

Smoking cessation and vaping cessation in New Zealand

Two community-based pragmatic trials to inform practice and policy

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Disclosures

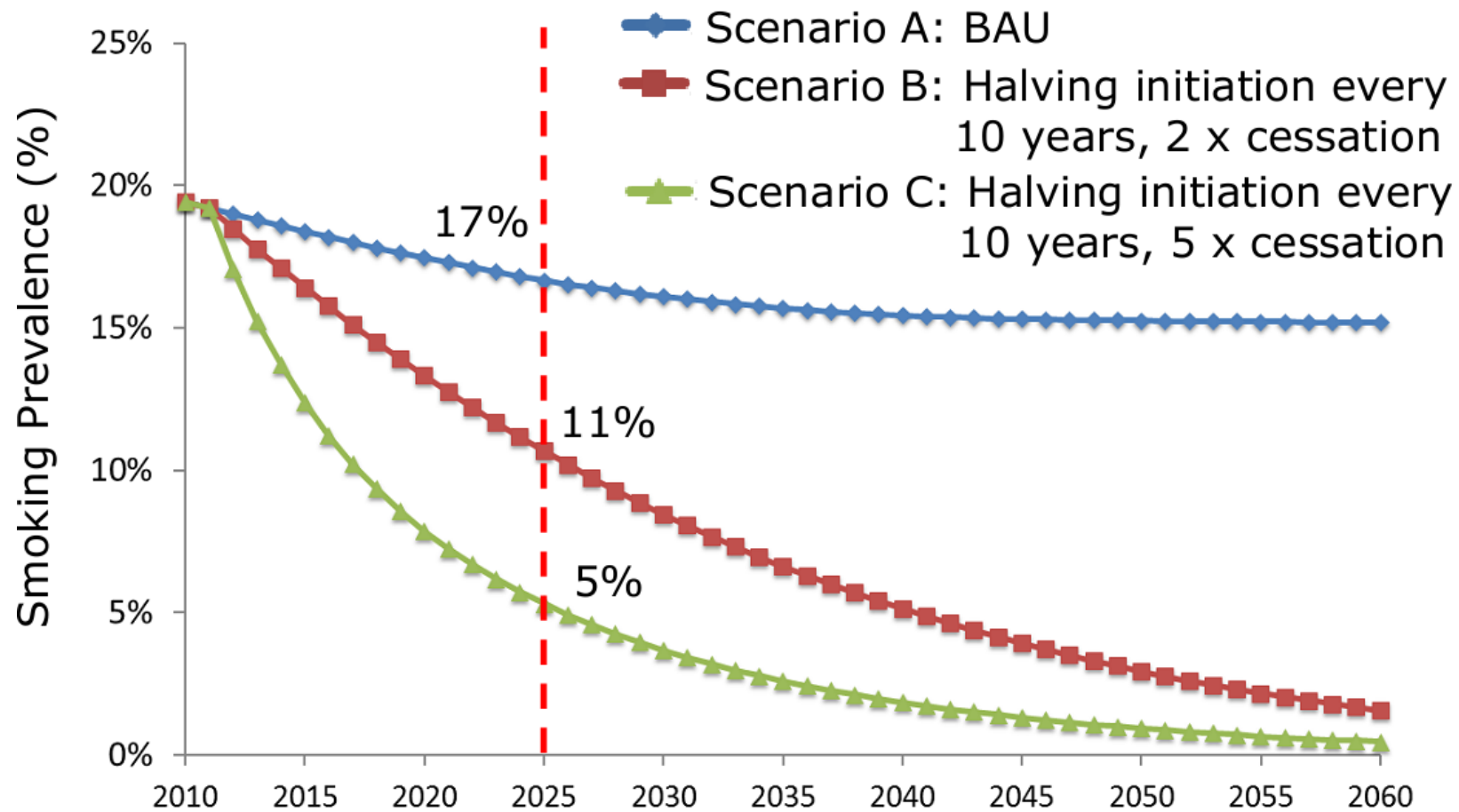
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- NZ Ministry of Health
- National Institutes of Health, USA
- Cytisine provided for a clinical trial, via Achieve Life Sciences and Sopharma.
- Habitrol® patches provided for a clinical trial via the NZ government, via their contract with Haleon.
- Nicorette® Quickmist purchased from Kenvue.
- Vapes purchased from NZVapor.
- NRT provided by Johnson & Johnson Pacific for a pilot university smoking cessation clinic

Smokefree NZ 2025



What is the ideal cessation intervention?

