

Recommended Best and **Promising Practices on Adult** Vaping Cessation Services for **Quitlines**

| Draft September 2022 |

Overview

This report contains recommendations for quitlines on adult vaping cessation services that are based on best and promising practices in the areas of pharmacotherapy (nicotine replacement therapy and other pharmacotherapy) and counseling.

The report is organized as follows:

Introduction (page 2):

Specific Aims

NAQC's Learning Community Initiative

Intended Audience

Context for Vaping Cessation Recommendations (pages 3-7):

Questions of Interest

E-Cigarettes:

Distinguishing Features

Regulation

Prevalence of Use

Factors Leading to and Sustaining Use and Motivations for Quitting

An Approach to Smoking Cessation

Role of Quitlines in Vaping Cessation

NAQC Recommendations for Quitlines – Adult Vaping Cessation (pages 7-11)

Definitions and Criteria for Levels of Evidence for Adult Vaping Cessation

Questions of Interest

Recommendation: Pharmacotherapy

Recommendation: Counseling

Moving Forward (page 11)

Acknowledgements (page 13)

References (pages 14-16)

Introduction

Specific Aims

The main purpose of this report is to provide recommendations to the quitline community on best or promising practices for adult vaping cessation in the areas of pharmacotherapy and counselling. These recommendations are informed by a comprehensive literature review and expert presentations during a Learning Community meeting on May 4th 2022, Quitline Practices for Adult Vaping Cessation. The report also provides contextual information on e-cigarettes, including features that distinguish e-cigarettes from combustible cigarettes, regulation, prevalence of use, factors leading to and sustaining use and motivations for quitting, use in smoking cessation, and the role of quitlines in vaping cessation.

This report focuses on vaping cessation for adults only, not youth, as cessation pharmacotherapy (nicotine replacement therapy, bupropion SR, and Varenicline) is approved by the Food and Drug Administration (FDA) for adults ages 18 years and over can be offered by quitlines to their participants who seek to quit use of e-cigarettes. A separate Learning Community report in 2022 will focus on youth cessation and incorporate aspects of e-cigarette use that are specific to youth ages 17 years and under.

NAQC's Learning Community Initiative

The North American Quitline Consortium (NAQC) began a Learning Community initiative in 2020 to provide a structured forum for quitline funders, service providers, researchers, national partners, and others to exchange experiences and learning on new and emerging areas of quitline practice. Learning Community participants help inform and review NAQC recommendations for best and promising practices for quitlines. The following highlights the Learning Community work from 2020 to present.

2020: The Learning Community initiated work on three focus areas: technology-mediated services, youth cessation, and vaping cessation. In September 2020, NAQC released a foundational Learning Community brief, Evolving Quitline Practices: Technology-Mediated Services, Youth Cessation, and Vaping Cessation and presented a corresponding webinar.

2021: The Learning Community focused on technology-mediated services, with the release of a report in November 2021, Recommended Best and Promising Practices on Technology-Mediated Services for Quitlines, with recommendations for Text, Web and Apps for improving reach, engagement, and outcomes. Learning Community meetings and a webinar on technologymediated practices preceded the report.

2022: The Learning Community's focus this year is adult vaping cessation and youth cessation, with NAQC's facilitation of two meetings: Quitline Practices for Adult Vaping Cessation (May 4th) and Quitline Practices for Youth Cessation (July 12th).

Intended Audience

This report is designed for all NAQC members, and the community interested in expanding their knowledge of adult vaping cessation practices within quitline environments. This community includes funders (state entities who fund quitline services), service providers (operators of quitlines who develop and deliver services), researchers (those who advance the evidence base and evaluate quitlines), and national organizations (the federal agencies, foundations, and non-profit organizations that support quitlines and help advance their practice).

