



BREATHE: The Breathlessness Rapid Evaluation
And THERapy Study – May 2024



The George Institute
for Global Health

Facts:

- Breathlessness in Australia is becoming more prevalent following bushfires, worsening air pollution and the COVID-19 pandemic.
- More than 1.8 million Australians have breathlessness that chronically limits exertion and are not aware that it can be helped by better diagnosis and care.
- Respiratory conditions account for around 10% of deaths in Australia and 31% of Australian adults have a chronic respiratory disease.

Project Cycle: 2024–2028

Partners:

The George Institute for Global Health, Australia & India
UNSW Sydney, Australia
University of Sydney, Australia
University of Notre Dame, Australia
University of Newcastle, Australia

Supporters:

Medical Research Future Fund

Principal Investigator:

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Contact:

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Background:

- Breathlessness is reported by about 10% of adults in Australia and associated with common medical problems such as asthma, chronic obstructive pulmonary disease, heart failure, sedentary lifestyle, anxiety, and obesity.
- Chronic breathlessness is often misdiagnosed and mismanaged in primary care due to the multi-faceted and complex nature of its causes.
- Previous studies in general practice in Australia have reported over-testing as a significant problem, and that 25–75% of tests are not supported by evidence or expert opinion.
- An evidence-based approach is required to reduce avoidable tests and improve overall diagnostic efficiency.

Aims:

- To develop and test an automated system that identifies patients with breathlessness and integrates a digital tool, called a clinical decision support system (CDSS), in primary care.
- To improve the identification and management of breathlessness in Australia by determining whether a CDSS in primary care improves diagnostic accuracy, symptom management and clinical efficiency compared to usual care.

Methods:

- 400 participants across 40 primary care sites will take part in a two-arm cluster randomised trial comparing the clinical benefit, accuracy and time taken to diagnose patients who present with breathlessness when GPs use the CDSS, compared to no CDSS and usual care.
- All participants will complete a short pre-visit questionnaire to help GPs identify and understand their breathing problem.
- Participants will be followed up for 12 months.

Impact:

- By enhancing guidance for general practitioners, the BREATHE CDSS could help reduce unnecessary tests and referrals and speed up breathlessness diagnoses so that correct treatments can commence sooner.
- We anticipate that the BREATHE CDSS will lead to better health outcomes and lower costs for patients and will be testing whether this is truly the case.

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