



Tailored Email Messages to Help People Quit Smoking: Can It Be Replicated to Help People Quit Heavy Drinking?

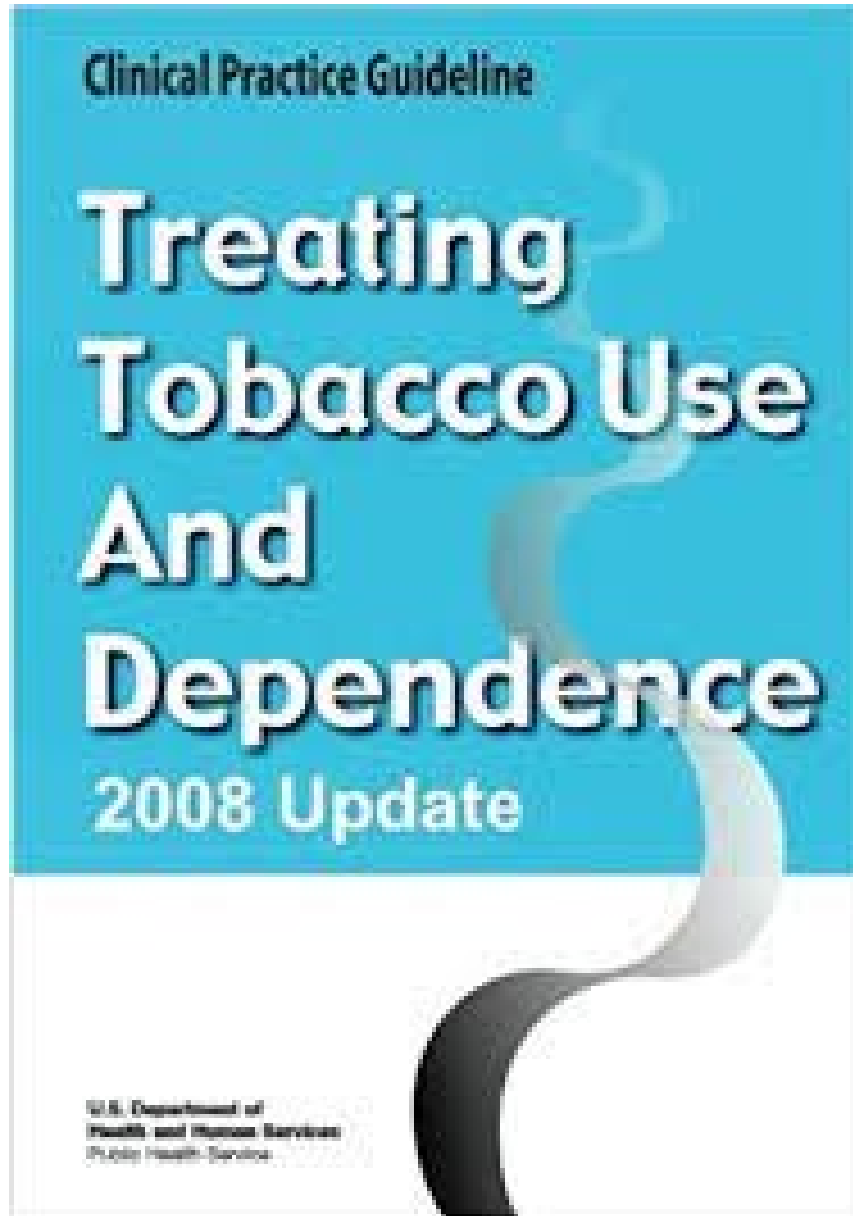
J. Lee Westmaas, PhD

Tobacco Control Research Group

American Cancer Society

Background/Rationale

Treating Tobacco Dependence



Behavioral/Psychosocial Support for Cessation

Behavioral Strategies (problem solving/skills training)

