

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.

The *COPD Clinical Care Standard* contains 10 quality statements that describe the health care that should be provided to people who are at risk of, or currently living with COPD.

It includes a set of indicators to support healthcare services to monitor how well they are implementing the care recommended in this clinical care standard and to support local quality improvement activities.

This information sheet describes what the quality statements mean for healthcare services and lists the indicators.

The definitions required to collect and calculate indicator data are specified online at: meteor.aihw.gov.au/content/793471

Monitoring the implementation of this clinical care standard can help healthcare services to meet the requirements of:

- The National Safety and Quality Health Service (NSQHS) Standards for acute healthcare services
- The National Safety and Quality Primary and Community Healthcare (Primary and Community Healthcare) Standards, for participating primary healthcare services.

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.

Ensure resources and systems are in place to enable access to high-quality spirometry for COPD diagnosis. Establish referral pathways to ensure clinicians can refer for spirometry when required. Ensure systems are in place to ensure spirometry results are accessible to clinicians across all care settings.

Ensure quality control processes are in place for the performance and interpretation of spirometry as outlined in the Thoracic Society of Australia and New Zealand (TSANZ) *Standards for the Delivery of Spirometry for Resource Sector Workers*. Spirometers should regularly undergo quality control and calibration to ensure they are consistent with the American Thoracic Society (ATS) and European Respiratory Society (ERS).

Establish processes and systems to ensure that spirometry is performed and interpreted by suitably trained and competent clinicians acting within their scope of practice. Ensure that training is in line with the TSANZ *Standards for Spirometry Training Courses*. Consider the frequency of spirometry performance and the ability to maintain competence when determining who should perform spirometry and interpret results.



Cultural safety and equity

Healthcare services can:

- Consider the increased prevalence of COPD among Aboriginal and Torres Strait Islander people and the relevance of this for the population accessing the healthcare service
- Ensure that systems are in place to support access to services that allow assessment of COPD symptoms and risk factors in a way that is free from racism, bias, and assumptions, including regarding people who have smoked
- Consider systems and processes to encourage use of high-quality spirometry for Aboriginal and Torres Strait Islander patients.

Indicators for local monitoring

Indicator 1a: Proportion of patients with a recorded diagnosis of COPD whose healthcare record documented their spirometry results.

Applicable for: General practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793508

Indicator 1b: Proportion of admitted patients with a COPD exacerbation whose healthcare record documented their spirometry results.

Applicable for: Hospitals.

METEOR link: meteor.aihw.gov.au/content/793513

More information about each indicator and the definitions needed to collect and calculate indicator data can be found online at the above METEOR links.

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.

Ensure policies, procedures and systems are in place to support clinicians to carry out and document the outcomes of comprehensive assessments for people with COPD on at least an annual basis. Provide clinicians with access to validated assessment questionnaires and tools (see 'Related resources' in the *COPD Clinical Care Standard*).

Ensure that pathways of care enable referrals to clinicians and services that may be required as part of the comprehensive assessment. Services may include social support, pulmonary rehabilitation, home medicines review, specialist respiratory care and palliative care. Support clinician understanding of, and enable access to, local guidelines and referral pathways (for example, through HealthPathways).

Indicators for local monitoring

Indicator 2a: Proportion of patients with COPD whose history of exacerbations was assessed and documented in their healthcare record in the previous 12 months.

Applicable for: General practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793516

Indicator 2b: Proportion of patients with COPD whose symptom severity was assessed using a validated tool in the previous 12 months.

Applicable for: General practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793519

More information about each indicator and the definitions needed to collect and calculate indicator data can be found online at the above METEOR links.

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.

Ensure that clinicians have access to consumer resources for COPD to enable clinicians to support patient participation in informed decision-making about treatment options and self-management strategies.

Establish and maintain policies and procedures to support the development of self-management plans (including COPD action plans) by clinicians jointly with patients, and to ensure these plans are reviewed regularly (for example, following a deterioration, exacerbation or hospital admission).

