

Sleep restored: The effectiveness of cognitive behavioural therapy for insomnia

Insomnia impacts the lives of more than



1 in 7 Australians

or **14.8 per cent** of the population aged 18 and over. In 2025, this was **3.2 million** Australian adults.

What is chronic insomnia?

The International Classification of Sleep Disorders-3 (ICSD-3) definition of chronic insomnia involves a complaint of difficulties initiating and/or maintaining sleep and daytime impairment experienced on at least three nights per week and present for at least three months, with adequate sleep opportunity.

People living with insomnia experience difficulties initiating or maintaining sleep. This has daytime consequences including:



Fatigue



Poor mood



Reduced productivity

There are several treatment options for insomnia

Cognitive behavioural therapy for insomnia (CBT-I)

Delivered by trained clinicians individually or in small group settings and in-person or via tele-health, or digital CBT-I programs (with or without clinician guidance)

Pharmacotherapy

Sedative hypnotic medications accessed over the counter or by prescription

Third-wave therapies

Psychological and behavioural treatments such as mindfulness-based treatment and acceptance commitment therapy

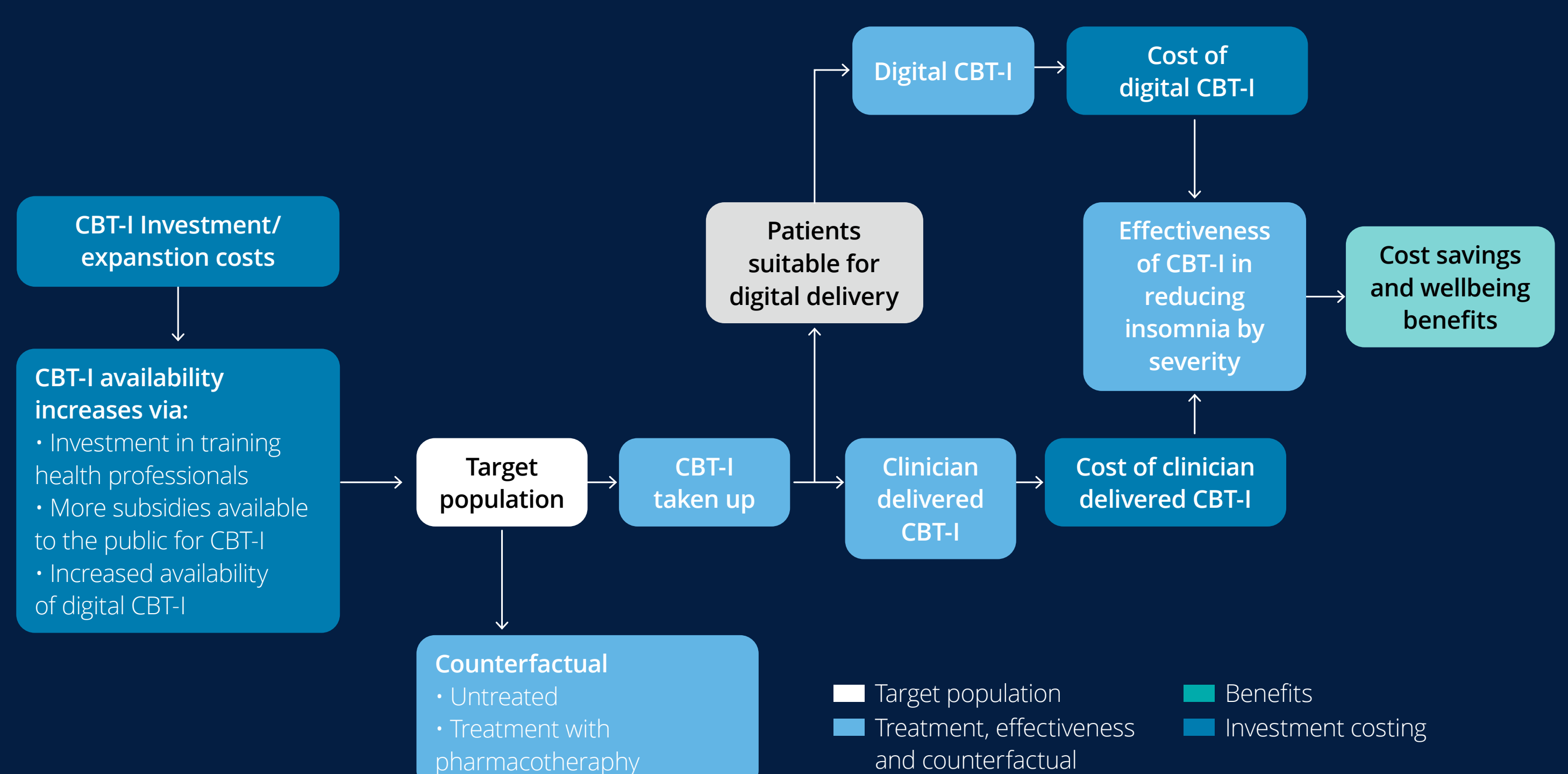
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CBT-I is the recommended first line treatment for insomnia but is highly underutilised and less than 1 per cent of Australians living with insomnia access it.

Methodology

The aim of this analysis was to estimate the effectiveness of CBT-I for a specified target population of 100,000 individuals living with insomnia over a five-year period. The framework used in this analysis compares the intervention with a CBT-I treatment against a counterfactual scenario of not receiving treatment or receiving a pharmacotherapy treatment. In the intervention scenario, individuals receive either digital or clinician-delivered CBT-I. This involves treatment delivery costs, as well as upfront investment to expand CBT-I availability and access for the target population. Both delivery modes reduce insomnia symptoms leading to cost savings and improvements in wellbeing.

Framework to measure the effectiveness of CBT-I



Expanding access to CBT-I to 100,000 Australian adults over 5 years is highly cost effective:

Costs

Total incremental cost of delivering CBT-I is estimated to be

\$40.8 million

(present value), or

\$306 per person for digital CBT-I

\$2,023 per person per person for clinician-delivered CBT-I

Benefits

Total economic benefits are estimated to be

\$149.7 million

including:

• Avoided health system costs (general practitioner (GP) encounters, hospital admissions, allied health and sleep physician referrals)

• Avoided productivity losses (absenteeism, presenteeism, and reduced employment)

Net economic benefit

This will deliver a net economic benefit of

\$108.9 million

or \$1,089 per person

Incremental cost effectiveness

Digital CBT-I cost of **\$4,872** per Quality-Adjusted Life Year (QALY) gained

Clinician delivered CBT-I cost of **\$28,922** per QALY gained

3.67 The economic benefit cost-ratio of expanding CBT-I access is 3.67, meaning that \$3.67 would be generated for every \$1 invested into it

Future opportunities

There is an opportunity to support better outcomes for people living with insomnia through improved access to CBT-I. This includes:



Upskilling the available workforce to deliver CBT-I



Increasing awareness of CBT-I among frontline care providers



Develop funding pathways to increase the uptake of CBT-I



Delivering public health awareness and education campaigns to highlight the importance of insomnia and preventative sleep health



Introducing routine insomnia screening in primary care