- Identify, avoid, cope with triggers (e.g., change routine, avoid others who smoke)
- Cope with cravings (e.g., deep breathing, take a break, go for a walk)
- Cope with stress (e.g., taking up a hobby, beginning exercise routine)
- Restructure thinking patterns about smoking, lapses
- Getting support from others
- Someone cares about your quit attempt (not alone)

Behavioral/Psychosocial Support for Cessation



Formats

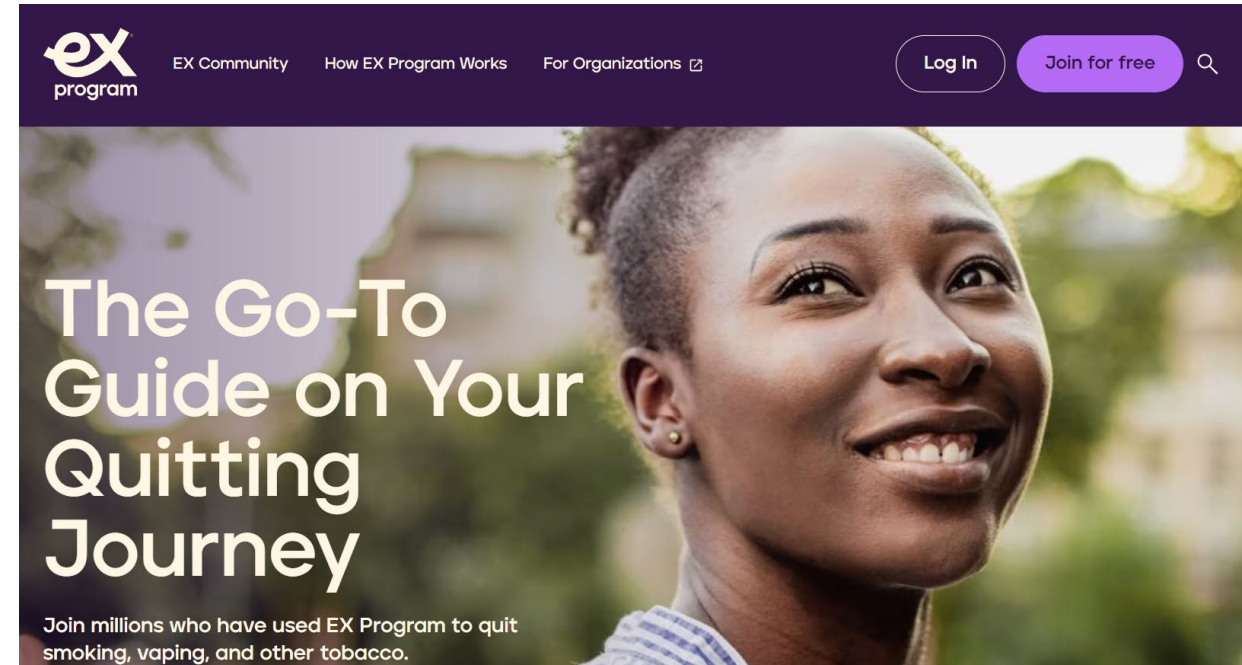
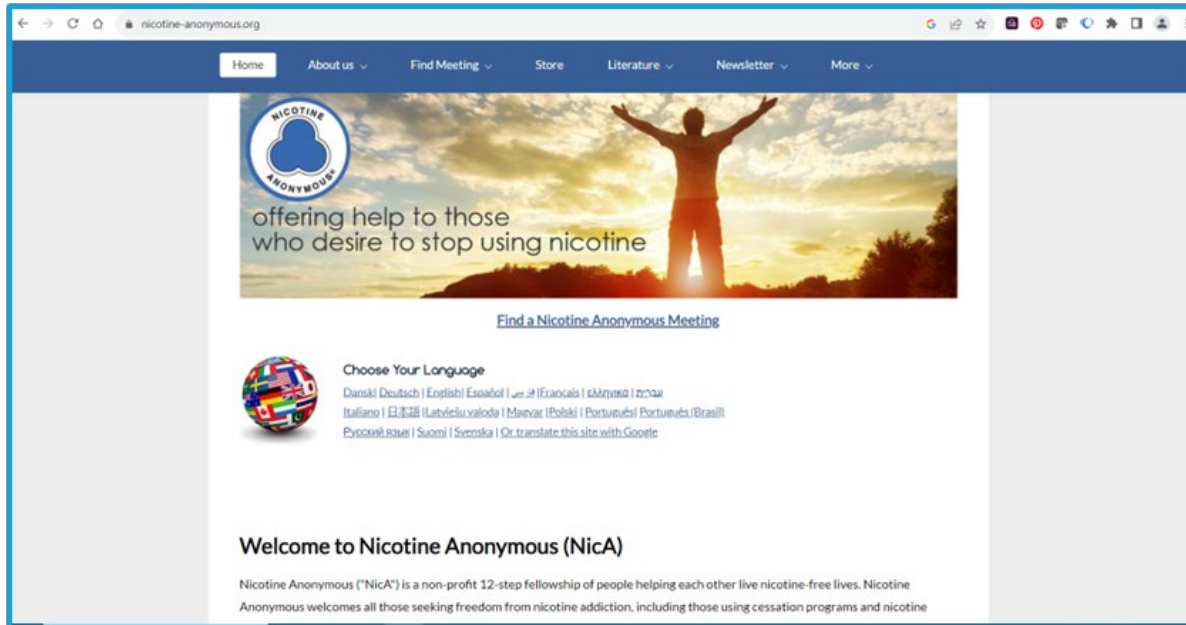
- Proactive telephone counseling
- Individual counseling
- Group counseling
- Facebook Support Groups