Affordable: For people who smoke and funders

Practicable: Easy to use

Effective: It works

Cost-effective: Brings the greatest possible advantage, in relation to its cost

Acceptable: People like it, and so will use it/engage with it

Safe: No, few and/or manageable side effects

Equitable: Access for all, reaching those most in need

Pragmatic trials to inform practice and policy



More pragmatic
(Effectiveness)

'Real world' conditions
Heterogeneous population

More explanatory
(Efficacy)

Under 'ideal' conditions
Homogeneous population

Smokefree Aotearoa 2025 Action Plan

- Vaping can help people switch away from tobacco
- Vaping is less harmful than smoking
- NZ's plan included a nicotine reduction strategy.
- Access to cleaner forms of nicotine is key to the success of such a strategy.
- Once people have switched to NRT and/or nicotine e-cigarettes, offer support to switch to no nicotine use.

Is there a need for vaping cessation support?

Systematic review (Literature up until September 2021)

- 79 articles: 56 cross-sectional, 6 qualitative, 5 cohort, 3 experimental, 2 mixed methods, and 7 intervention or case studies. 80% from the USA
- Users of nicotine vapes report symptoms of nicotine dependence.
- Youth: high intent to quit vaping – motivated by health concerns
- Adults: mixed intent to quit vaping – motivated by “cost, lack of satisfaction, and psychologic factors”.
- Adults were more likely to report past quit attempts: ‘cold turkey’, NRT, varenicline, or nicotine tapering.
- Almost no evidence on effective cessation strategies (2 randomised trials)

Clinical trials: vaping cessation

Text messaging

- US phase 3 trial of an 8-week tailored text-based behavioural support program, or no intervention
- 2,588 vapers (18–24 years)
- Self-reported 30-day point prevalence abstinence from vaping
- 7-months post-randomisation: 24% treatment vs 19% control: OR=1.39; 95% CI 1.15–1.68; $p < 0.001$.

Nicotine reduction

- US pilot trial of 12 weeks of nicotine tapering plus behavioural support; NRT (patch and/or gum/lozenge) plus behavioural support; or self-guided quitting support
- 24 adult vapers (~20 years)
- Self-reported abstinence (vape and nicotine-free at both 12 weeks and 6 months): 75%, 43% and 44% respectively.

Clinical trials: vaping cessation

Cytisine

- US double-blind, phase 2 trial of 12 weeks of 3mg cytisinicline + behavioural support vs placebo + behavioural support
- 160 vapers aged 18 years and over
- Biochemically verified continuous abstinence from vaping
 - End of treatment (weeks 9-12): 31.8% treatment vs 15.1% placebo: RR=2.6, 95% CI 1.1-7.1, $p=0.035$).
 - Four weeks post-end of treatment (weeks 9-16): 22.4% treatment vs 13.2% placebo: RR=2.0, 95% CI 0.8-5.3, $p=0.15$.
- Excluded people with serious psychiatric illness and current use of illicit substances. Low representation of non-white or Hispanic peoples who vaped

Country level support



Vaping Cessation Guidance Resource

This resource is meant to guide healthcare providers to support their clients who want to quit vaping (i.e., people seeking treatment who use e-cigarettes or who use both e-cigarettes and tobacco). This resource can be used for both adults and youth (ages 15 to 24).

The recommendations, highlighted in purple, are based on the evidence and expertise available at the time this resource was developed (February 2022). The special considerations, highlighted in orange, are based on the feedback provided by Expert and Peer panel members. Additional supports are highlighted in yellow. Please be aware that as evidence on vaping and vaping cessation practices continue to emerge, healthcare providers are advised to re-evaluate treatment plans.