Context for Vaping Cessation Recommendations

Questions of Interest

To provide context for NAQC's adult vaping cessation recommendations, this section of the report answers the following NAQC questions of interest with information as current as is feasible in a rapidly changing environment:

- 1. What are distinguishing features of e-cigarettes?
- 2. What are the successes and challenges of regulating e-cigarettes?
- 3. How prevalent is e-cigarette use among adults?
 - a. What is the prevalence of dual/poly use of tobacco products (e.g., combustibles and ecigarettes/vaping) versus singular use of e-cigarettes?
 - b. How do use patterns vary by age and other user characteristics?
- 4. What factors lead to and sustain use of e-cigarettes and motivate quitting among adults?
- 5. What are science-based conclusions associated with e-cigarettes use for smoking cessation?
- 6. What quitline practices assist adult e-cigarette users with quitting?
 - a. What nicotine pharmacotherapy protocols have quitline providers adopted for ecigarette users?
 - b. What counseling protocols have quitline providers adopted for e-cigarette users?

E-Cigarettes

Distinguishing Features:

E-cigarettes first entered the U.S. market in 2007 and have steadily increased in popularity among tobacco users, especially youth and young adults. E-cigarettes are considered less harmful to the user than combustible cigarettes, however their use has been associated with negative health consequences, including nicotine dependence and harms from chemicals in the e-liquids. 1,2,3 E-cigarettes (also referred to as e-cigs, vapes, vape pens, mods, tanks, and electronic nicotine delivery systems or ENDS) are battery-operated devices that convert a liquid to produce an aerosol that is inhaled (the practice often referred to as vaping) and the liquid solution in e-cigarettes usually contains nicotine, flavoring, a humectant, and various other compounds.⁴

The amount of nicotine in e-cigarettes is highly variable, often reaching or exceeding that of combustible cigarettes, and notably the labeled nicotine amount is often inaccurate.⁵ The design of e-cigarettes has evolved over time to include sleek discreet devices that are disposable or rechargeable and increasingly efficient at delivering nicotine. With a considerable share of the e-cigarette market, JUUL is the most popular reusable e-cigarette device, with a pre-filled pod system containing nicotine salts, resulting in a fast delivery of higher concentrations of nicotine with less irritation.⁶ Other products have since followed the high-tech JUUL design.

Regulation:

In the United States e-cigarettes can be regulated either as products marketed for therapeutic purposes or as tobacco products; gaining U.S. regulatory control over e-cigarettes, however, has been challenging, and meanwhile the business and culture around vaping has accelerated into a billion dollar industry.^{7,8,9} The Family Smoking Prevention and Tobacco Control Act (2009) provided the FDA's Center for Tobacco

Products authority to regulate the manufacturing, distribution, and marketing of tobacco products. 10 Several years of challenges to that authority ensued, including whether e-cigarettes constitute a tobacco product as they contain nicotine derived from tobacco rather than tobacco, raising questions as to which arm of FDA could regulate the vaping industry.¹¹ Having established e-cigarettes as a tobacco product, FDA published a proposed rule in 2014 to begin regulating e-cigarettes, which was adopted in 2016, requiring a pre-market review process for new tobacco products and a prominent warning on packaging stating the products contain the addictive chemical nicotine. 12,13

After delays in enforcing parts of the 2016 rule, in January 2020, the FDA finalized an enforcement policy to limit flavored cartridges to tobacco or menthol, banning flavors that particularly appeal to youth. 14 In June 2022, the FDA ordered JUUL to stop selling and distributing the JUUL device and four types of JUUL pods (Virginia tobacco flavored pods and menthol flavored pods with nicotine concentrations of 5% and 3%). Following a successful federal court appeal by JUUL, as of July 5, 2022, the FDA administratively stayed this order to allow for additional review. ¹⁵ The federal government does not impose a tax on ecigarette products, however, as of March 31, 2022, 30 states and the District of Columbia had passed legislation requiring a tax on e-cigarettes. 16,17

Prevalence of Use:

