



EFFECTIVENESS OF NICOTINE REPLACEMENT THERAPY SAMPLES AT PROMOTING SMOKING CESSATION IN DENTAL PATIENTS: A NATIONAL DENTAL PBRN STUDY

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Please add "yes" or "no" to each table cell. If "yes", please turn cell background color to yellow.	Tobacco Industry	E-cigarette & nicotine product industry (excluding pharma)	Pharma Industry
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Participants

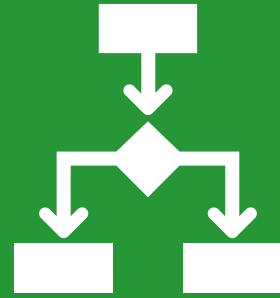
Agenda



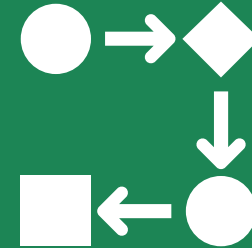
Background



Methods



**Primary
Outcome
Results**



**Process
Evaluation
Results**



**Break out
meetings**



Why we did this study...



Smoking is detrimental to oral health



People who smoke underutilize evidence-based treatments for smoking cessation



Oral health providers rarely provide smoking cessation interventions



Free smoking cessation medication shifts the focus from shaming to providing concrete support

This worked in primary care- the FreSH study's goal is to see if it would also work in dental settings

Study Goals

Study aim: To test the effectiveness of providing free samples of nicotine replacement therapy in addition to Ask-Advise-Refer on long term abstinence from combustible cigarettes (compared to AAR plus an electric toothbrush).

POPULATION



1,200 adults
who smoke
visiting
50 dental
practices



INTERVENTION

Free Nicotine Replacement
Therapy (NRT) samples
+
Ask-Advise-Refer (AAR) care

Electric toothbrush (ET)
+
AAR
(enhanced usual care)

PRIMARY OUTCOME

Long-term smoking
abstinence at 6 months
(CO-confirmed)

SECONDARY OUTCOMES

Short-term abstinence
Quit attempts
NRT use
Quitline use
Implementation Outcomes

1, 3 & 6 months



FreSH study overview

Pre-Study

At Dental Visit

1-6 months

6 months

Dental practices randomized

Patients screened for eligibility

Patients consented & completed baseline survey

Intervention delivered

Follow-up surveys after the visit and at **1, 3, and 6-months** post-visit (remotely)

If self-report abstinence, CO testing to biochemically confirm at **6 months** (remotely)



AAR

INTERVENTION

Ask-Advise-Refer (AAR) care

ASK

about tobacco USE

ADVISE

tobacco users to QUIT

REFER

to other resources

Ask-Advise-Refer (AAR) Script

Ask

- "Do you smoke or use tobacco products? I take the time to ask all my patients about tobacco use because it's important."

Advise

- "Quitting smoking is the best thing you can do for your oral health. Cigarette smoking can cause gum disease, tooth loss, and oral cancer. Quitting smoking will allow these problems to start healing and prevent future damage."

Refer

- "If you are willing, I'd like to place an electronic referral to the state quit line. The quitline offers free, confidential cessation support that you can use anytime you want, even if you're not ready to quit. If you agree, a coordinator from the quit line will call you to offer you counseling to help you make changes in your smoking. Would it be ok if I placed that referral?"

NRT

INTERVENTION

Free Nicotine Replacement Therapy (NRT) samples + Ask-Advise-Refer (AAR) care



Nicotine Replacement Therapy (NRT) Script

Introduction

"In your bag, you will find samples of the nicotine patch and nicotine lozenges. These products can help people who smoke to quit, especially when they are used together. They won't take all your withdrawal symptoms away, but they will take the edge off. You can use either or both, though we encourage you to use both. Even if you're not yet ready to quit, you might find that these products help control the craving to smoke. You can use these samples however you like. For example, you could use them to reduce smoking, to get started on quitting, to make a practice quit attempt, or during times when you cannot smoke. This is an opportunity to learn about two nicotine replacement therapy products that can be used individually or together. What you do with these products is up to you. I recommend you give these a try in the next week."

Nicotine Patch

"The nicotine patch provides a steady flow of nicotine throughout the day. Place the patch on your shoulder or back. Replace the patch every morning. Move the site of the patch each day to avoid getting a rash. If the patch causes trouble sleeping, you may take the patch off 1-2 hours before bed, although best results come from wearing it for 24 hours. I am giving you the 14mg patch, which is safe for all smokers to use. Heavier smokers (people who smoke more than 10 cigarettes per day) can use the 21mg patch if the 14mg patch doesn't control your cravings."