Disclaimer: The recommendations listed in this resource are meant to provide general guidance and have not been adapted by or with specific vulnerable populations at this time. Practitioners should always take into consideration peoples' social and cultural diversity and use trauma-informed and person-centred approaches when creating a treatment plan for people who want to quit vaping.

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Quitline ME MUTU

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Help to Quit Why Quit? Stay Quit Community Blogs Log in Sign up

Need free support or advice? Free call Quitline on 0800 778 778

Sign up

COMMIT to QUIT NOW

Vaping & Quitting

My Smoking Quiz

E matua momi ana koe i te aha?
What do you mainly use?

Cigarettes Rollies Cigars Vape

Motivation Tips

He aha te ngako o tōu hikoi whakamutu?
What's your main reason for Quitting?

Health Money Family Pregnancy Re

HERU & HAPŪ MĀMĀ + Quitline ME MUTU

How to register

NZ Quitline

- The best thing you can do for your health is be smokefree and vape free.
- Vaping is for those who are quitting smoking.
- Vaping is not for children or young people.
- Vaping can help some people quit smoking.
- Vaping is not harmless but it is much less harmful than smoking.
- Vaping is not for non-smokers - if you don't smoke, don't vape

Knowledge generation for NZ



1. Survey:

To gain insights from people who used to vape or currently vape (irrespective of smoking status) about their vaping cessation efforts

2022

2. Pragmatic community-based vaping cessation trial

2028

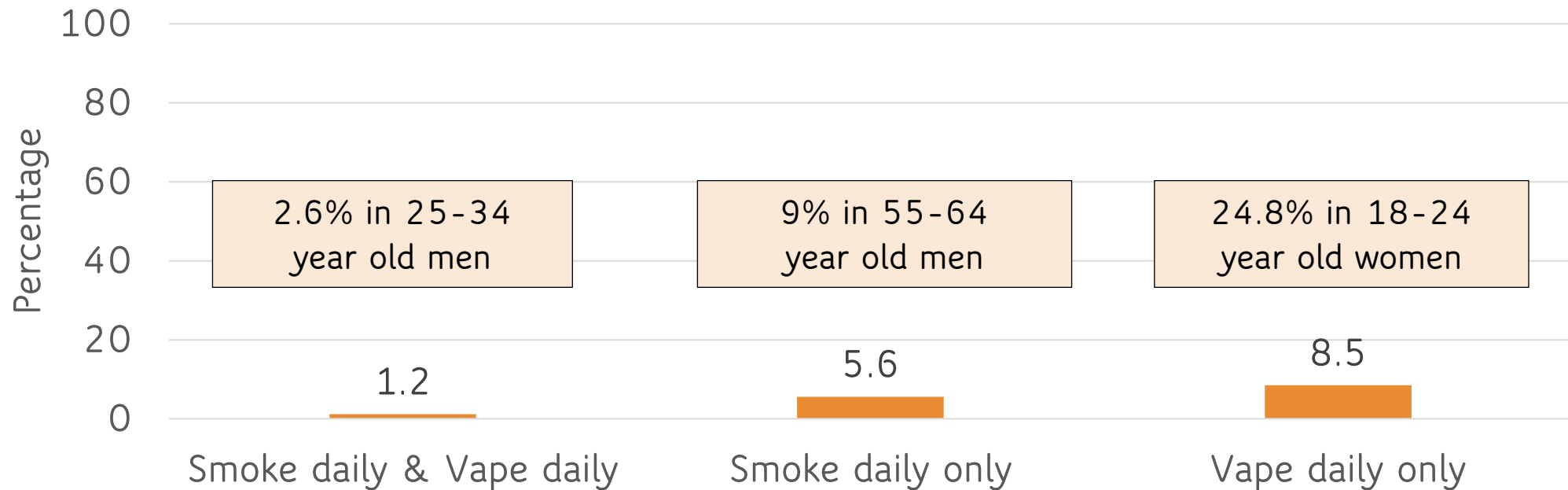
3. NZ-specific vaping cessation guidelines

"Guidance" 2024

4. Cochrane review for vaping cessation

2025

NZ Health Survey 2022/23 (≥ 15 years)



NZ: National cross-sectional survey (2022)

Rahimi M et al., Drug & Alcohol Review, 2025 (in press)

Aim: To gain insights from people who used to vape or currently vape (irrespective of smoking status) about their vaping cessation efforts.