Data from the 2019 National Health Interview Survey (NHIS) indicates that 4.5% of U.S. adults currently use e-cigarettes (approximately 10.9 million). Regarding e-cigarette users' smoking history, 36.9% reported currently smoking cigarettes, 39.5% formerly smoked cigarettes, and 23.6% reported never smoking cigarettes. 18 The 2019 NHIS indicated that among adults, e-cigarette use was highest among young adults ages 18-24 years (9.3%) and lowest among adults 65 years and over (0.8%) and use was highest for people identifying as white, non-Hispanic (5.1%), followed by those identifying as Black non-Hispanic (3.4%), Asian (2.7%) and Hispanic (2.8%). E-cigarette use was also higher for lesbian, gay, or bisexual individuals (11.5%) compared to heterosexual/straight individuals (4.2%). Those reporting as uninsured also saw a higher e-cigarette use (7.2%) compared to those with private insurance (4.3%). Behavioral Risk Factor Surveillance System (BRFSS) data for 2017 and 2018 comparing e-cigarette use by state show the highest rates in Oklahoma (9.8%), Hawaii (7.8%), and Arkansas (7.7%).¹⁹

Concerning frequency of e-cigarette use, an analysis of 2014-2015 data from the Population Assessment for Tobacco and Health (PATH) Study found that younger adults (ages 18-24 years) were less likely to use e-cigarette every day or 6 to 29 days a month, and more likely to use e-cigarettes 1-5 days a month, contrasted to older adults (ages ≥25 years).²⁰ The percentages for e-cigarette frequency of use are as follows:

- Everyday use: 5.6% of young adult users; 6.6% of older adult users
- 6 to 29 days a month: 23.3% of young adult users; 32% of older adult users
- 1 to 5 days a month: 71.2% of young adult users; 61.3% older adult users

In a study comparing 2017, 2018, and 2020 BRFSS data, daily use of e-cigarettes among U.S. adults increased consistently from 1.5% in 2017 to 2.1% in 2018 and was 2.3% in 2020, with the most significant increase among adults aged 21 to 24 years.²¹

Specific to quitline participants, a study that included adults enrolled in 24 public quitlines administered by Optum in 2018 (23 states and the District of Columbia), 14.7% of adults reported vaping or using ecigarettes in the 30 days prior to enrollment in quitline services and most of these users (97%) were also using either combustible or smokeless tobacco.²² Many (87%) reported that they planned to quit using e-cigarettes in the next 30 day, and more than two-thirds (69%) were using vaping as a way to quit smoking. Use of e-cigarettes also varied by type of quitline service in which the user engaged: 19.3% of registrants for web-only services reported vaping, compared to 13.0% of phone program registrants, and 16.0% of those registering for individual services. A brief unpublished 2022 NAQC survey of service providers found that most state quitlines have less than 25% of their participants reporting use of ecigarettes, and dual use is more common than exclusive vaping.

Factors Leading to and Sustaining Use and Motivations for Quitting:

Analysis of data from the Population Assessment for Tobacco and Health (PATH) Study indicated that the main reason for using e-cigarettes among young adults (18-24) was the availability of appealing flavors (90.3%), a significantly higher percentage than for adults 25 years and over (66.4%).²³ The lead reason for using e-cigarettes among users 25 years and older was a belief that e-cigarettes might be less harmful than cigarettes to others around them (81.9%), a similar percentage to young adult users (84.2%). Other reasons for e-cigarette use included that it might be less harmful to the user than cigarettes (young adults 81%, older adults 79%); could help a person quit smoking (young adults 75%, older adults 71.5%); and acceptability of using e-cigarettes in places where cigarette smoking is not allowed (young adults 75.6%, older adults 79.3%). Analysis of data from the Smokeless Tobacco Use in College Students study found the lead reason for experimentation with e-cigarettes was curiosity about the product (91.6%), followed by their friends use them (70.2%), and better for their health than smoking cigarettes (69.9%).²⁴

From a physiological perspective on sustained use, nicotine dependence from using e-cigarettes mirrors combustible cigarettes and other tobacco products. Summarizing from the Tobacco, Nicotine, and E-Cigarettes Research Report issued by the National Institutes of Drug Abuse, a transient surge of endorphins in the reward circuits of the brain when nicotine is administered causes a slight, brief euphoria.²⁵ Nicotine increases levels of the neurotransmitter dopamine in these reward circuits, which reinforces nicotine use, and repeated exposure alters the reward circuits' sensitivity to dopamine leading to changes in other brain circuits involved in learning, stress, and self-control. Long-term brain changes brought about by continued nicotine exposure result in withdrawal symptoms when not using nicotine, and difficulty adhering to a resolution to quit.