Ensure that clinicians have access to suitable templates for self-management plans and COPD action plans (for example, the Lung Foundation Australia [COPD Action Plan](#)). In general practice, this may include [General Practitioner Management Plans](#) or [Team Care Arrangements](#).

Ensure that appropriate services and referral pathways are available to enable access to self-management interventions (for example, smoking cessation and pulmonary rehabilitation).



Cultural safety and equity

Healthcare services can:

- Provide patient information about COPD in a variety of languages and formats appropriate to the service's patient population
- Establish links with appropriate health and community services and ensure that referral processes and pathways are in place to allow Aboriginal and Torres Strait Islander patients access to a network of suitable service providers within the healthcare service or local area.

Indicator for local monitoring

Indicator 3a: Proportion of patients with COPD who have a written COPD action plan.

Applicable for: Hospitals, general practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793523

More information about this indicator and the definitions needed to collect and calculate indicator data can be found online at the above METEOR link.

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.

Establish and maintain policies, procedures and protocols for clinicians to offer people with COPD vaccinations for respiratory and other infections as recommended in the Australian Immunisation Handbook. This includes vaccinations for influenza, pneumococcal disease and COVID-19 at appropriate intervals. Ensure the patient's vaccination history is kept up to date on the Australian Immunisation Register and their healthcare record. Have systems and procedures in place to enable patient recall for subsequent vaccinations at the appropriate intervals.

Establish and maintain policies, procedures and protocols to support the provision and documentation of smoking cessation interventions. Provide clinicians with access to relevant training such as the [Quit Centre online training modules](#) to support discussions about smoking cessation with people with COPD. Have systems in place to organise referral to relevant services (for example, [referral to Quitline](#)). In hospital, ensure that patients have access to nicotine replacement therapy during admission.

Ensure clinicians document the outcomes of discussions with people with COPD about smoking cessation in the patient's healthcare record (and My Health Record where available).



Cultural safety and equity

Healthcare services can:

- Establish links with appropriate health and community services and ensure that referral processes are in place to allow Aboriginal and Torres Strait Islander patients access to a network of suitable service providers.

Indicators for local monitoring

Vaccination

Indicator 4a: Proportion of patients with COPD who were immunised against influenza in the previous 15 months.

Applicable for: General practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793525

Indicator 4b: Proportion of patients with COPD who were immunised with at least one dose of pneumococcal vaccination.

Applicable for: General practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793527

Indicators for local monitoring

Tobacco-smoking cessation

Indicator 4c: Proportion of patients with COPD whose smoking status was recorded in their healthcare record in the previous 12 months.

Applicable for: Hospitals, general practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793529

Indicator 4d: Proportion of patients with COPD who reported they currently smoke tobacco who were offered cessation advice.

Applicable for: Hospitals, general practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/794069

Indicator 4e: Proportion of patients with COPD who reported they currently smoke tobacco who were provided, or referred to, evidence-based behaviour support and counselling.

Applicable for: Hospitals, general practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793531

Indicator 4f: Proportion of patients with COPD who reported they currently smoke tobacco who were prescribed pharmacotherapy for smoking cessation.

Applicable for: Hospitals, general practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793536

More information about each indicator and the definitions needed to collect and calculate indicator data can be found online at the above METEOR links.



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.

Ensure that systems, processes, and resources are in place to support and monitor referral and access to pulmonary rehabilitation programs for all patients with COPD in all care settings.

Healthcare services discharging patients after a COPD exacerbation should ensure the patient has a referral for pulmonary rehabilitation and provide adequate handover to the clinician responsible for the patient's ongoing care. This includes handover of the need for the patient to commence pulmonary rehabilitation within four weeks of discharge.

Ensure that clinicians have access to information about local pulmonary rehabilitation programs and relevant referral pathways (for example, in primary care this may be through HealthPathways).

Where a pulmonary rehabilitation program is not available locally, identify alternative pathways or programs for patients. This may include pulmonary telerehabilitation programs, local exercise programs, or referring patients to a clinician in primary care with expertise in pulmonary rehabilitation such as a physiotherapist or accredited exercise physiologist.

