any opportunities to simplify the patient's treatment regimen. This may include offering the patient a similar inhaler device to one they are already familiar with, or a combination inhaler device (for example, one that includes a LAMA plus a LABA) rather than two separate inhaler devices. Also consider the environmental impact of different inhaler devices (see the *COPD Clinical Care Standard* for more information).

7 Pharmacological management of COPD exacerbations

A person having a COPD exacerbation receives short-acting bronchodilator therapy at the onset of symptoms and, if indicated, oral corticosteroids in line with the current *COPD-X Guidelines*. Antibiotics are only considered if criteria for prescribing are met, and they are prescribed according to evidence-based guidelines.

A COPD exacerbation is characterised by an acute worsening of symptoms that is more severe than normal day-to-day fluctuations in patient symptoms. Triggers include viral and bacterial infections and exposure to environmental pollutants.

Symptoms include:

- Increased breathlessness
- Reduced exercise tolerance
- Tachypnoea
- Increased cough and sputum production or purulence
- Fever.

Manage COPD exacerbations in line with [COPD-X Guidelines](#), and with consideration to patient comorbidities. The clinical features of a COPD exacerbation may overlap with conditions such as heart failure, pulmonary embolism, pneumonia and sepsis. Consider these as potential differential diagnoses and manage in line with current evidence-based guidelines.

COPD exacerbations can often be managed in the community. However, if symptoms worsen or persist despite treatment, a visit to the hospital emergency department is required. Additional indications for hospital attendance include:

- Hypoxaemia
- Deteriorating functional status
- High-risk comorbidities (for example, pneumonia, cardiovascular disease [heart failure, atrial fibrillation, ischaemic heart disease])
- Patient concern about the severity of their symptoms or ability to cope.

Pharmacological management of COPD exacerbations includes treatment with:

- An appropriate inhaled short-acting bronchodilator at the onset of symptoms according to the person's [COPD action plan](#)
- An oral corticosteroid for five days if the response to the short-acting bronchodilator is inadequate; intravenous corticosteroids may be required if the person cannot take medicines orally.

Escalate pharmacotherapy according to the severity of the exacerbation in line with *COPD-X Guidelines*.

Antibiotic therapy is not routinely recommended for COPD exacerbations; the benefit of antibiotic therapy is related to the likelihood of bacterial infection and severity of exacerbation. Refer to the current *Therapeutic Guidelines: Antibiotic* or locally endorsed evidence-based guidelines for specific guidance on antibiotic management of COPD exacerbations.

If antibiotics are indicated according to guidelines and the patient's clinical circumstances:

- Prescribe oral amoxicillin or doxycycline according to the prescribing criteria in the current *Therapeutic Guidelines* or locally-endorsed evidence-based guidelines
- Do not use broad spectrum antibiotics (for example, amoxicillin plus clavulanate, macrolides or cephalosporins) for initial therapy – these antibiotics are no more effective than amoxicillin or doxycycline, and unnecessarily expose the patient to harms from broad-spectrum treatment
- Do not use intravenous antibiotic therapy unless oral medicines cannot be taken
- Manage antibiotic therapy as described in the [Antimicrobial Stewardship Clinical Care Standard](#) including reviewing the appropriateness of the antibiotic's microbial spectrum of activity, dose and route of administration within 48 hours of the first prescription.

8 Oxygen and ventilatory support for COPD exacerbations

A person experiencing hypoxaemia during a COPD exacerbation receives controlled oxygen therapy, ensuring that oxygen saturation levels are maintained between 88% and 92%. Non-invasive ventilation is considered in anyone with hypercapnic respiratory failure with acidosis.

In acute care settings, provide controlled oxygen therapy to patients with a COPD exacerbation experiencing hypoxaemia (oxygen saturation level [SpO₂] < 88% on pulse oximetry) to achieve and maintain SpO₂ levels between 88% and 92%, or according to the individualised level for the patient. This applies to all acute care settings including during patient transfer in an ambulance, within hospital emergency departments and in all wards. In hospitals, calling criteria for rapid response (as provided by medical emergency teams) should be amended in line with these targets.

Ensure that the appropriate flow rate, delivery device, and target SpO₂ levels are documented in the patient's healthcare record at initiation of oxygen therapy. Monitor and record the patient's SpO₂ levels, respiratory rate and other vital signs, and regularly review the ongoing need for oxygen therapy and the prescribed flow rate.