Nicotine Lozenge

"The nicotine lozenge is used by placing it between your cheek and your gums. The nicotine absorbs through your cheek. Do not chew or swallow the lozenge or it could upset your stomach. Try to use a lozenge every 1-2 hours (up to 20 per day). I am giving you the 4mg lozenge. If the lozenge feels too strong, you can spit it out halfway through."

Contact

"If you have questions about the use of either medication, contact FreSH study."

Sample bags

INTERVENTION

Free Nicotine Replacement Therapy (NRT) samples
+
Ask-Advise-Refer (AAR) care

Electric toothbrush (ET)
+
AAR
(enhanced usual care)



Nicotine replacement therapy

OR

Electric Toothbrush



Visit schedule

Quitline brochure



Information about smoking and oral health

Information and stop smoking medicine



Post-its

Pen



Magnet

Tote



Study Results

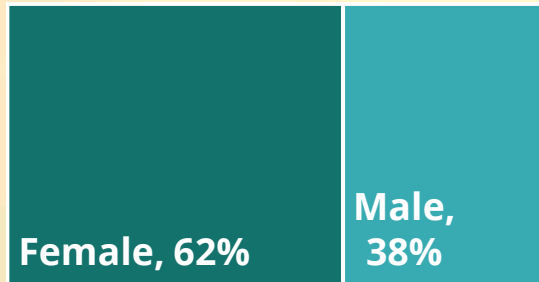
Study Practices

89 practitioners
from
59 practices
across the
Northeastern and
Midwestern
regions of the
National Dental
PBRN



Practice Demographics

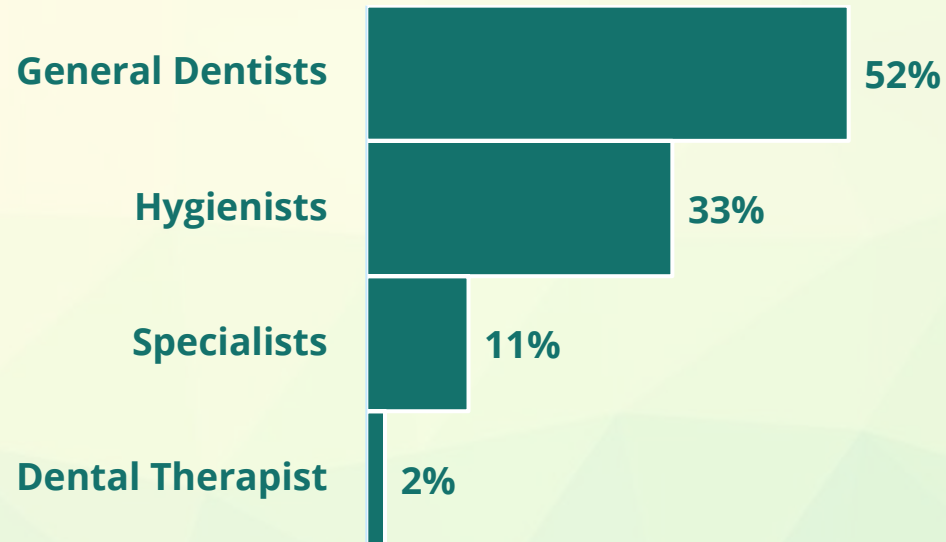
Practitioner Sex



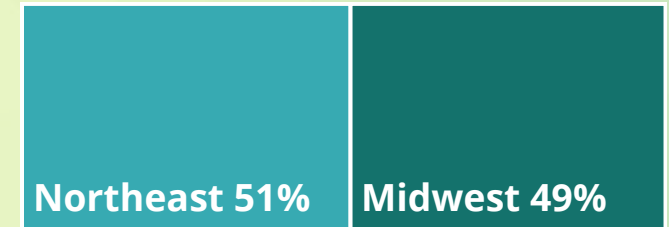
Practitioner Age

average age 44.6 years

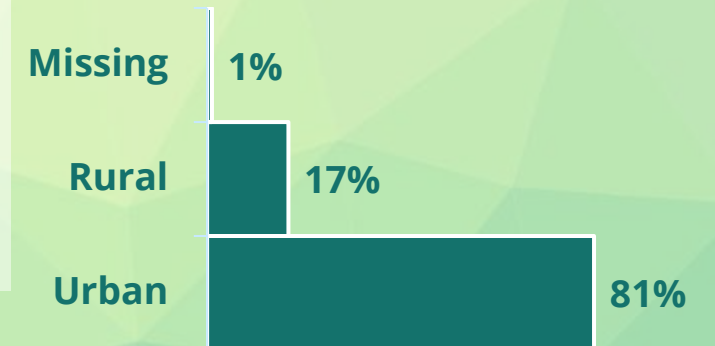
Practitioner Specialty



Practice Node



Practice Location



NRT and ET practices had similar geographical distribution, and practitioner types