Design: Web-based cross-sectional survey. Participants recruited through market research survey panels (Horizon, Dynata, Kantar).

Sample: 1,100 people who used to smoke or currently smoked, were aged ≥ 16 years, and either currently vaped (but had tried before to stop vaping) or used to vape.

Outcomes: Demographics, smoking/vaping history, vaping dependence, vaping identity, quit attempts, reasons for wanting to quit, strategies used, enablers and barriers to quitting, triggers for relapse to vaping, advice for others.

Sample: N=1,119

	Never smoked N=144	Used to smoke N=975
Used to vape N=718	102	616
Currently vape N=401	42	359

Gender	Male	35%
	Female	64%
	Not-binary	1%
Age group (years)	16-24	11%
	25-44	54%
	>=45	35%
Ethnicity	Maori	16%
	Pacific	5%
	NZ/European	68%
	Asian/other	11%
Education	No formal	12%
	Secondary	62%
	Vocational/tertiary	26%
Place of residence	Large city	59%
	Regional city/town	31%
	Rural	10%

Irrespective of smoking history or current vaping status, the majority (73-81%) of participants had made one or two serious attempts to quit vaping

Reasons for wanting to quit vaping

- Health concerns (N=516, 47%, 95% CI: 44%-50%)
- Dislike of feeling dependent on vaping (N=424, 39%, 95% CI: 36%-42%)
- Cost of vaping (N=293, 27%, 95% CI: 24%-30%)

Strategies used to quit vaping

- Cold turkey (N=600, 55%, 95% CI: 52%-58%)
- Nicotine reduction (N=251, 23%, 95% CI: 20%-25%)
- Support from friends and/or family (N=207, 19%, 95% CI: 17%-21%)

Advice to those who want to stop vaping

Avoidance

- Restrict where you vape
- Avoid having the vape/nicotine nearby*
- Avoid being around others who vape
- Throw the vape away

Seek help

- Medical support
- Quitline
- Specialist vape retailer

Replacing the hand-to-mouth action

- Sweets, chewing gum, water bottle with straw, lip balm, spinners

*“Do it slowly
and go get help
from doc for
anxiety”*

*“Put it somewhere
you have to get up
and go for a vape,
and leave it there
when done, so its not
always in your hand”*

Advice to those who want to stop vaping

Nicotine

- Go 'Cold Turkey'
- Try NRT patches and gum
- Reduce nicotine over time
- Reduce frequency of use
- Zero nicotine vape on hand

Building self-efficacy

- Preparing to quit
- Be kind to one-self

Disgust

- Get a horrible flavour

"go into the quitting process with a feeling of elation, not loss"

"To cut down the strength gradually, don't buy from a dairy or supermarket, only get through a reputable seller than can give the serious advice"

Barriers to quitting	
Never smoked	Used to smoke
Vaping gave them something to do	Vaping gave them something to do
Concerned about potential weight gain	Concerned about relapsing back to smoking
Too stressed to stop	They enjoyed vaping

"I had no problem quitting vaping as I didn't like it. It was much harder to quit smoking"

Triggers for relapse back to vaping in people who currently vaped

- Feeling stressed (N=194, 49%, 95% CI: 44%-54%)
- Being around people who were vaping (N=162, 41%, 95% CI: 36%-46%)
- Symptoms of nicotine withdrawal (N=149, 37%, 95% CI: 33%-42%)

Where to next?