In primary care, set up systems that support clinicians to provide Team Care Arrangement items where appropriate, to help patients access clinicians with expertise in pulmonary rehabilitation.



Cultural safety and equity

Healthcare services can:

- Have systems in place to support clinicians to consider virtual pulmonary rehabilitation programs for patients who may have personal or cultural preferences about exercising in group settings, or who live in rural and remote areas where access to centre-based programs may be limited
- Establish links with appropriate health and community services, including ACCHOs, and support referral pathways to culturally safe programs where available for Aboriginal and Torres Strait Islander patients in line with their needs and preferences
- Review data on Aboriginal and Torres Strait Islander patients' participation rates in pulmonary rehabilitation programs at their healthcare service and work with their local Aboriginal or Torres Strait Islander communities to maximise participation.

Indicators for local monitoring

Indicator 5a: Proportion of patients with COPD who were referred to a pulmonary rehabilitation program.

Applicable for: Hospitals, general practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793538

Indicator 5b: Proportion of patients discharged from hospital after a COPD exacerbation who started a pulmonary rehabilitation program within four weeks of discharge.

Applicable for: Hospitals, out-patient clinics and pulmonary rehabilitation programs. General general practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793542

More information about each indicator and the definitions needed to collect and calculate indicator data can be found online at the above METEOR links.

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.

Establish and maintain systems, processes, and resources to support clinicians to offer people with COPD individualised pharmacotherapy, according to the COPD-X stepwise approach outlined in the Lung Foundation Australia's [COPD-X Handbook](#).

Ensure that clinicians are trained and competent in explaining and demonstrating correct inhaler and spacer technique to patients. This includes providing access to relevant training, including access to placebo inhaler devices and other resources (for example, inhaler device technique training videos) as appropriate.

Establish systems to ensure inhaler technique and adherence are regularly and routinely assessed, and outcomes documented in the patient's healthcare record (and My Health Record where available). This includes before an escalation of therapy, after any change in inhaled medicines or a COPD exacerbation.

Indicators for local monitoring

Indicator 6a: Proportion of patients with COPD prescribed an inhaled medicine whose inhaler technique was assessed at least once in the previous 12 months.

Applicable for: Hospitals, general practices, other specialist clinics and community pharmacies.

METEOR link: meteor.aihw.gov.au/content/793550

Indicators for local monitoring

Indicator 6b: Proportion of patients with COPD prescribed an inhaled corticosteroid who were previously prescribed dual long-acting bronchodilators.

Applicable for: Hospitals, general practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793546

More information about each indicator and the definitions needed to collect and calculate indicator data can be found online at the above METEOR links.

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.

Ensure that systems, resources and pathways are in place to support clinician management of COPD exacerbations in line with *COPD-X Guidelines*. Provide access to, and ensure that antibiotic prescribing is in line with, *Therapeutic Guidelines: Antibiotic* or locally endorsed evidence-based guidelines and the [Antimicrobial Stewardship Clinical Care Standard](#).

Ensure systems and processes are in place to support appropriate use of antibiotics when managing COPD exacerbations, with particular emphasis on:

- Using antibiotics only when in line with the criteria for prescribing antimicrobials described in the current *Therapeutic Guidelines: Antibiotic* or locally endorsed evidence-based guidelines
- Selecting appropriate antibiotics if treatment is indicated – using amoxicillin or doxycycline first-line, and avoiding broad-spectrum antibiotics (for example, amoxicillin plus clavulanate, macrolides or cephalosporins) for initial therapy
- Using an appropriate route of administration, reserving intravenous therapy only for patients who cannot take oral therapy

- Reviewing appropriateness of dose, route, and the antibiotic's microbial spectrum of activity within 48 hours of the first prescription (as per the *Antimicrobial Stewardship Clinical Care Standard*).⁶³

In acute care settings, evaluate antimicrobial prescribing and use in line with the NSQHS [Preventing and Controlling Infections Standard](#) Actions 3.18 and 3.19. Ensure that antimicrobial stewardship systems are effective in supporting the appropriate use of antibiotics for COPD exacerbations and consider the findings of local antimicrobial audits.