FreSH study flow

NRTS

ET

Pre-Study

29

Practices Recruited

30

At Dental Visit

562

Patients Approached

821

491

Patients Consented + BL Survey

715

486

Intervention

710

87%

After Visit Survey

90%

1-6 months

77%

1-month Survey

85%

69%

3-month Survey

79%

6 months

67%

6-month Survey

74%

72

Eligible for CO Device

123

74%

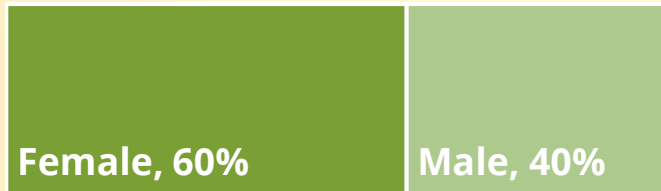
CO Test Completed

67%

Participant Demographics

NRTS

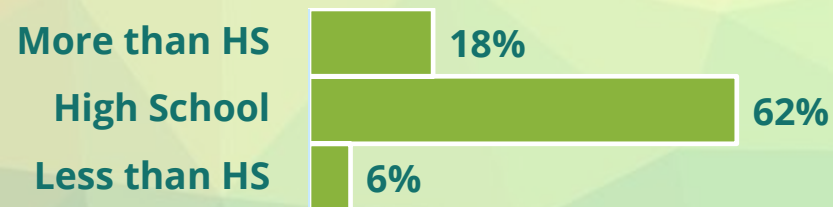
Participant Sex



Participant Age

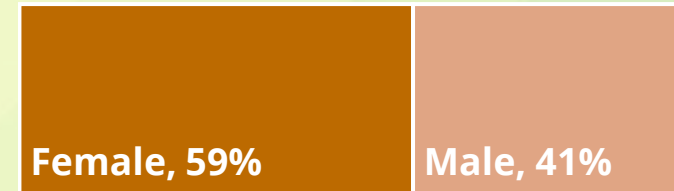
average age 47.5 years

Participant Education



ET

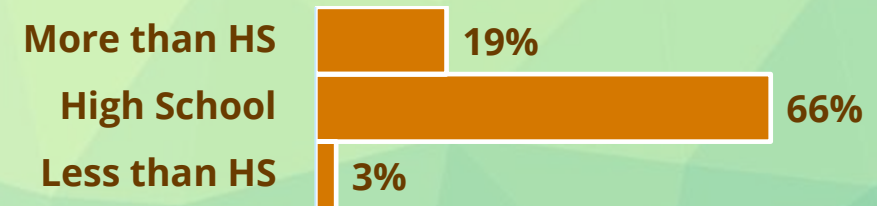
Participant Sex



Participant Age