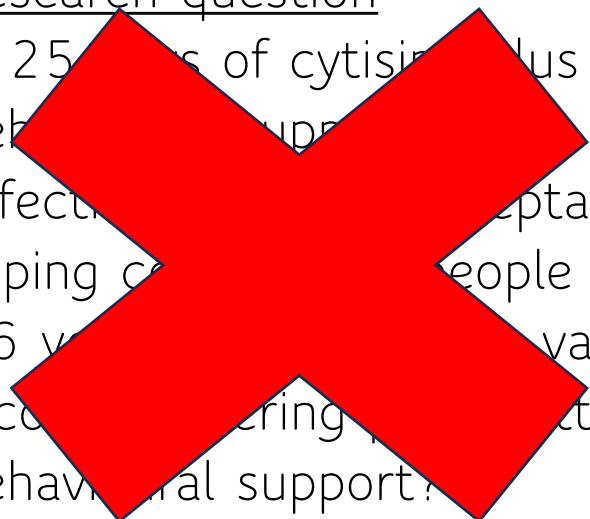
Cytisine is more effective than NRT for smoking cessation and is more acceptable to users.

Cytisine is at least as effective as varenicline for smoking cessation but has greater acceptability and fewer adverse effects.

Cytisine is more effective than placebo for vaping cessation and with few side effects

Research question

Is 25 mg of cytisine plus written behavioral support more effective and acceptable for vaping cessation in people aged 16 years and over who vape nicotine than varenicline plus written behavioral support?



Where to next?

NZ smoking cessation providers wanted to offer NRT, but not permitted to

US vaping cessation pilot study (n=24) utilised nicotine tapering over 12 weeks plus behavioural support.¹

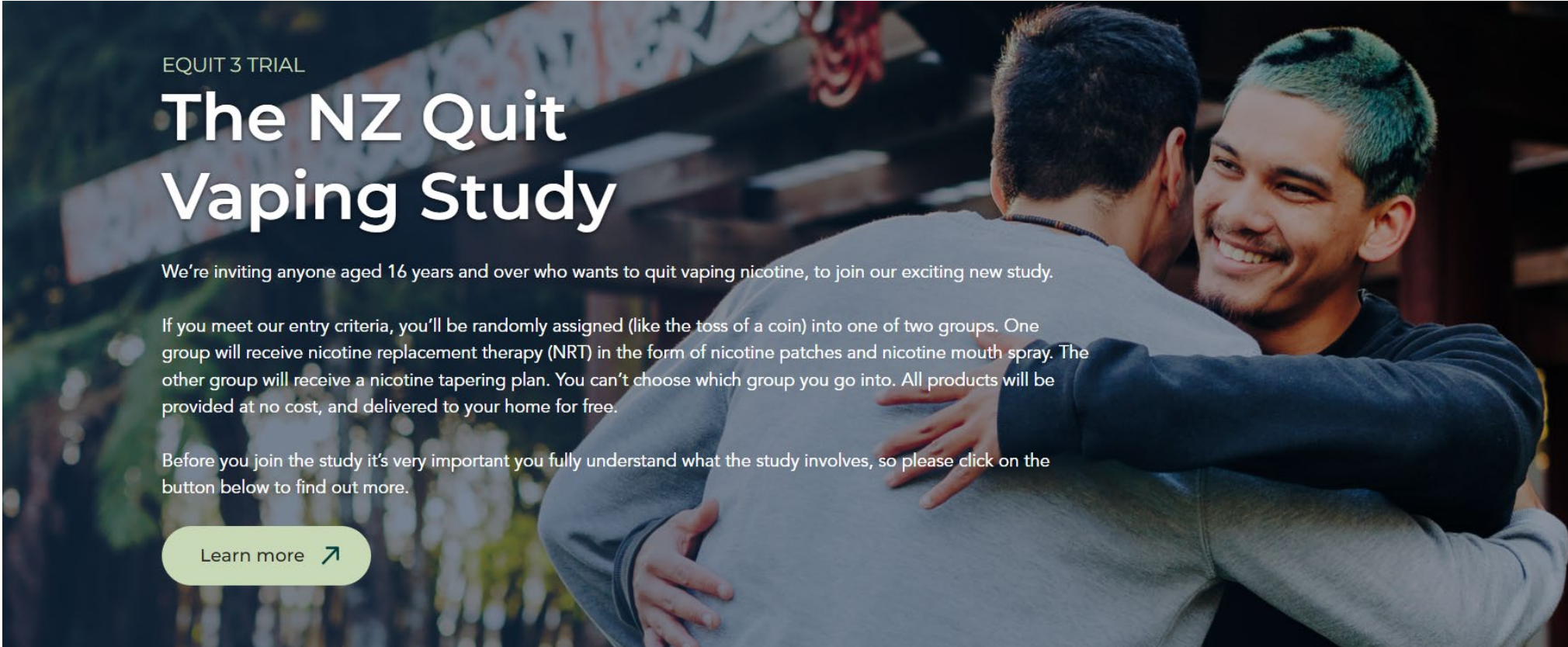
Review: Combination NRT is superior to single use NRT for smoking cessation (18 trials, N=11,356).