Indicators for local monitoring

Indicator 7a: Proportion of antibiotic prescriptions for a COPD exacerbation that met the criteria for prescribing in the current Therapeutic Guidelines or evidence-based, locally endorsed guidelines.

Applicable for: Hospitals.

METEOR link: meteor.aihw.gov.au/content/793552

Indicator 7b: Proportion of antibiotic prescriptions for a COPD exacerbation where the prescription was for oral amoxicillin or doxycycline.

Applicable for: Hospitals.

METEOR link: meteor.aihw.gov.au/content/793555

Indicator 7c: Proportion of patients with a COPD exacerbation who were prescribed a corticosteroid where the prescription was for an oral corticosteroid for five days.

Applicable for: Hospitals, general practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793557

More information about each indicator and the definitions needed to collect and calculate indicator data can be found online at the above METEOR links.

Indicators for local monitoring

***Antimicrobial Stewardship Clinical Care Standard* indicators**

Services should also monitor relevant *Antimicrobial Stewardship (AMS) Clinical Care Standard* indicators:

- **Indicator 6a** – The proportion of prescriptions for which the indication for prescribing the antimicrobial is documented
- **Indicator 6b** – The proportion of prescriptions for which the duration, stop date or review date for the antimicrobial is documented
- **Indicator 7a** – The proportion of prescriptions for which an antimicrobial review and updated treatment decision is documented within 48 hours from the first prescription

Computation descriptions and definitions needed to collect and calculate indicators from the *AMS Clinical Care Standard* can be found online at meteor.aihw.gov.au/content/736878.

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.

Ensure there are systems, policies and pathways in place to enable access to controlled oxygen therapy for patients experiencing a COPD exacerbation, and non-invasive ventilation for patients with hypercapnic respiratory failure with acidosis.

Acute healthcare services should have local policies and protocols in place that provide guidance on assessment for hypercapnic respiratory failure with acidosis in COPD patients, and the use of non-invasive ventilation in these patients. These should be appropriate to the context of service delivery and consistent with the patient's care goals.

Clinicians who prescribe or administer controlled oxygen therapy and non-invasive ventilation must be suitably trained and competent in:

- The use of oxygen delivery devices and non-invasive ventilation equipment
- Administering both therapies at the appropriate settings.

Ensure that protocols are in place for oxygen therapy which include:

- Checking patient history for COPD for any patient receiving oxygen therapy
- Appropriate documentation of oxygen prescriptions
- Guidance on appropriate target oxygen saturation levels for people with COPD (that is, SpO₂ between 88% and 92%)
- Amended calling criteria for rapid response (as provided by medical emergency teams) in line with target oxygen saturation levels.

Ensure that there are systems, policies and procedures in place to:

- Enable assessment for hypercapnic respiratory failure in patients with a COPD exacerbation
- Provide non-invasive ventilation for patients with hypercapnic respiratory failure with acidosis and invasive mechanical ventilation when indicated
- Ensure the person's goals of care are considered and a senior clinician is involved in the decision to use non-invasive ventilation or mechanical ventilation
- Support documentation of advance care planning discussions and the patient's expressed goals of care for the episode of care, including plans for non-invasive and mechanical ventilation, endotracheal intubation and resuscitation, and advanced care plan.

Indicators for local monitoring

Indicator 8a: Proportion of patients with a COPD exacerbation who received controlled oxygen therapy where the target oxygen saturation levels of 88% to 92% were documented in the patient's healthcare record.

Applicable for: Hospitals.

METEOR link: meteor.aihw.gov.au/content/793577

Indicator 8b: Proportion of patients who presented to the emergency department with a COPD exacerbation who received a blood gas analysis to assess for hypercapnic respiratory failure with acidosis.

Applicable for: Hospitals.