There are, nevertheless, motivations for quitting e-cigarette use. Among young adults enrolling in the Truth Initiative's *This is Quitting* texting program, the most common reason for quitting e-cigarettes was health concerns (50.8%), including lung health and concern for future health. The second most frequently cited reason was the financial cost associated with e-cigarettes (26.5%). ²⁶ Of note, research on the short-term health effects of e-cigarette use is emerging, with long-term health effects unknown.²⁷

Potential Benefits for Smoking Cessation:

As an alternative to combustible cigarettes, tobacco users may turn to e-cigarettes as a step to assist with smoking cessation and query quitlines about this approach. Several sources provide research-based conclusions on this topic.

The 2021 Cochrane Review, Electronic Cigarettes (ECs) for Smoking Cessation, states that there is moderate-certainty evidence that ECs with nicotine increase quit rates compared to ECs

without nicotine and compared to NRT. Evidence comparing nicotine ECs with usual care/no treatment also suggests benefit but is less certain. More studies are needed to confirm the size of effect, particularly when using modern EC products.²⁸

- The Surgeon General's Smoking Cessation Report 2020 concludes that the evidence is inadequate to infer that e-cigarettes, in general, increase smoking cessation. However, the evidence is suggestive but not sufficient to infer that the use of e-cigarettes containing nicotine is associated with increased smoking cessation compared with the use of e-cigarettes not containing nicotine, and the evidence is suggestive but not sufficient to infer that more frequent use of e-cigarettes is associated with increased smoking cessation compared with less frequent use of e-cigarettes.²⁹
- The Centers for Disease Control and Prevention (CDC), in messaging for the general public, states: 30
 - E-cigarettes have the potential to benefit adult smokers who are not pregnant if used as a complete substitute for regular cigarettes and other smoked tobacco products.
 - E-cigarettes are not safe for youth, young adults, and pregnant women, as well as adults who do not currently use tobacco products.
 - While e-cigarettes have the potential to benefit some people and harm others, scientists still have a lot to learn about whether e-cigarettes are effective for quitting smoking.
 - Additional research can help understand long-term health effects.

Role of Quitlines in Vaping Cessation

Quitlines have a long-established history of offering evidenced-based services that help tobacco users quit and are an essential component of comprehensive tobacco control programs. In the face of an everchanging landscape of tobacco use and tobacco disparities, state quitline funders and their quitline service providers are well positioned to respond, including to adjust tobacco cessation services to address e-cigarette use. 31 Although relatively little has been published specific to the intersection of quitline practice and vaping cessation, the following summarizes several publications issued by NAQC, or with NAQC as a partner:

NAQC's 2014 report Cessation Treatment and E-cigarettes: A Report on the Current Literature and Quitline Practices included the results of key informant interviews with twelve quitline call centers. The interview results indicated that quitlines had developed approaches for responding to callers' questions about e-cigarettes and for treating smokers currently using e-cigarettes or who expressed an interest in using e-cigarettes as part of a quit attempt.³² The report offered recommendations for quitlines to advise callers that the overall health risks of e-cigarettes are unknown, to advise against use of e-cigarettes for smoking cessation, and to discourage dual use of combustible cigarettes and e-cigarettes. The report also stated that emerging research literature provided some guidance to quitlines but few definitive answers and noted there was an absence of definitive research findings and lack of clinical guidelines. NAQC also issued a 2019 fact sheet: Overview of Quitline Services for Those who Vape. 33