Patients experiencing a COPD exacerbation may also be at risk of hypercapnic respiratory failure with acidosis. Assess and monitor for signs of hypercapnia in patients receiving oxygen therapy, such as drowsiness, confusion, bounding pulse, or flushed skin, and perform blood gas analysis to assess blood pH and carbon dioxide (CO₂) levels.

Hypercapnic respiratory failure with acidosis is defined as partial pressure of carbon dioxide in arterial blood (PaCO₂) above 45 mmHg and pH below 7.35. Arterial blood gas analysis is recommended as the most accurate method for excluding hypercapnia. However, venous blood gas analysis may be used as a screening tool for hypercapnic respiratory failure with acidosis in emergency care settings.

Consider non-invasive ventilation in all patients with hypercapnic respiratory failure with acidosis. Non-invasive ventilation should be delivered by clinicians trained and experienced in its use in a hospital environment where close monitoring can be undertaken. This is because intubation and invasive mechanical ventilation may subsequently be required.

The decision to proceed to non-invasive or invasive mechanical ventilation should be made in conjunction with the patient or a nominated substitute decision-maker where this will not delay urgent care, in line with local procedures. A senior clinician should be involved in decisions about mechanical ventilation. Decisions about non-invasive or invasive mechanical ventilation must always consider and respect the patient's expressed goals of care, including plans for endotracheal intubation and resuscitation, and any advance care plans.

An escalation plan addressing what to do in the event of deterioration and ceilings of therapy should be discussed with the patient or a nominated substitute decision-maker, before starting non-invasive or invasive mechanical ventilation. The plan should be in the patient's healthcare record.

Ensure the patient's goals of care for this episode of COPD exacerbation, and advance care plan, are documented in their healthcare record.

9 Follow-up care after hospitalisation

A person who has been hospitalised for a COPD exacerbation is offered a follow-up assessment within seven days of discharge, facilitated by timely and effective communication between their hospital and primary care providers.

People with COPD who have been hospitalised due to an exacerbation should receive a follow-up assessment with their nominated primary care provider (usually a general practitioner) within seven days of discharge, or sooner for more complex or unwell patients.

For hospital clinicians, provide a discharge summary to the patient and to the patient's nominated primary care provider on discharge, requesting they provide a patient review within seven days. The discharge summary should include:

- Diagnoses and results of investigations undertaken
- Medicines initiated or changed and their recommended treatment duration
- Documentation of the patient's oximetry on room air, and whether the patient is a carbon dioxide retainer
- Details of referral to pulmonary rehabilitation and other follow-up appointments, including that the patient should see their nominated primary care provider within seven days of discharge
- The date, time, and place for spirometry if required, as arranged by hospital staff
- Clear instructions for the managing primary care team that if spirometry is required but has not been arranged by hospital staff, this needs to be arranged within eight weeks of discharge
- Instructions to the patient on what actions to take if their condition deteriorates after discharge.

Explain the information in the discharge summary to the patient and answer questions they may have before they leave the hospital.

For clinicians conducting the follow-up, tailor assessment to the patient's individual needs, taking into consideration the recommendations in the discharge summary.

Aspects of the follow-up assessment may include:

- Reviewing medicines, including assessment of adherence and inhaler technique, supported by a referral for a home medicines review (HMR) if appropriate (see [Quality statement 6](#))

- Reviewing the patient's self-management plan and COPD action plan, or developing these plans if required (see [Quality statement 3](#))
- Assessing barriers to coping at home, such as carer needs, home environment (for example, exposure to mould or dust) and the need for social care supports
- Conducting spirometry if there is no evidence that this has been completed previously (see [Quality statement 1](#)) or if repeat testing is required
- Reviewing comorbidities and determining if any adjustments to treatment are needed
- Discussing smoking cessation and reviewing vaccination needs as appropriate (see [Quality statement 4](#))
- Providing a referral for pulmonary rehabilitation if not provided in hospital (see [Quality statement 5](#))
- Screening for mental health conditions such as anxiety and depression (see [Quality statement 2](#))
- Evaluating the need for referral to a respiratory specialist or allied health professional (for example, dietitian, speech pathologist or psychologist) if appropriate
- Assessing the need for symptom support and palliative care services, including advance care planning (see [Quality statement 10](#)).

If face-to-face consultation is difficult, consider using telehealth services to enable a timely review.