Behavioral/Psychosocial Support for Cessation

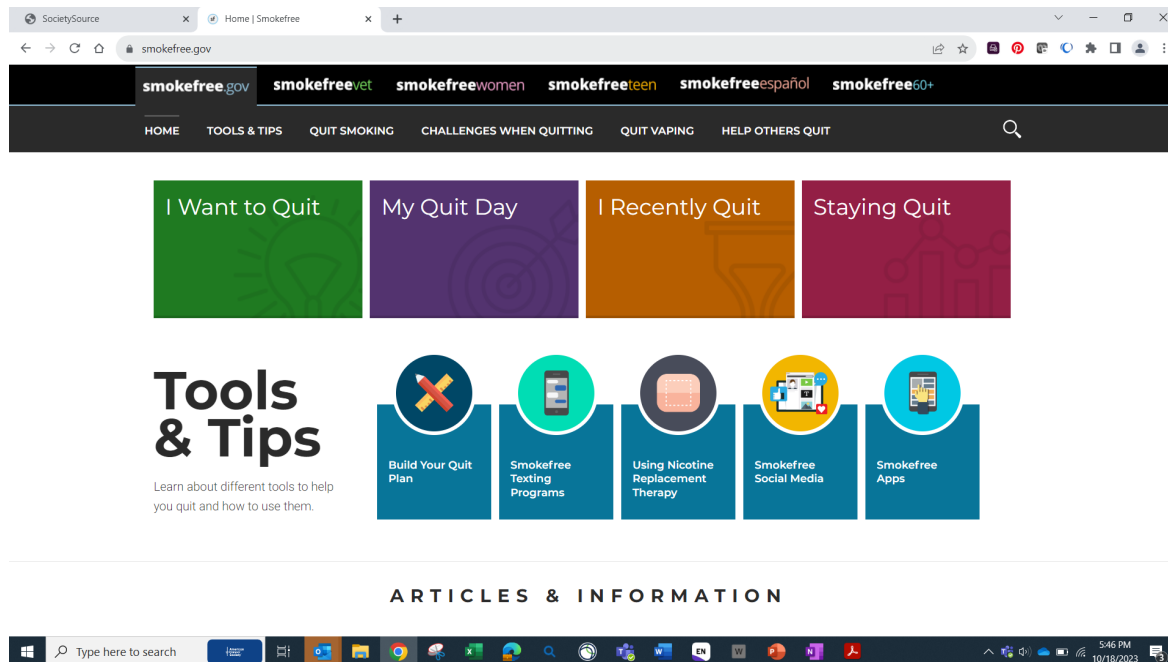
➤ Nicotine Anonymous
(weekly calls among
members)