A 2014 cross-sectional survey conducted with 418 quitline counselors in the U.S. and Canada, with survey implementation facilitated by NAQC, concluded that quitline counselors view ecigarettes as ineffective quitting aids, potentially dangerous, and in need of greater regulations and, whereas counselors can influence how treatment seekers view e-cigarettes, it is imperative that quitlines stay abreast of emerging data and communicate about these products in ways that best serve clients.34

NAQC Recommendations for Quitlines - Adult Vaping Cessation

As a member organization, NAQC aims to support the quitline community in enhancing evidence-based tobacco cessation services, including recommendations in the area of adult vaping cessation. NAQC, however, recognizes the ongoing challenges to both research and practice in the area of e-cigarette use and vaping cessation, including the inaccuracy of nicotine levels on e-cigarette labels (related to the lack of e-cigarette regulation), inaccurate reporting of e-cigarette usage and nicotine consumption by users and their limited knowledge of product details, variation in aerosol nicotine concentrations by device, and variation in nicotine exposure by the user's puff topography and experience of the user.³⁵ In addition, as discussed under prevalence, a relatively small proportion of adult quitline participants report e-cigarette use and most are dual or poly-users of nicotine in other forms, commonly smoking. Nevertheless, research supported practices are emerging that guides cessation approaches for ecigarette users who desire to quit, with sufficient evidence to offer two recommendations, one to guide pharmacotherapy and one on counseling. While not making a specific recommendation to combine pharmacotherapy and counseling for adult vaping cessation, it is important to state the additional benefit to the cessation outcomes for tobacco users when the two treatment approaches are used simultaneously.36,37,38

Definitions and Criteria for Levels of Evidence for Adult Vaping Cessation Recommendations

To assess the levels of evidence for the recommendations for vaping cessation practices, NAQC has adopted criteria for quitline services presented by Anderson (2016) for best practice, promising practices, and insufficient evidence to recommend.³⁹

A. Best Practices

- Research-validated practices whose efficacy has been demonstrated as effective based on results of established meta-analytic reviews such as Cochrane Reviews.
- Field-tested practices that have a compelling rationale from widespread practice and success.

B. Promising Practices

Practices that have one or more limited examples of success in the research literature or quitline practice.

C. Insufficient to Recommend

Practices that lack strong examples and consistent findings assessing efficacy within the literature and/or Quitline practice

Questions of Interest

NAQC's recommendations on adult vaping cessation in the quitline environment arise from the following questions of interest:

- 1. What are effective pharmacotherapy protocols for adult vaping cessation?
- 2. What are effective counseling protocols for adult vaping cessation?
- 3. What other practices are effective for adult vaping cessation?

Pharmacotherapy

Recommendation: All quitlines should use a validated method to assess the level of nicotine use or dependence and to guide dosing of cessation pharmacotherapy for adult quitline participants.

By June 30, 2023

Level of Evidence: Promising practice.

Evidence and Promising Practices

To date, there are seven FDA-approved first-line medications found to be safe and effective for treating nicotine dependence in non-pregnant adults (18 years and over): five nicotine replacement therapies (NRTs) – nicotine patch, gum, lozenge, nasal spray, and oral inhaler – and two non-nicotine oral medications – bupropion SR and varenicline; dosing varies by therapy and the individual's nicotine use/ dependence, and stage of treatment.⁴⁰ Combination pharmacotherapy is more effective for cessation than the use of one therapy alone, e.g., combining a long-acting NRT (nicotine patch) with a faster but shorter-acting NRT (nicotine gum, lozenges, nasal spray, or inhaler) to help offset acute episodes of craving or other relapse triggers, or combining varenicline with bupropion or NRT. 41,42

Similar to NAQC's e-cigarettes literature review conducted in 2014, 43 NAQC continues to find a paucity of published scientific research on pharmacotherapy specific to users seeking to quit e-cigarettes, whether using e-cigarettes exclusively or in conjunction with other tobacco products. One review published by the Canadian Journal of Health Technologies (2021) on pharmacological interventions for vaping cessation did not identify any evidence-based guidelines regarding the use of pharmacological vaping cessation intervention, and some guidance suggests it may be reasonable to apply smoking cessation interventions and/or protocols for vaping cessation, but no guidance specific to the use of pharmacotherapy was identified.⁴⁴ As such, NAQC draws on two promising practices presented at the May 4, 2022 Learning Community meeting on adult vaping cessation, one by Dr. Taylor Hays (Mayo Clinic Nicotine Dependence Center) and one by Dr. Christine Sheffer (Roswell Park Comprehensive Cancer Center).⁴⁵ These practices may be utilized by quitlines seeking to adopt the recommendation.