Review: 'Cut down to quit' + fast acting oral NRT is superior to 'Cut down to quit' for smoking cessation (7 trials, N=5,323)

Research question

Is combination NRT plus written behavioural support more effective, safe and acceptable for vaping cessation in people aged ≥ 16 years, than vape nicotine tapering plus written behavioural support?

¹ Sahr M et al. *Pharmacy (Basel)*. 2021;9(1).21

A photograph of two men embracing in a park-like setting. One man is seen from the back, wearing a grey hoodie, while the other man, with short dark hair and a beard, is smiling and wearing a dark blue long-sleeved shirt. The background is slightly blurred, showing trees and a building.

EQUIT 3 TRIAL

The NZ Quit Vaping Study

We're inviting anyone aged 16 years and over who wants to quit vaping nicotine, to join our exciting new study.

If you meet our entry criteria, you'll be randomly assigned (like the toss of a coin) into one of two groups. One group will receive nicotine replacement therapy (NRT) in the form of nicotine patches and nicotine mouth spray. The other group will receive a nicotine tapering plan. You can't choose which group you go into. All products will be provided at no cost, and delivered to your home for free.

Before you join the study it's very important you fully understand what the study involves, so please click on the button below to find out more.

[Learn more ↗](#)

- Live in New Zealand;
- Currently vape nicotine at least weekly;
- Used to smoke, or have never smoked;
- Aged 16 or older; have access to the internet;
- Motivated to quit-vaping in the next eight weeks;
- Able to provide consent

ClinicalTrials.gov ID: NCT06832098

EQUIT3 Trial (N=774 people, 90% power)

Group 1: Combination NRT for 8 weeks

- Nicotine patch (21mg) and Mouth spray (1mg)

