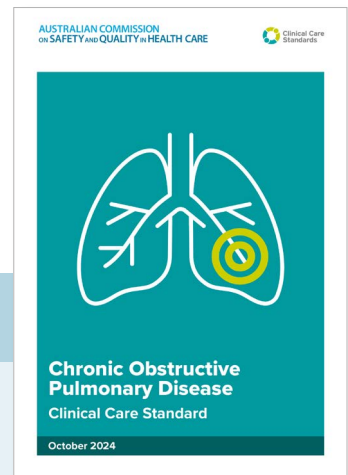


Atlas Focus Report: Chronic Obstructive Pulmonary Disease

Introduction

About 1 in 13 people over 40 years of age in Australia are thought to have chronic obstructive pulmonary disease (COPD), but about 50% may not know they have it.^{1,2} It is the fifth leading cause of death and of burden of disease in Australia.^{3,4} COPD is also associated with significant costs and hospitalisations.⁴ Best-practice care has the potential to improve outcomes and quality of life for people living with COPD.



What's new?

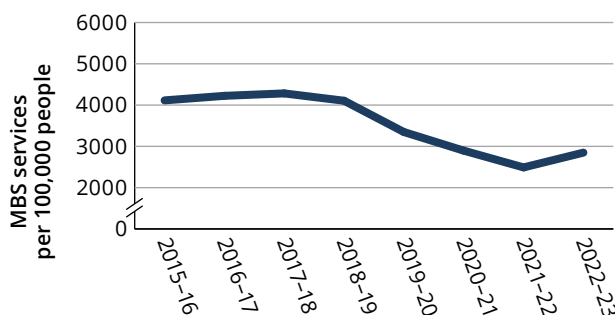
The latest *Australian Atlas of Healthcare Variation (Atlas) Focus Report: COPD* shows major changes in rates of spirometry and type of medicines used – two aspects of care covered in the *COPD Clinical Care Standard*.

Spirometry

Essential for accurate diagnosis and appropriate management⁵

31% ↓

DECREASE IN NATIONAL RATE*
between 2015-16 and 2022-23

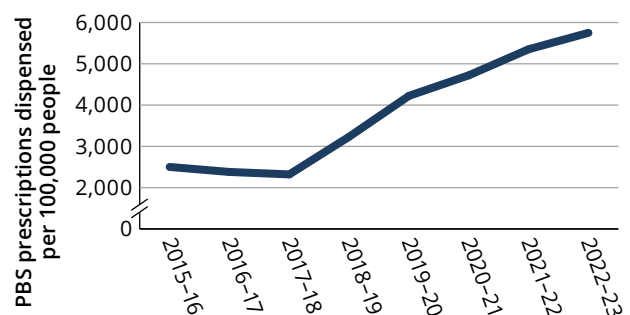


Triple therapy (ICS with LAMA and LABA)[†]

Should be reserved for COPD patients with frequent exacerbations and with significant symptoms despite optimal dual therapy; and for those with co-existing asthma⁵

130% ↑

INCREASE IN NATIONAL RATE‡
between 2015-16 and 2022-23



To find out why and what can be done – see pages 2–5

* MBS-subsidised spirometry services, people aged 35 years and over.

† ICS – inhaled corticosteroids; LAMA – long-acting muscarinic antagonist; LABA – long-acting beta₂-agonist.

‡ PBS-subsidised prescriptions dispensed for COPD ICS with LAMA and LABA (single or multiple inhalers), people aged 35 years and over. See [data resources](#) for more information.

Spirometry

Who and why?

- Spirometry should be performed in:
 - A person over 35 years of age with a risk factor and one or more symptoms of COPD
 - A person with a recorded diagnosis of COPD that has not yet been confirmed with spirometry.⁶
- Spirometry differentiates COPD from other lung diseases with similar symptoms, such as asthma⁶, which is important for guiding treatment. For example, ICS are an early treatment option in asthma, but should be reserved for patients with more severe disease in COPD, partly due to the risk of pneumonia in COPD⁵
- See [Quality Statement 1: COPD Clinical Care Standard](#).