average age 47.3 years

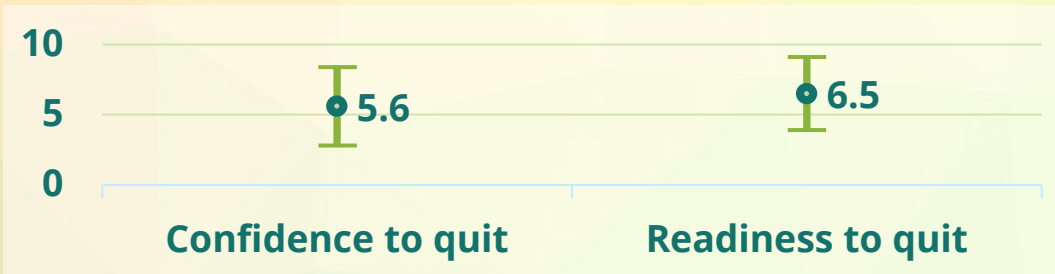
Participant Education



The NRTS and ET patients were demographically similar at baseline

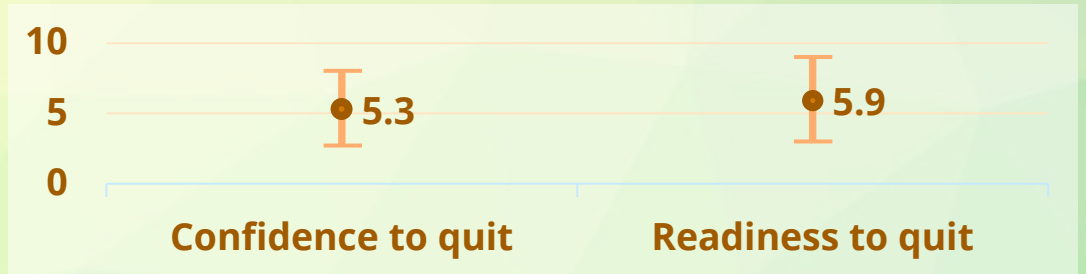
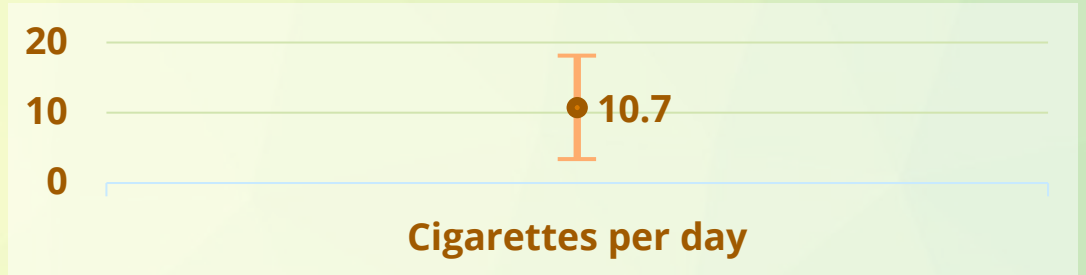
Participant Smoking History

NRTS



Plan to quit in next 6-months, 48%	Plan to quit in next 30 days, 28%	Do not plan to quit, 16%
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ET

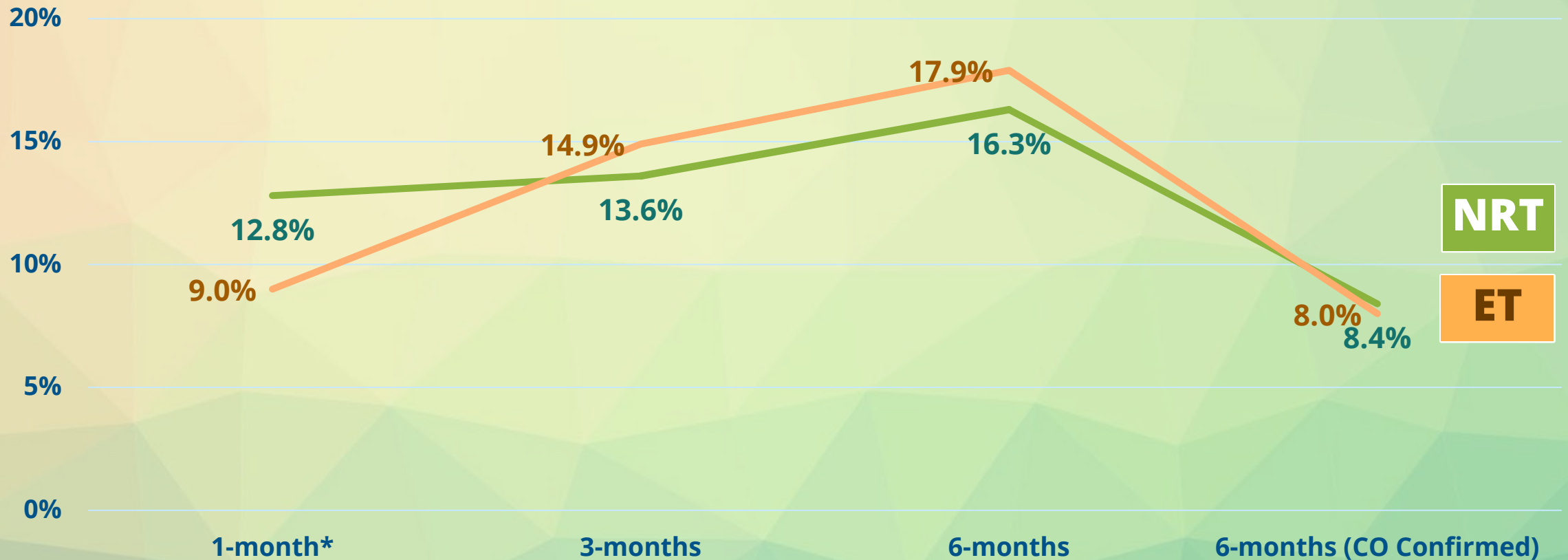


Plan to quit in next 6-months, 47%	Plan to quit in next 30 days, 24%	Do not plan to quit, 20%
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NRTS Group had significantly higher smoking intensity and motivation to quit