➤ Internet/online programs
(<https://www.becomeanex.org/>)
(<https://smokefree.gov/>)



Behavioral/Psychosocial Support for Cessation

- Texting programs (e.g., smokefreeTxt)
- Smartphone apps for cessation (quitguide; quitStart)

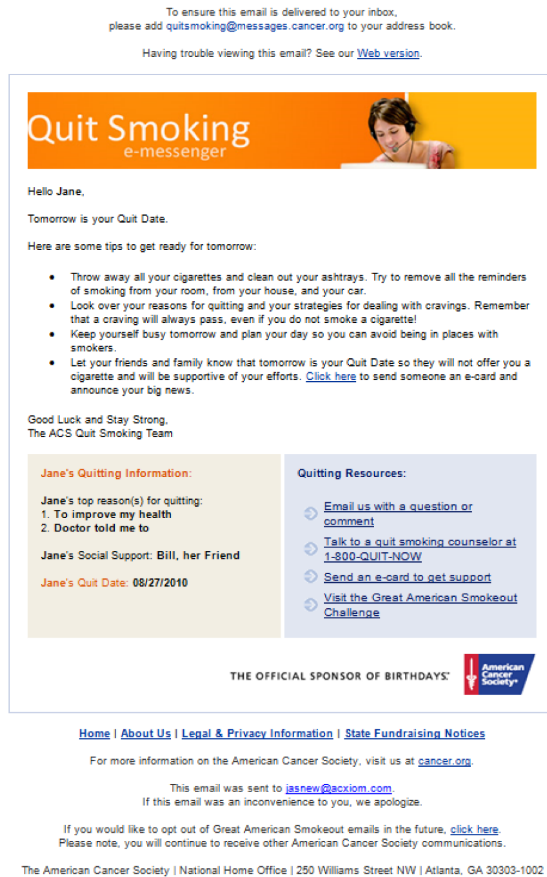


Why Emails for Smoking Cessation Support?

- Many people (all age groups) still use/check email every day (on computer or mobile phone)
- Mobile-friendly
- Can include images, animation (unlike txt msgs)
- Algorithm(s) can tailor/personalize emails based on input provided

Tailored Emails for Smoking Cessation

Figure 1. Sample email.



- Recruited from ACS's Great American Smokeout (GASO) Web page
- Enrolled > 1000 smokers planning to quit in the next 30 days
- Randomized to 1 of 3 groups:
 1. Treatment group: 27 tailored emails over 6- week period (Deluxe group: DEG)
 2. Basic Email Group (BEG): 3 emails-downloadable booklets
 3. Single Email Group (SEG): List of cessation resources
- Follow-up surveys: smoking status at 1, 3, and 6 months


Tailored Emails for Smoking Cessation:

Results

- Quitting over 6-months statistically significantly higher in DEG vs. Control group (SEG)*
 - DEG; opened mean of 14 emails.
- *(OR=1.47, Wald $\chi^2=5.78$, CI 1.07 to 2.02, $p=0.02$)

To ensure this email is delivered to your inbox,
please add quitsmoking@messages.cancer.org to your address book.

Having trouble viewing this email? See our [Web version](#).



Quit Smoking e-messenger

Hello Jane,

Tomorrow is your Quit Date.