Mayo Clinic Nicotine Dependence Center⁴⁶

To determine pharmacotherapy for patients who use e-cigarettes, patients are asked for the concentration of the nicotine solution on the label of the product they use to estimate the nicotine exposure, which can then be cross-walked to the equivalent of smoker pack-days. The approach is as follows:

Nicotine exposure estimate:

- Known concentration of nicotine solution
 - Nicotine percent solution: Multiply by 10 for mg/ml concentration Example: 5% nicotine ~ 50 mg/ml

Estimate total volume of solution used per day

Calculate total nicotine exposure

 Example: 50 mg/ml solution in a 0.7 ml POD One POD used per day 50 mg/ml X 0.7 ml = 35 mg nicotine exposure

(Caveats: inaccurate labels, inaccurate reporting of consumption, patient/client may not know product details, aerosol nicotine concentrations vary by device, Nicotine exposure varies by puff topography and experience of the user.)

Pharmacotherapy for vape cessation

- Match NRT patch to the estimated nicotine exposure:
 - 1 mg of patch for each mg/day of nicotine exposure Example: 35 mg of nicotine exposure; patch dose 35 mg per day

For e-cigarette cessation, this approach can guide matching the patch dose to total milligrams of nicotine used per day, and evidence-based pharmacotherapy combinations (nicotine patch and short-acting NRT, or varenicline and bupropion SR, or varenicline and nicotine patch or short acting NRT).

Department of Health Behavior, Roswell Park Comprehensive Cancer Center 47,48

The investigative team led by Dr. Christine Sheffer at Roswell Park developed and assessed the validity of the Roswell ENDS Nicotine Dependence Scale (Roswell eND Scale) to assess nicotine dependence among treatment-seeking ENDS or e-cigarette users who contacted the New York State Smokers' Quitline (NYSSQL), the majority of whom also smoke cigarettes. The content, construct, and criterion validity of the Roswell eND Scale were examined in a study of 209 participants who contacted NYSSQL from November 2019 to June 2021 seeking to discontinue ENDS in addition to combustible cigarettes. Co-use of combustible cigarettes ranged from light and intermittent to regular use. Exploratory and confirmatory factor analyses showed high construct validity. Significant correlations between Roswell eND Scale scores and salivary cotinine levels, a biomarker of nicotine exposure, demonstrated concurrent criterion validity. During development and testing, the addition of items assessing cigarette and other tobacco use did not improve the validity of the scale. These findings suggest that among adults who contact quitlines to discontinue ENDS use, many of whom also smoke cigarettes, the 5-item Roswell eND Scale can briefly and effectively assess nicotine exposure and nicotine dependence without the addition of an additional assessment for cigarette use.

The scale and scoring are as follows:

- 1. Do you vape more frequently during the first few hours after awakening than during the rest of the day?
 - a. Yes <1>
 - b. No <0>
- 2. How soon after you wake up do you vape?
 - a. 0-5 m < 3 >
 - b. 6 30 m < 2 >
 - c. 31 60 m < 1 >
 - d. $61 + \min < 0 >$
- 3. Of all the times that you vape, which time would you hate to give up?
 - a. First of Day <1>
 - b. All others <0>
- 4. How many pods, cartridges, or refills do you typically use each week?

- a. Less than one per week <0>
- b. 1-4 per week <1>
- c. 5 or more per week <2>
- 5. How often do you vape?
 - a. 1 day or less each week <0>
 - b. 2-3 days each week <1>
 - c. 4 6 days each week <2>
 - d. 7 days each week <3>

Scores can then be used to guide treatment recommendations. According to the findings of the Roswell eND Scale study, the significant positive correlation with salivary cotinine levels suggests that individuals with a higher scale scores have higher nicotine exposure and require higher doses of nicotine replacement to support a successful attempt to discontinue ENDS and cigarette use.