Group 2: Nicotine reduction over 8 weeks

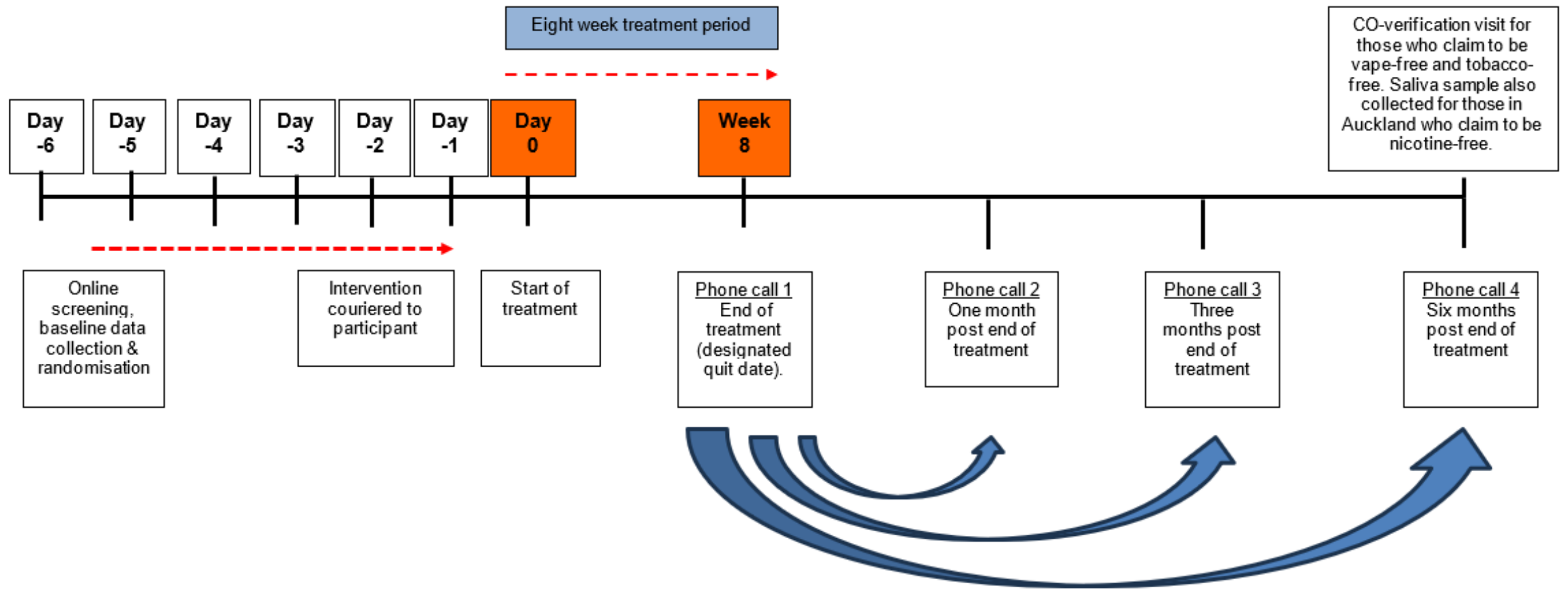
- Based on current e-juice nicotine concentration and frequency of vaping upon entry to the trial.
- Informed by a US pilot trial¹, established schedules for NRT tapering,² and advice from the end-user advisory group
- Use their own vapes and nicotine e-liquid.
- Users of disposables: Advised to switch to another device for tapering and/or taper by the number of sessions/uses (rather than by nicotine content).

Both groups get
written behavioural
support

Material co-created
by end-user advisory
group, and builds on
existing NZ material.

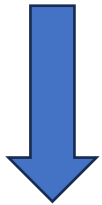
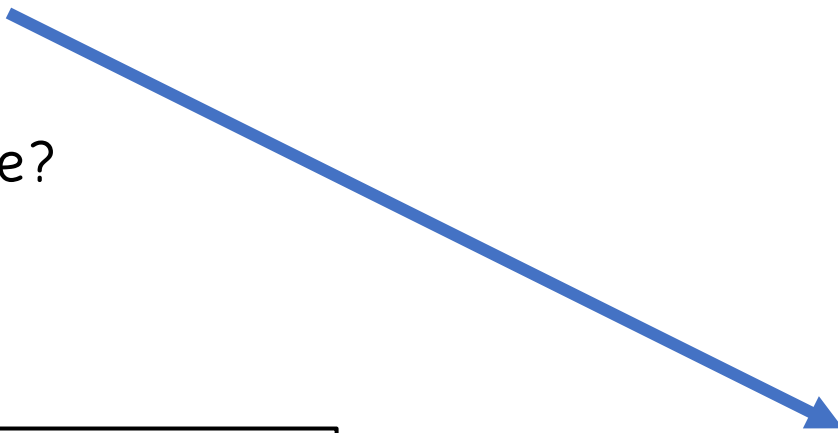
¹ Sahr et al. *Pharmacy (Basel)*. 2021;9(1).21;

² Hsia SL, et al. *Preventive Medicine* 2017 Apr;97:45-49.



How to measure abstinence from vaping?

- Vape-free and tobacco-free?
- Vape-free?
- Nicotine-free?



Self-report of no device use (defined as not vaping more than five vaping sessions since EoT), and self-report of no use of any tobacco products (defined as not smoking more than five cigarettes and no use of any other tobacco products since EOT), but individuals may or may not be using NRT.

Not vaping nicotine, not using any tobacco products, and not using any NRT

No device use, but may or may not be using tobacco products and/or NRT

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NRT: Habitrol® via NZ government, via their contract Haleon; Nicorette® Quickmist purchased from Kenvue.

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