* p<0.05

Primary outcome: Abstinence

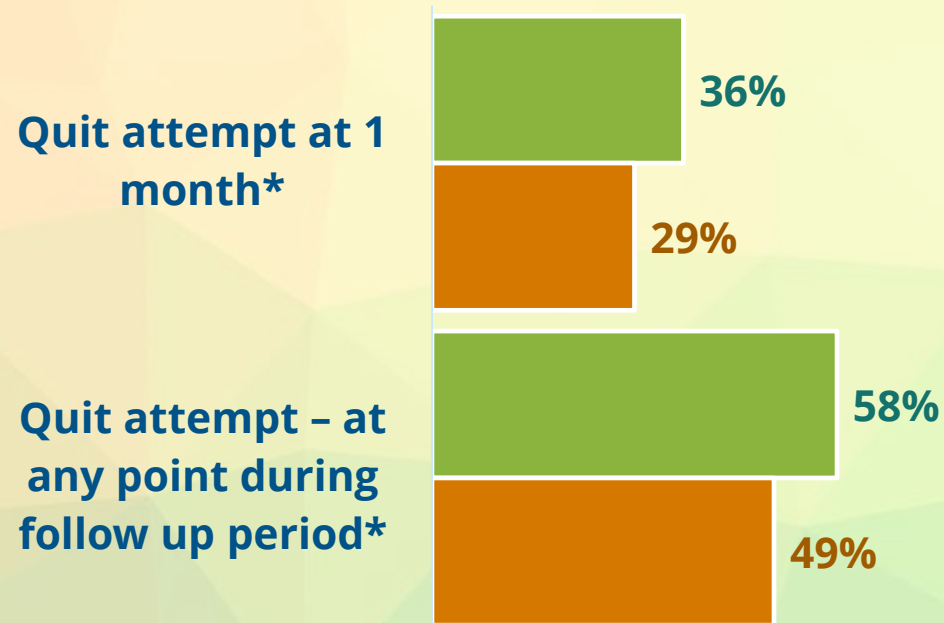


No difference in long-term abstinence (aOR=1.17, 95% CI: [0.66,2.09])
NRTs group higher abstinence at 1 month (aOR=1.72, CI: [1.03,2.88])