Here are some tips to get ready for tomorrow:

- Throw away all your cigarettes and clean out your ashtrays. Try to remove all the reminders of smoking from your room, from your house, and your car.
- Look over your reasons for quitting and your strategies for dealing with cravings. Remember that a craving will always pass, even if you do not smoke a cigarette!
- Keep yourself busy tomorrow and plan your day so you can avoid being in places with smokers.
- Let your friends and family know that tomorrow is your Quit Date so they will not offer you a cigarette and will be supportive of your efforts. [Click here](#) to send someone an e-card and announce your big news.

Good Luck and Stay Strong,
The ACS Quit Smoking Team

Jane's Quitting Information:

Jane's top reason(s) for quitting:
1. To improve my health
2. Doctor told me to

Jane's Social Support: Bill, her Friend

Jane's Quit Date: 08/27/2010

Quitting Resources:

- [Email us with a question or comment](#)
- [Talk to a quit smoking counselor at 1-800-QUIT-NOW](#)
- [Send an e-card to get support](#)
- [Visit the Great American Smokeout Challenge](#)

THE OFFICIAL SPONSOR OF BIRTHDAYS: 

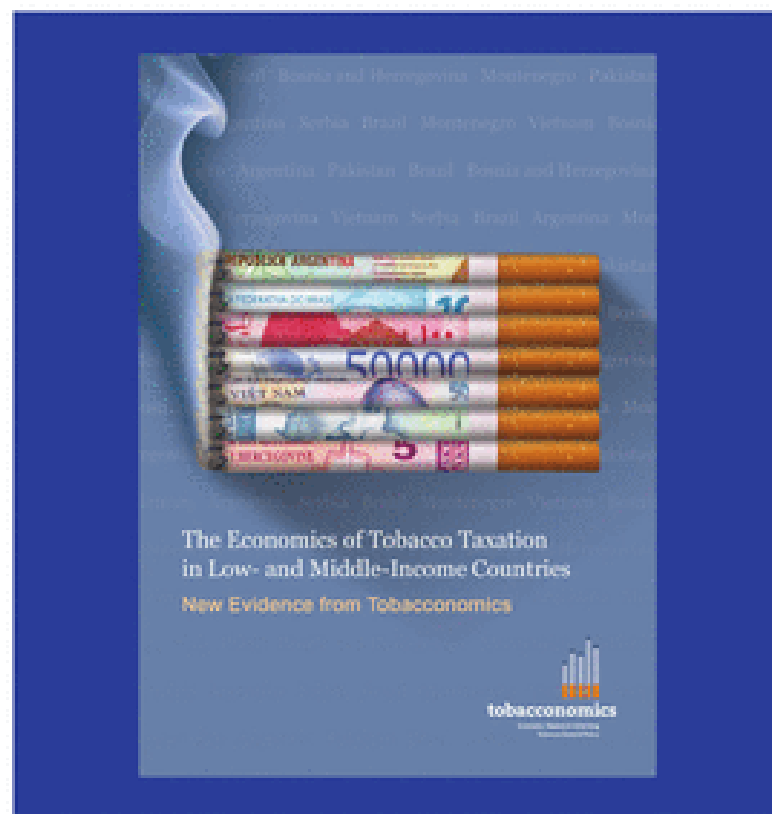
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For more information on the American Cancer Society, visit us at cancer.org.

This email was sent to jasnew@acxiom.com.
If this email was an inconvenience to you, we apologize.

If you would like to opt out of Great American Smokeout emails in the future, [click here](#).
Please note, you will continue to receive other American Cancer Society communications.

TOBACCO CONTROL



Research paper

Randomised controlled trial of stand-alone tailored emails for smoking cessation

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ABSTRACT

Introduction Digital technology has created opportunities for delivering smoking cessation assistance at the population level. However, the efficacy of sending multiple, automated, tailored emails providing motivation, support and information for quitting is unknown.

