

## Can you improve adherence to pharmacological therapy for those with COPD?

Clinical Question	How effective and safe are interventions intended to improve adherence to single or combined pharmacological treatments compared with usual care in people with chronic obstructive pulmonary disease (COPD)?
Bottom Line	Single component interventions such as provision of education or motivational interviewing by a health professional can help to improve adherence to pharmacotherapy. Similarly, single component interventions may also help to improve quality of life. There was no apparent difference in the number of people experiencing exacerbations, adverse events, serious adverse events, or deaths between those receiving interventions to improve adherence compared to those who did not.
	Multi-component interventions that include structured education, motivational or behavioural components provided by a health professional, may also help to improve medication adherence in people who have mild-to-severe COPD, for medium- to long-term duration. Low- to moderate-certainty evidence shows that pharmacist-led approaches may be beneficial in reducing number of people admitted to hospital (for any reason or COPD-related).
Caveat	The evidence presented in this review should be interpreted with caution as most of the evidence was of low to very low certainty for single component interventions, and moderate to very low certainty for multi- component interventions. Larger studies are needed to demonstrate effects of single and multi-component interventions, in different COPD populations and optimal intervention durations.
Context	COPD is a progressive, chronic lung disease characterised by persistent respiratory symptoms and limited airflow due to airway or alveolar abnormalities (or both). Adherence to medication is one of the most important factors that enables successful treatment of COPD. Benefits to clinical outcomes are often limited due to people not taking medication as prescribed, which can also be costly and wasteful for health services
Cochrane Systematic Review	Janjua S, Pike KC, Carr R, Coles A, Fortescue R, Batavia M. Interventions to improve adherence to pharmacological therapy for chronic obstructive pulmonary disease (COPD). Cochrane Database of Systematic Reviews 2021, Issue 9. Art. No.: CD013381. DOI: 10.1002/14651858.CD013381.pub2. This review contains 14 trials with a total of 2191 participants.
Dearle No. Contember 2024 written by Veneces MD. Lender	

Pearls No. 686, September 2021, written by Vanessa MB Jordan.

Systematic review link:

https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013381.pub2/full