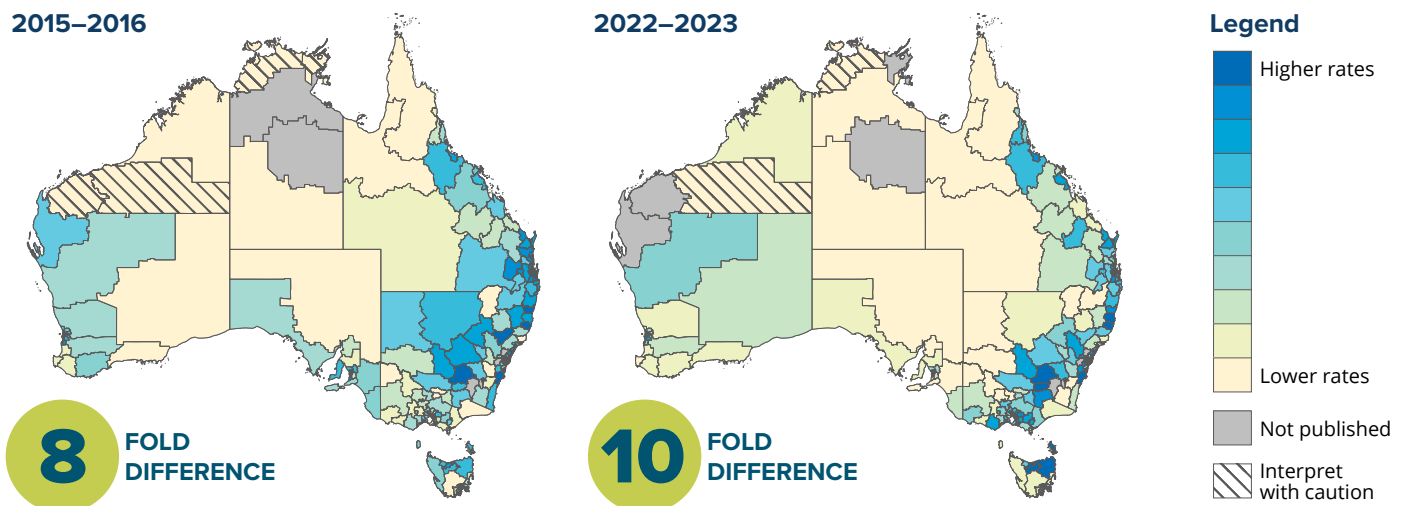
What did we find?*

- The national spirometry rate decreased by 31% between 2015–16 and 2022–23
- In 2015–16, there were 551,506 services (4,114 per 100,000 people) compared to 452,712 services in 2022–23 (2,848 per 100,000 people)
- Spirometry that is usually performed in doctors' rooms⁷ has decreased by 68% compared to a 7% decrease for spirometry that is usually performed in a laboratory
- Spirometry rates were lower outside major cities, despite the higher prevalence of COPD in regional and remote areas.⁴