Methods Smokers planning to quit (n=1070) were randomly assigned to (1) 27 tailored cessation emails (deluxe email group (DEG)), (2) 3 to 4 tailored emails with links to downloadable booklets (basic email group (BEG)) or (3) a single non-tailored email (single email group (SEG)). All emails included links to quitting resources. Self-reported 7-day point-prevalence abstinence was assessed at 1 month, 3 months and 6 months postenrolment.

Results Across follow-ups, abstinence was significantly greater for smokers in the DEG (34%) compared with the SEG (25.8%; OR=1.47, 95% CI 1.07 to 2.02, p=0.02) but there was no difference between the BEG (30.8%) and the SEG (p=0.13). Results were independent of baseline cigarettes per day, interest in quitting, smoker in household, use of nicotine replacement therapy (NRT) or varenicline and gender, themselves associated with abstinence (ps<0.05). Missing=smoking and multiple imputation analyses based on 25 data sets corroborated results. Participants in the DEG were also more likely to use non-medication aids (eg, quit smoking website

messaging interventions, one included an Internet Quit Coach, and another used video messaging). Subsequent reviews corroborated these findings for smoking cessation and other health-related behaviours,^{5–6} including a recent randomised controlled trial of 196 smokers that was a mobile phone intervention based on commitment and acceptance therapy.⁷

With the advent of the iPhone, the functionality of mobile phones increased dramatically, allowing downloading of smoking cessation applications (apps) that include features other than, or in addition to, text messaging (eg, connecting to other smokers using social media platforms, tracking of smoking patterns, calculators for money saved and/or days of life saved by not smoking, etc).⁸ However, the majority of iPhone and Android apps evaluated in a recent review, in spite of being downloaded millions of times within a 2-month period, did not include many of the evidence-based strategies outlined in the updated clinical practice guideline.⁸

Another potential modality for delivering cessation assistance is emails. Emails have the advantage that most individuals access their email accounts on a daily or near-daily basis.⁹ They can also provide content within the email, obviating the need to access a specific website, as required with comput-

Empowered to Quit (E2Q)

Visit Empowered To
Quit on Cancer.org



Sign Up &
Pick a Quit
Date



Receive
Welcome
Email



Complete
Brief Survey



Receive Personalized Emails
to Support your Quit
Journey for 2 months

Join Empowered to Quit

To personalize your experience with the Empowered to Quit Program, please enter your name, email address, and the date you would like to try to quit smoking.

First Name*

Last Name*

Email*

Quit Date* (mm/dd/yyyy)



I'm not a robot



SIGN-UP

How to pick your Quit Day

You can set it as soon as tomorrow or up to 30 days from now. Be sure to give yourself enough time to come up with a quit plan, but not so much time that you'll change your mind; it is best to pick a weekday that doesn't look like it will be too stressful of a day. Let's get started!

What happens after picking your Quit Day?

As your Quit Day gets closer, you can make your quit plan with the help of short emails from the American Cancer Society. Once your Quit Day arrives, you'll continue to receive tailored emails and tools to support you along your quit journey.

Not sure it's your time to quit smoking?

Here are a few key reasons to quit from the 2020 U.S. Surgeon General's Report:

- Quitting tobacco is beneficial at any age.
- Quitting tobacco improves health status and enhances the quality of life.
- Quitting tobacco reduces the risk of premature death and can add as much as a decade to life expectancy.

It's not too late to quit using tobacco. There are many [health benefits](#) of quitting nicotine. In fact, the sooner you quit smoking, the more you can reduce your chances of getting cancer and other [diseases](#).



Hello Jane,

Congratulations on your decision to quit smoking! It is the single best thing you can do to improve your health.

We have one message for you: YOU CAN DO IT!

And we want to help you along the way.