Current Quitline Practice

NAQC's 2022 unpublished brief survey of service providers on vaping cessation services indicates that 50 of 51 responding state quitlines offer NRT to e-cigarette users (98%) and 4 states (8%) offer bupropion (Wellbutrin) or varenicline (Chantix). Two quitline providers, Optum and National Jewish Health, use the Mayo Clinic Nicotine Dependence Center approach guide NRT dosing for e-cigarette users. Roswell Park utilizes the Roswell eNDScale to guide NRT dosing for participants of the New York State Smokers Quitline seeking to quit e-cigarette use.

Counseling

Recommendation: All quitlines should offer counseling that establishes the adult quitline participant's use of e-cigarettes and tailors counseling accordingly.

By June 30, 2023

Level of evidence: Research and field-tested best practice.

Supporting Evidence

There is substantial documentation of the positive impact on tobacco cessation of proactive quitline counseling that engages the tobacco user in ongoing treatment on tobacco cessation. 49,50, 51,52,53 Furthermore, behavior change models underpin tobacco cessation counseling delivered by tobacco treatment specialists, such as cognitive-behavior approaches (thoughts, habits, routines, triggers, cues) and the Transtheoretical/Stages of Change Model (precontemplation, contemplation, preparation, action). 54,55 These models value active participation of the tobacco user in understanding their tobacco use, nicotine dependence, motivation to quit, and in determining a quit journey.

The counseling exchange – whether by telephone or interactive text messaging (which may appeal to young adults who vape) can be tailored to e-cigarette use, such as types of e-liquids and flavors, why the patient/client vapes including external influences, patterns of use that differ from cigarette use (e.g., vaping all day long), health impacts of vaping, and plans for quitting and relapse prevention such as avoiding triggers. A randomized clinical trial of young adults participating in the Truth Initiative's This Is

Quitting program to promote abstinence from e-cigarette use found higher abstinence rates for participants in the program (24.1%) compared to the control group (18.6%).⁵⁶ This is Quitting provides a fully automated, tailored, interactive text message program for vaping cessation that is designed specifically for young people. The program delivers social support and cognitive and behavioral coping skills training.

Current Quitline Practice

NAQC's 2021 Annual Survey of Quitlines found that 48 of the 52 quitlines (92%) had some type of protocol tailored for e-cigarette users: phone counseling (53%), two-way interactive text (51%), web-based self-help tools (51%), web-based counseling (47%) and web-based chat rooms (6%). Nearly all (98%) offer NRT to adult e-cigarette users.⁵⁷ NAQC is evaluating the use of the *This is* Quitting by state quitlines as an option to support young adults in vaping cessation. (Quitlines in Maine and New York are offering the Truth Initiative's *This is Quitting*.)

Other Practices Effective for Adult Vaping Cessation

NAQC did not find sufficient research or practice evidence to make any other recommendation on adult vaping cessation at this time.

Moving Forward

NAQC will continue to encourage and follow the science on promising and best practices for adult vaping cessation, including through the Learning Community Initiative. Many Quitlines have already implemented mechanisms for dosing NRT and tailored counseling for adults who use e-cigarettes. NAQC is committed to working with those who have not yet adopted these strategies on moving forward.

NAQC will track adoption of the recommendations in this report throughout the coming years. Our dialogue with the Quitline community will continue to better understand barriers to adoption and to share strategies for successful adoption and implementation. NAQC is available to answer questions, provide technical assistance, and facilitate dialogue among the Quitline community. We look forward to working in collaboration with the Quitline community to better reach and serve people who use tobacco, including e-cigarettes.

Acknowledgments

NAQC would like to thank the Advisory Council for serving as the convener of the Learning Community on Technology-mediated Services. The Advisory Council includes:

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