Geographical variation in spirometry over time

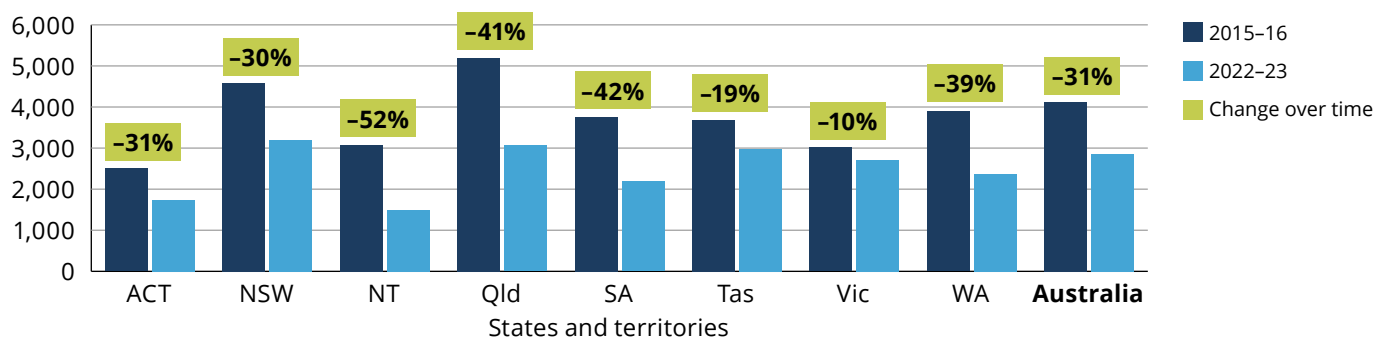
2015–2016

2022–2023



Difference between the local area with the highest rate and the local area with the lowest rate.

State and territory rates



For interactive data dashboard and local area (SA3) data see safetyandquality.gov.au/atlas-COPD

* MBS-subsidised spirometry services, people aged 35 years and over. See [data resources](#) for more information.

Why are spirometry rates low?

Possible reasons include:

Barriers to provision in primary care

Cost of machine, consumables and staff; low awareness of clinical benefit; lack of time and staff; reduced level of interpretation skills⁷

Limited access

Lack of spirometry in primary care or a reasonable referral option⁷

Patient factors

Cost, lack of time, being unwell, difficulty travelling to other location if not in GP's rooms⁷

COVID and other infectious diseases

Loss of primary care-based spirometry skills during COVID restrictions, cost of infection-prevention protocols, ongoing concerns about potential spread of infectious diseases through spirometry⁹, fewer face-to-face consultations during COVID¹⁰

What can be done?



CONSUMERS

- A breathing test called 'spirometry' is the only way to find out if you have COPD. Accurate diagnosis is important because other lung conditions such as asthma can cause similar symptoms to COPD but have different treatments. You should have spirometry if you are over 35 years of age and:
 - Have one or more risk factors for COPD and symptoms of the disease
 - Have been told that you have COPD but have not had spirometry, even if you have been in hospital because of COPD symptoms.
- See [Information for consumers – COPD Clinical Care Standard](#) for more details.



GENERAL PRACTITIONERS (GPs)

- Use spirometry to confirm suspected diagnoses of COPD
- Know where to refer patients locally for spirometry, if not available on-site
- See [Information for clinicians – COPD Clinical Care Standard](#) for more details.



HEALTH DEPARTMENTS AND PRIMARY HEALTH NETWORKS

- Review spirometry remuneration payments and models
- Support respiratory diagnostic hubs and outreach services for people with chronic lung symptoms and/or risk factors for chronic respiratory disease, targeting areas and populations with high COPD burden
- Introduce a GP Practice Incentives Program (PIP) Quality Improvement (QI) Incentive initiative for spirometry
- Provide GP and consumer education programs about the need for spirometry^{11,12}
- See the [Australian Atlas of Healthcare Variation Focus Report – COPD](#) for more details.

MedicineInsight: individual practice and GP data with accompanying QI guide

The free [MedicineInsight program](#) gives GPs access to their individual data for several COPD management indicators and a quality improvement (QI) guide for acting on the data (contributes to continuing professional development). The program allows participating GPs to reflect on their own practice results and the aggregate of all MedicineInsight practices.