METEOR link: meteor.aihw.gov.au/content/793583

Indicator 8c: Proportion of patients with hypercapnic respiratory failure with acidosis due to a COPD exacerbation who received NIV or the reason for not using NIV was documented in their healthcare record.

Applicable for: Hospitals.

METEOR link: meteor.aihw.gov.au/content/793585

More information about each indicator and the definitions needed to collect and calculate indicator data can be found online at the above METEOR links.



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.

Hospitals

Ensure that clinical information systems support clinicians to provide discharge summaries to the patient's nominated primary care provider (for example, general practitioner or Aboriginal Medical Service) and other community providers (for example, residential aged care facility) and communicate the need for follow-up within seven days of discharge or sooner if indicated. Where local clinical information systems allow, upload this information to the patient's My Health Record where the patient has given permission.

Establish effective communication systems between the hospital network and community care providers.

Primary care

Ensure that systems, processes and resources are in place to enable follow-up assessment of patients who have been hospitalised due to a COPD exacerbation within seven days of discharge, or sooner if required.



Cultural safety and equity

Healthcare services can:

- Ensure that systems are in place to enable effective follow-up after discharge that consider the patient's culture and location of care; Aboriginal and Torres Strait Islander people and others who have received acute treatment away from their community may need structured support to safely return home and receive timely follow-up after discharge
- Establish appropriate, culturally safe networks and arrange access to services, support and contacts for people who have been transferred from remote locations
- Support clinicians to consider the use of telehealth or outreach models to enable access to follow-up for patients living in rural and remote communities
- Ensure systems are in place to monitor and address the needs of Aboriginal and Torres Strait Islander people who choose to leave hospital before their treatment is completed.

Indicator for local monitoring

Indicator 9a: Proportion of patients with a COPD exacerbation whose discharge summary was sent to their nominated primary care provider on discharge from hospital.

Applicable for: Hospitals.

METEOR link: meteor.aihw.gov.au/content/793625

Indicator 9b: Proportion of patients with a COPD exacerbation who were seen for a follow-up assessment within seven days of discharge from hospital.

Applicable for: General practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793628

More information about each indicator and the definitions needed to collect and calculate indicator data can be found online at the above METEOR links.

10 Symptom support and palliative care

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

Ensure that systems, processes, and resources are in place to:

- Enable timely palliative care support for people with COPD, including after hospitalisation for an exacerbation
- Enable patient referrals to suitable clinicians or specialist palliative care services if required
- Support discussions about advance care planning and documentation of the patient's advance care plan in their healthcare record or My Health Record
- Enable documentation of goals of care for admitted patients with a COPD exacerbation, including plans for ventilation and resuscitation.



Cultural safety and equity

Healthcare services can:

- Have systems in place to support clinicians to deliver culturally safe palliative care that meets the patient's individual needs and preferences
- Develop referral pathways to palliative care services that are available through ACCHOs and Aboriginal Medical Services
- Establish ways to enable the involvement of Aboriginal or Torres Strait Islander Practitioners or Health Workers, cross-cultural health workers, and interpreters to align with patients' needs and preferences.

Indicators for local monitoring

Indicator 10a: Proportion of admitted patients with a COPD exacerbation whose healthcare record contained a copy of their advance care plan.

Applicable for: Hospitals.

METEOR link: meteor.aihw.gov.au/content/793630

Indicator 10b: Proportion of patients who have been admitted to hospital for a COPD exacerbation whose healthcare record included documentation regarding advance care planning.

Applicable for: General practices and other specialist clinics.

METEOR link: meteor.aihw.gov.au/content/793632

Indicators for local monitoring

Indicator 10c: Proportion of admitted patients with a COPD exacerbation whose healthcare record documented the patient's goals of care and their resuscitation plan for the episode of care.

Applicable for: Hospitals.

METEOR link: meteor.aihw.gov.au/content/793634

More information about each indicator and the definitions needed to collect and calculate indicator data can be found online at the above METEOR links.

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.

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.