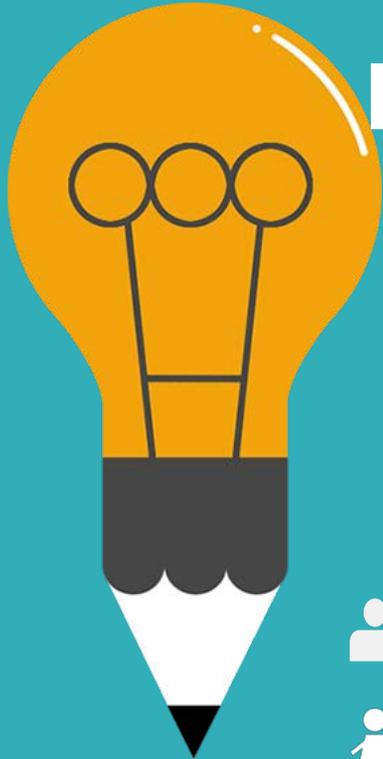


# NZ COMMUNITY PHARMACISTS' KNOWLEDGE AND PERSPECTIVES ON E-CIGARETTES



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# INTRODUCTION



## ELECTRONIC CIGARETTES:

Battery operated devices that generate vapour from an atomiser via inhalation from the cartridge

- Commonly used by smokers as potential smoking cessation aid or simply as an alternative
- Ingredients in e-liquid vary

## IN NEW ZEALAND

- Some pharmacies stock and supply e-cigarettes
- Currently no studies have been conducted looking at pharmacy supply in NZ
- Issues with the lack of evidence regarding safety and efficacy globally

# PROJECT AIMS

**AIM:** To explore NZ community pharmacists' knowledge and perceptions of electronic cigarettes

## OBJECTIVES:

1

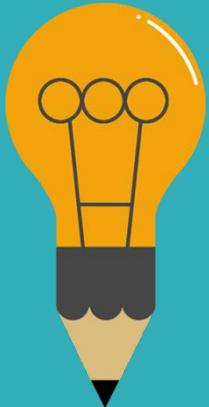
Design an online questionnaire and enter on Qualtrics to identify the extent of knowledge and attitudes community pharmacists have towards e-cigarettes

2

To obtain ethics approval for the study and to distribute the online questionnaire to at least 300 randomly selected community pharmacists in NZ following telephone invitation

3

To analyse the data collected to make findings with a view to publication



# METHOD



Questionnaire developed in Qualtrics  
and Ethics Approval obtained



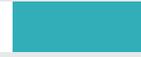
Phone calls made to recruit at least 300  
community pharmacists in NZ



Distributed online questionnaire via  
email



Data collection, cleaning and analysis

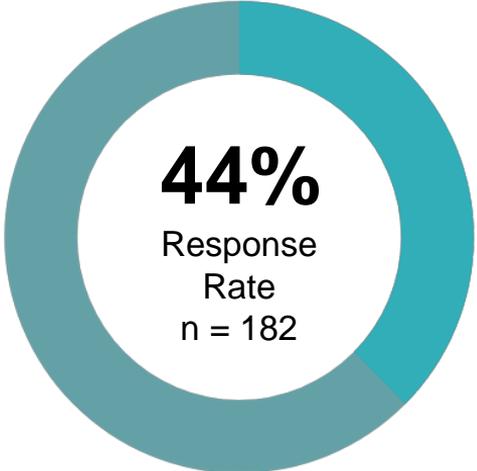


# RESULTS



# DEMOGRAPHICS

Total of 414 calls  
303 expressed interest  
182 responses



45.1%



53.8%



38.5%

19.2%

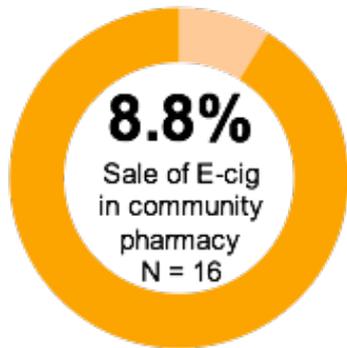
31.9%

10.4%



- 1-5 years
- 6-10 years
- >10 years

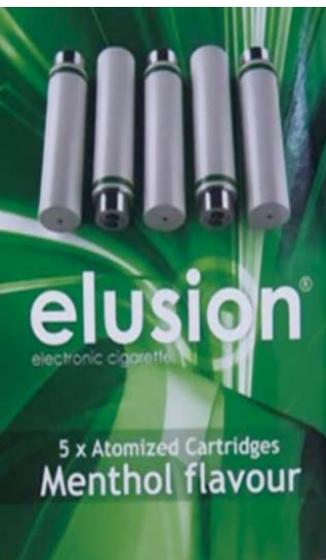
# SALES



- Yes
- No

Of these, 68.8%  
(n=11) stock  
different flavoured  
solutions

Nicotine containing  
products were  
reported to be sold  
in 4 pharmacies



# ADVERSE EFFECTS

Never been approached regarding e-cig adverse effects 87.4% (n=159)

Dry mouth 43% (n=13)

Sore throat 29% (n=6)

Cough 29% (n=6)

Headache 24%  
(n=5)

Other 19% (n=4)

# KNOWLEDGE

## Awareness



All pharmacists who completed the survey had heard of e-cigarettes **100%**

## Sources of Information



Media  
37.4%



Patients  
32.4%



Family/  
Friends  
15.9%



Research  
4.9%

Other  
9.3%

## Ingredients



Full Knowledge (9.5%)



Partial Knowledge (53.6%)



No Knowledge (31.3%)



Incorrect Knowledge (5.6%)

## Regulations



Full Knowledge (3.4%)



Partial Knowledge (31.4%)



No knowledge (54.9%)

# ATTITUDES AND PERCEPTIONS

Participants were asked to rate a series of statements on a Likert Scale.