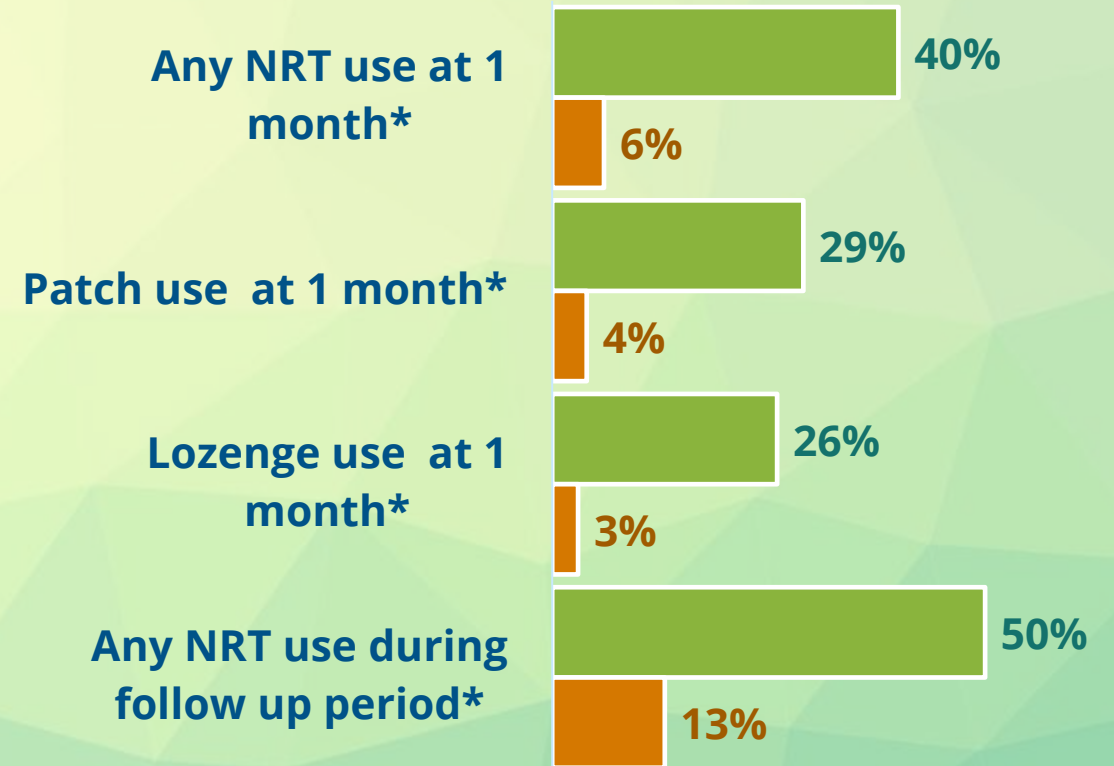
* p<0.05

Secondary outcomes

Quit Attempts



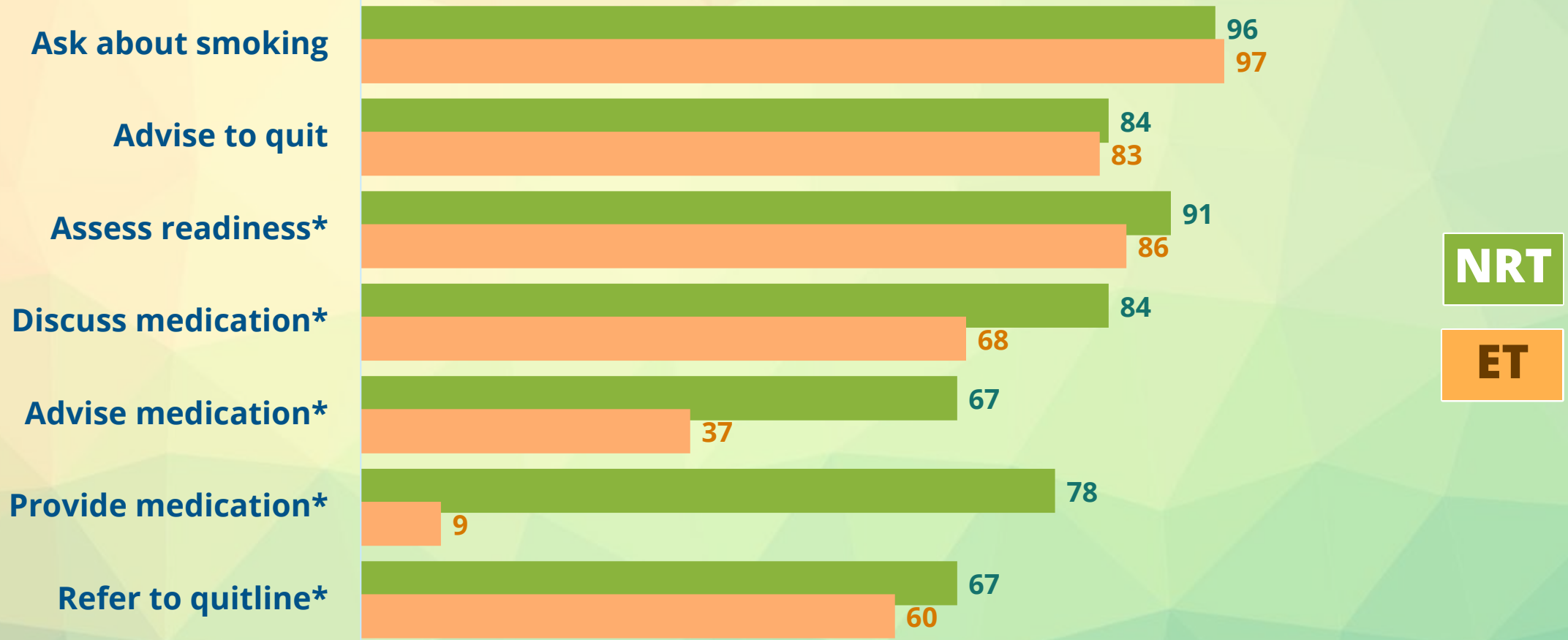
NRTS Use



NRTS group demonstrated increased quit attempts (aOR=1.64, CI: [1.15,2.33]) and use of NRTS at one-month post-intervention (aOR=10.37 [CI: 6.78,15.85])