Triple therapy – ICS with LAMA and LABA*

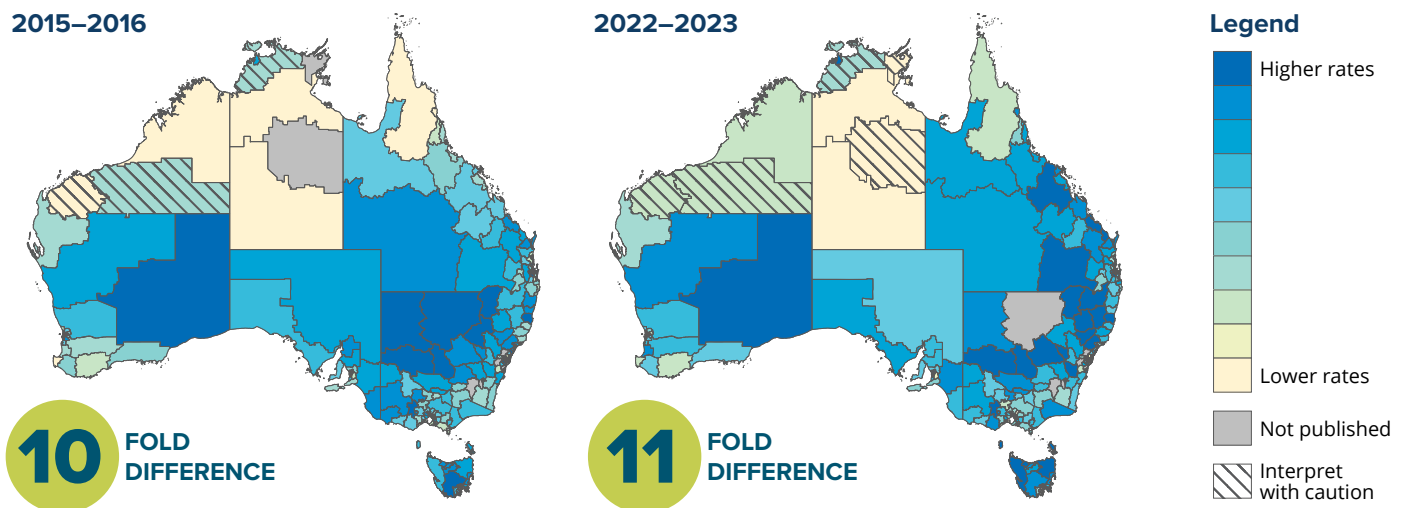
Who and why?

- Prescribing for COPD should follow a stepwise approach that includes checking inhaler technique⁵
- Triple therapy with inhaled corticosteroid (ICS) should be reserved for COPD patients with frequent exacerbations and significant symptoms despite optimal dual therapy; and for those with co-existing asthma⁵
- In many cases, ICS are less effective in COPD than in asthma because the type of underlying inflammation is different¹³
- ICS can increase the risk of pneumonia in patients with COPD^{5,14}
- See [Quality Statement 6: COPD Clinical Care Standard](#).

What did we find?†

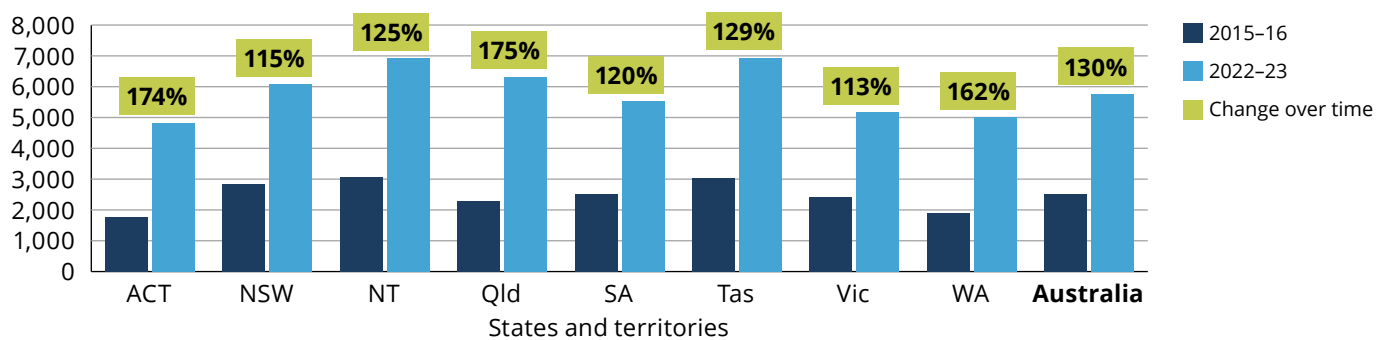
- Prescriptions dispensed for triple therapy increased nationally by 130% between 2015–16 and 2022–23
- In 2015–16, there were 353,102 triple therapy prescriptions dispensed (2,501 per 100,000 people), compared to 996,099 (5,750 per 100,000 people) in 2022–23
- Prescriptions dispensed for single therapy with a LAMA or a LABA therapy decreased nationally by 55% between 2015–16 and 2022–23
- In most states and territories, the rate of triple therapy in 2022–23 was higher than any other examined pharmacotherapy options for COPD.