## Options given were:

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

## AGREE or STRONGLY AGREE

E-liquid may be toxic



E-cigs are safer than tobacco cigarettes



Design of e-cigs encourages smokers to give up smoking



Encourages smoking in non smokers



Flavorings encourages e-cigs use in non smokers



## NEUTRAL

E-cigs are safe to inhale



Manufacturing of e-cigs is unreliable



Nicotine delivery via e-cigs is more effective than NRT



E-cigs should be recommended for smoking cessation



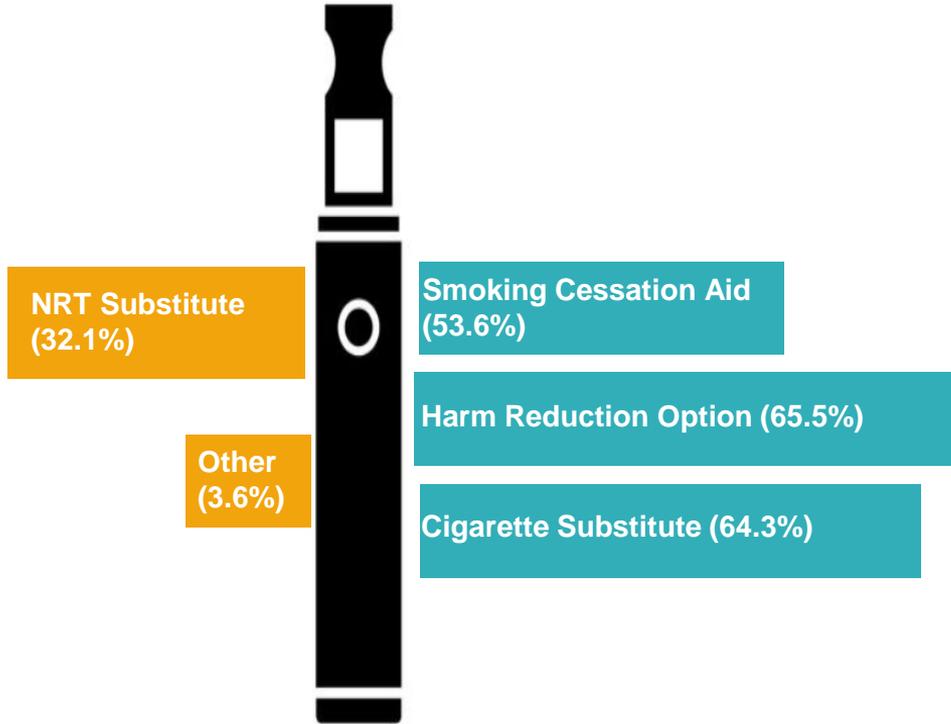
## DISAGREE or STRONGLY DISAGREE

Do not cause any adverse effects



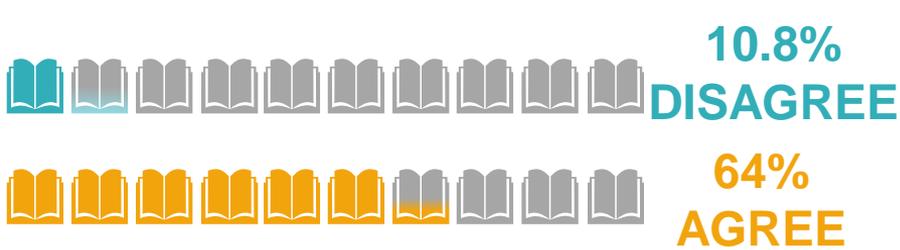
# PERCEPTIONS

## ROLE of E-CIG and its EFFICACY



	Effective	Ineffective
Classic NRT (patches, gums etc)	96%	4%
Newer NRT (inhalator, quickmist)	94.7%	5.4%
<b>Electronic Cigarettes</b>	81.1%	18.9%
GP and Pharmacist counselling	92.9%	7.1%
Family and support groups	96.5%	3.5%

# REGULATIONS



Nicotine is a scheduled substance under the Medicines Act. It is illegal to sell e-cigarette products while making a therapeutic claim unless approved for that purpose by Medsafe



## Aspect of e-cigarette regulation that pharmacists believe should be more tightly controlled:

- None 1.8%
- Safety 16.8%
- Accessibility 6.6%
- Eligibility 2.4%
- Nicotine 7.8%
- Excipients 15.0%
- Design 1.2%
- **All of the above 48.5%**

## Potential benefits that may arise from future regulations

Reassurance of safety for e-cig users	4
Establishment of e-cig as NRT for smoking cessation	4
Increase the sale of e-cig from pharmacies	3

# TRAINING



<b>Online tutorials</b>	<b>85% (n=139)</b>
<b>Information packs</b>	<b>74% (n=121)</b>
<b>CPD workshops</b>	<b>54% (n=89)</b>
<b>Video tutorials</b>	<b>40% (n=66)</b>
<b>Other</b>	<b>6% (n=11)</b>

Implementation of e-cigarettes into smoking cessation

9



Dealing with adverse effects

9



Dosage instructions

10



Counselling

10



Safety Information

10

# CONCLUSION

- Sources of information are unreliable and potentially biased; reliable studies need to be conducted
- Knowledge is not at the level it should be for healthcare professionals
- E-cigarettes are viewed as the lesser of two evils
- Community pharmacists believe there are better options for smoking cessation
- Safety is the main concern with regard to regulation



**THANK  
YOU**