* p<0.05

Intervention Fidelity

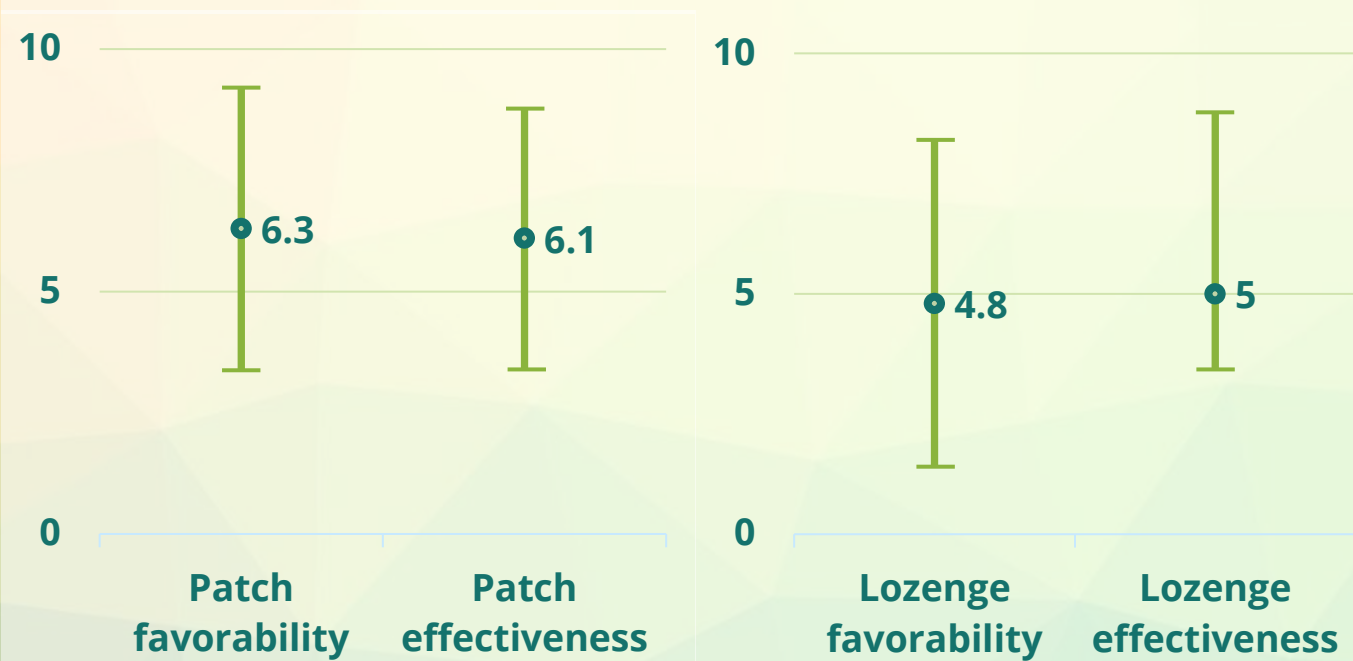


NRTS practitioners increased discussion, advice, and provision of NRTS compared to the ET practitioners