Geographical variation in COPD triple therapy over time



Difference between the local area with the highest rate and the local area with the lowest rate.

State and territory rates



For interactive data dashboard and local area (SA3) data see safetyandquality.gov.au/atlas-COPD

* ICS – inhaled corticosteroids; LAMA – long-acting muscarinic antagonist; LABA – long-acting beta₂-agonist.

† PBS-subsidised prescriptions dispensed for COPD ICS with LAMA and LABA (single or multiple inhalers), people aged 35 years and over. See [data resources](#) for more information.

Why has ICS use increased?

Possible reasons include:

Combination inhaler added to the PBS

Addition of triple therapy combination inhalers to the PBS from 2018¹⁵, which increased affordability and convenience for patients

Prescriber factors

Not checking inhaler technique; not using a stepwise approach to prescribing; lack of awareness of guidelines and reasons for a stepwise approach¹⁶; time pressure in primary care¹⁷

Asthma/COPD overlap

Actual or perceived coexistence; belief that 'covering both bases' with ICS is appropriate if there is diagnostic uncertainty due to lack of spirometry¹⁸; misdiagnosis as asthma due to a lack of spirometry¹⁹

Disease factors

Possible increase in number of patients with exacerbations or with more severe disease at the time of diagnosis¹²

Note: The prevalence of COPD remained steady between 2011–12 and 2022.²⁰

Is the increase appropriate?

Australian data on the appropriateness of triple therapy prescribing in COPD are not available. However, based on studies from other countries, a proportion may be inappropriate.¹³

A large study from the United States showed that 62% of COPD patients prescribed triple therapy did not meet the guidelines criteria of exacerbation history.²¹

What can be done?



CONSUMERS

- Ask about your treatment options, and about the risks and benefits of your medicines.²²



GENERAL PRACTITIONERS (GPs)

- Ensure your patients on triple therapy for COPD meet the guidelines' criteria (see [Who and why?](#) on page 4).



HEALTH DEPARTMENTS AND PRIMARY HEALTH NETWORKS

- Increase prescriber awareness of prescribing guidelines⁵
- Support multidisciplinary chronic disease teams with specialist respiratory nurses and physiotherapists, working collaboratively with the oversight of respiratory specialists.¹⁷

Practice Reflections: confidential data for GPs on spirometry referrals

In late 2025, GPs will receive a Practice Reflections report based on their individual MBS data for spirometry referrals. This report includes confidential data, along with comparisons with peers and practice points to support professional reflection and quality improvement.

COPD resources

Australian Commission on Safety and Quality in Health Care:

- [Australian Atlas of Healthcare Variation \(Atlas\) Focus Report: COPD](#) – Provides an interactive data dashboard, including data by local area (SA3); data downloads, including dispensing of individual COPD medicine classes; full commentary and success story of increasing spirometry access
- [COPD Clinical Care Standard](#) – In 10 quality statements, the Standard describes the care that people with COPD can expect to receive to support appropriate management of their condition and long-term outcomes. Information is provided for consumers, clinicians and service managers in acute and primary care, and includes a set of clinical indicators for local use.

The Lung Foundation Australia and Thoracic Society of Australia and New Zealand:

- [COPD-X Plan](#) – Guidelines for COPD diagnosis and management, updated quarterly
- [COPD-X Handbook](#) – Concise companion resource to the COPD-X guidelines.

References are available at [Highlights Report: COPD](#).