Cultural safety and equity

Clinicians can:

- Recognise that ACCHOs and Aboriginal Medical Services have an important role in facilitating access to relevant support services for Aboriginal and Torres Strait Islander patients after discharge, especially in rural and remote areas
- Ensure that the patient's usual care provider, if based in an ACCHO or Aboriginal Medical Service, is advised that the patient has been discharged from hospital to allow appropriate follow-up arrangements; involve an Aboriginal or Torres Strait Islander Liaison Officer or an Aboriginal or Torres Strait Islander Practitioner or Health Worker according to the patient's needs and preferences
- Check the availability of discharge medicines with the ACCHO or Aboriginal Medical Service providing follow-up care
- Consider the use of telehealth or outreach models to support access to follow-up for patients living in rural and remote communities.

10 Symptom support and palliative care

A person with COPD is offered symptom support and palliative care that meets their individual needs and preferences.

Offer people with COPD access to individualised symptom management and palliative care that aligns with their needs and preferences, to improve quality of life throughout the course of their illness. All clinicians involved in the patient's care, including in primary care settings, should be competent in providing palliative care (see the [National Palliative Care Standards](#)).

Consider a palliative approach to care from the time of diagnosis, not only for patients with severe symptoms or those at the end of life. This is particularly important for patients with significant comorbidities.

Explain that palliative care does not focus only on people at the end of life but can benefit patients with COPD with severe symptoms. Palliative care includes health advice, self-management education, treatment and other assistance to meet the patient's individual physical, emotional, spiritual and practical needs to improve quality of life. For patients with COPD, this may include management of severe breathlessness, fatigue, pain or anxiety. Palliative care can be delivered alongside the patient's usual COPD care.

Hospitalisation for an exacerbation, with or without admission to an intensive care unit, increases mortality risk and should prompt consideration of palliative care needs if not already established. Additional factors that should trigger discussions about palliative care include:

- Poor respiratory status (for example, forced expiratory volume in one second [FEV₁] less than 25% of predicted, hypoxaemia, hypercapnia or respiratory failure)
- Need for advanced respiratory therapy (for example, home oxygen therapy or domiciliary non-invasive ventilation)
- Heart failure or other comorbidities
- Unintended weight loss or cachexia
- Functional decline (for example, housebound, poor functional status or cognitive decline)
- Increasing dependence on others
- Challenging physical or emotional symptoms (for example, breathlessness, fatigue, cough or mood disturbance)
- Disease progression (for example, worsening cor pulmonale or more frequent hospital admissions).

When discussing palliative care, consider the person's physical, emotional, spiritual and practical needs.

Provide palliative care as required or offer referrals to other clinicians who can provide suitable care and support. Depending on the patient's needs, this may include allied health professionals such as physiotherapists, psychologists or speech pathologists. Patients with severe symptoms may benefit from referral to a respiratory physician or specialist palliative care service.

Discuss advance care planning and support the patient to set up an advance care plan if they do not already have one in place. Document the outcomes of these discussions, including a copy of the patient's advance care plan when available, in the patient's healthcare record and upload to their My Health Record (if available).

When a patient is admitted for a COPD exacerbation, document their goals of care, and plans for ventilation and resuscitation. This should be informed by the patient's advance care plan (if available).

- Recognise that ACCHOs and Aboriginal Medical Services play an important role in providing Aboriginal and Torres Strait Islander patients with palliative care supports, especially in rural and remote areas; understand what palliative care support is available in ACCHOs and Aboriginal Medical Services in your region and offer referral where appropriate, in line with the patient's needs and preferences.

Questions?



Find out more about the *COPD Clinical Care Standard* and other resources. Scan the QR code or use the link safetyandquality.gov.au/copd-ccs.



Cultural safety and equity

Clinicians can:

- Recognise that patients may have diverse and important religious beliefs or cultural practices related to palliative care and end-of-life care; always ask patients about their needs and preferences, and do not make assumptions about the care they require
- Provide opportunities for patients to involve family members or other support people when making decisions about palliative care and advance care planning
- Consider consulting an Aboriginal or Torres Strait Islander Practitioner or Health Worker, or a cross-cultural health worker, to enable discussions with patients and their family members or other support people about palliative care; offer access to interpreting services or the involvement of an Aboriginal and Torres Strait Islander Liaison Officer if required

The Australian Commission on Safety and Quality in Health Care has produced this clinical care standard to support the delivery of appropriate care for a defined condition. The clinical care standard is based on the best evidence available at the time of development. Healthcare professionals are advised to use clinical discretion and consideration of the circumstances of the individual patient, in consultation with the patient and/or their carer or guardian, when applying information contained within the clinical care standard. Consumers should use the information in the clinical care standard as a guide to inform discussions with their healthcare professional about the applicability of the clinical care standard to their individual condition.