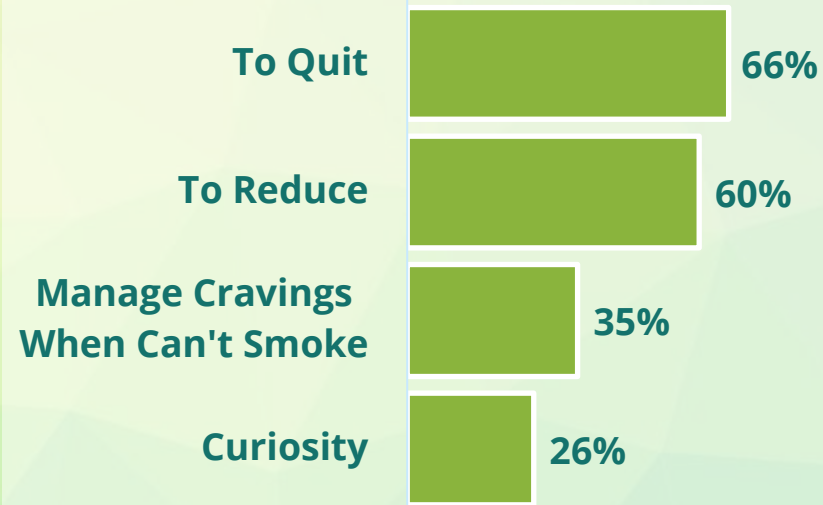
* p<0.05

NRT used to quit or reduce cigarette use

Patches and lozenges rated moderately favorable and effective



Reason for NRT

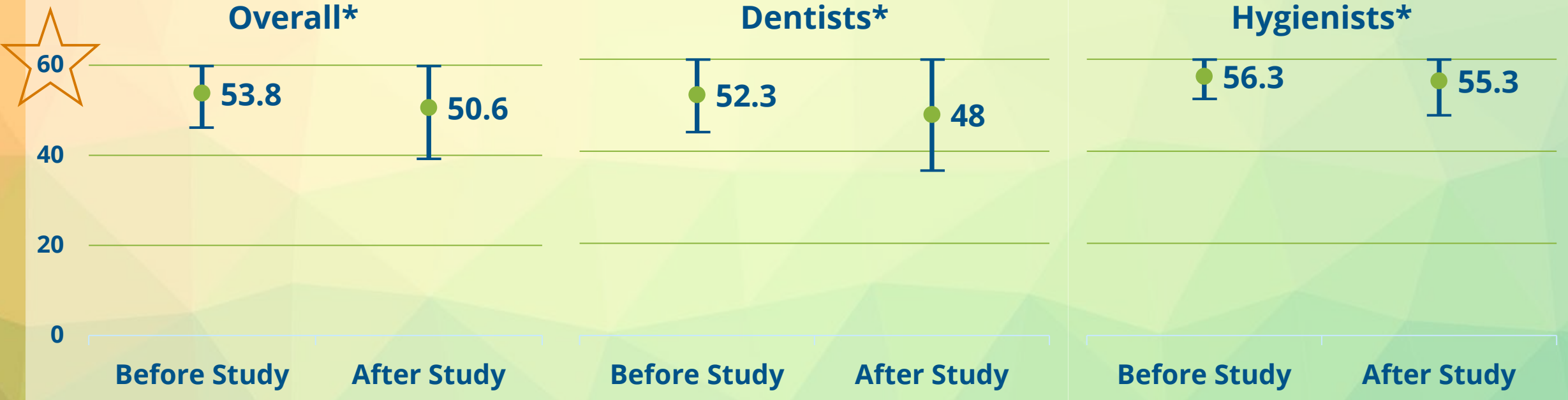


24% (47% of users) obtained additional NRT following sample

* p<0.05

Implementation Outcomes: NRTS feasible and acceptable to patients and practitioners

Organizational Readiness to Implement Change (ORIC)



	NRTS	Before study	After study
	Feasibility (FIM)	4.4 (0.6)	4.3 (0.8)
	Acceptability (AIM)	4.5 (0.6)	4.5 (0.6)
	Appropriateness (IAM)	4.4 (0.6)	4.5 (0.7)

Higher scores = superior ratings

*p<0.05

Exit Interviews: Perceptions of Ask-Advise-Refer (AAR) + NRTS intervention

“Honestly, I really just [felt] like I’ll have a few options to do when I do quit smoking. I won’t just have to do it like cold turkey. I feel like that could be very, very helpful” ~Patient



“They were really excited...They said, ‘Thank you for this service. I’m so glad that you’re doing this much needed service.’... There are some who [participated] because they wanted to really try [NRTS] and see if it’s going to bring about something.” ~Dentist

NRTS gave patients a push to quit/cut back

Practitioners found NRTS easy to deliver, especially in preventive visits

Conclusions

NRTS increased NRT utilization, quit attempts and short-term abstinence but not long-term abstinence.



Practitioners and patients found NRTS feasible and acceptable



Lower recruitment for NRTS as well as recruitment of more-motivated patients suggests some practitioner discomfort delivering the intervention



Despite high acceptability among patients, half did not try NRT samples



The National Dental Practice-Based Research Network

The nation's network

Please visit our website at NationalDentalPBRN.org

Breakout Room Discussion Questions

1. What do you do to address tobacco use in your practice? What has worked for you? What hasn't worked?
2. How do you approach conversations with patients about sensitive topics? (like talking about their tobacco use if they don't want to quit; flossing when they don't floss etc.)
3. What type of support would you need to treat tobacco use in your practice?
4. The National Institute for Dental and Craniofacial Research is interested in studies focused on "integrating oral health into medical care." What ideas do you have regarding oral health practitioners partnering with medical professionals to address tobacco use?

FreSH findings in perspective