So, over the next two months, we will be sending you **personalized** tips on how to quit and remain smoke-free. The messages will be customized based on what you told us about yourself when you enrolled in our program and timed around your Quit Date. They'll also include reminders about your personal reasons for quitting and who you can turn to for help during the quitting process (see boxes with your quitting information and Quitting Resources below).

To help customize your quit journey, we ask that you complete this brief survey

BEGIN SURVEY



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3 Email Examples



Hi Testjane,

Today is the day! You've been preparing for your Quit Date and now it's here. Remind your friends and family that today's your Quit Date - you'll need their support.

Here are some tips to help you get through the day:

- **Stay busy.** It's important to distract yourself so you won't have time to think about smoking. If you spend a lot of time at the computer, you might like to try playing the free online game [Tetris](#), or you might like one of these free games you can play on your smartphone: [Angry Birds Dream Blast](#), [Another Eden](#), [Citytopia](#), or [Puzzle Page](#).*
- Avoid being in places you associate with smoking.
- **Recognize your triggers** and try to avoid them.
- Don't forget: the urge to smoke usually only lasts 3-5 minutes. **Distract yourself** and you'll make it through the urge.
- Remember to let your support person know that today is the Day, and that you may need their support. Let them know you might need to vent to them about any withdrawal symptoms you experience (like irritability, anxiety, or depression), or just to talk about how your quit day is going.

For more advice on getting through this tough week, visit [The Great American Smokeout website](#) or call 1-800-QUIT-NOW (1-800-784-8669), or chat online with a trained professional. We're here to help!

Stay strong,
Your Empowered to Quit Team

*The American Cancer Society does not endorse any product or service

My Quit Information

My Quit Date: 12/05/2022

Quitting Resources



Hello Testjane,

Congratulations on sticking with your decision to quit smoking. [Read stories](#) from others like you who have quit smoking, or join a [Facebook group](#) to connect with others who are quitting or have just quit.

You might consider using medication like nicotine replacement therapy (NRT), like the patch, when you quit smoking. Medication combined with counseling can offer you the best chances of successfully quitting. However, we don't recommend using electronic cigarettes to quit because we don't yet have strong evidence that it helps. We also don't know if inhaling the other ingredients in e-liquids cause long-term harm. If you do use an e-cigarette to quit, your goal should be to try to gradually reduce the nicotine levels so that you quit both cigarettes and e-cigarettes.

Your top reasons for quitting are:

1. To improve my health
2. For my family and/or friends

A good idea is to print them and put them where you can see them often. Or take a photo and keep it on your phone. You might put them next to your bed, your desk, or in a phone case. Feel free to add to the reasons you already provided.

A quit coach is available 24 hours a day by phone if you need someone to talk to. They have lots of experience helping people just like you, and the service is FREE. Call today at 1-800-QUIT-NOW (1-800-784-8669), if you have not already, or [chat online](#).

Good luck and stay strong,
Your Empowered to Quit Team

My Quit Information

My Quit Date: 12/05/2022

Quitting Resources

My Top Reason(s) for Quitting

1. To improve my health
2. For my family and/or friends

My Social Support: William

- For more information or support please contact us at 1.800.227.2345 or visit [Cancer.org](#)
- Talk to a quit smoking counselor at 1-800-QUIT-NOW



Janetest,

No matter how you feel today, it's a good thing to be smoke-free.

You have made it through 2 full days of not smoking and you are on to your third. Congratulations!

To help you not smoke, there is nothing like a good walk around the block! Walking helps keep your weight down, relieves stress, and gives you more energy. So, especially in these first few days which are likely to be your hardest, give yourself lots of breaks and, when possible, take a walk around the block.

Visit the [Great American Get Fit Challenge](#) for more ideas on how to fit physical activity into your day.

Take care and you'll hear from us again soon!
Your Empowered to Quit Team

My Quit Information

My Quit Date: 11/30/2022

Quitting Resources

My Top Reason(s) for Quitting

1. To improve my health
2. For my family and/or friends

My Social Support: Bill

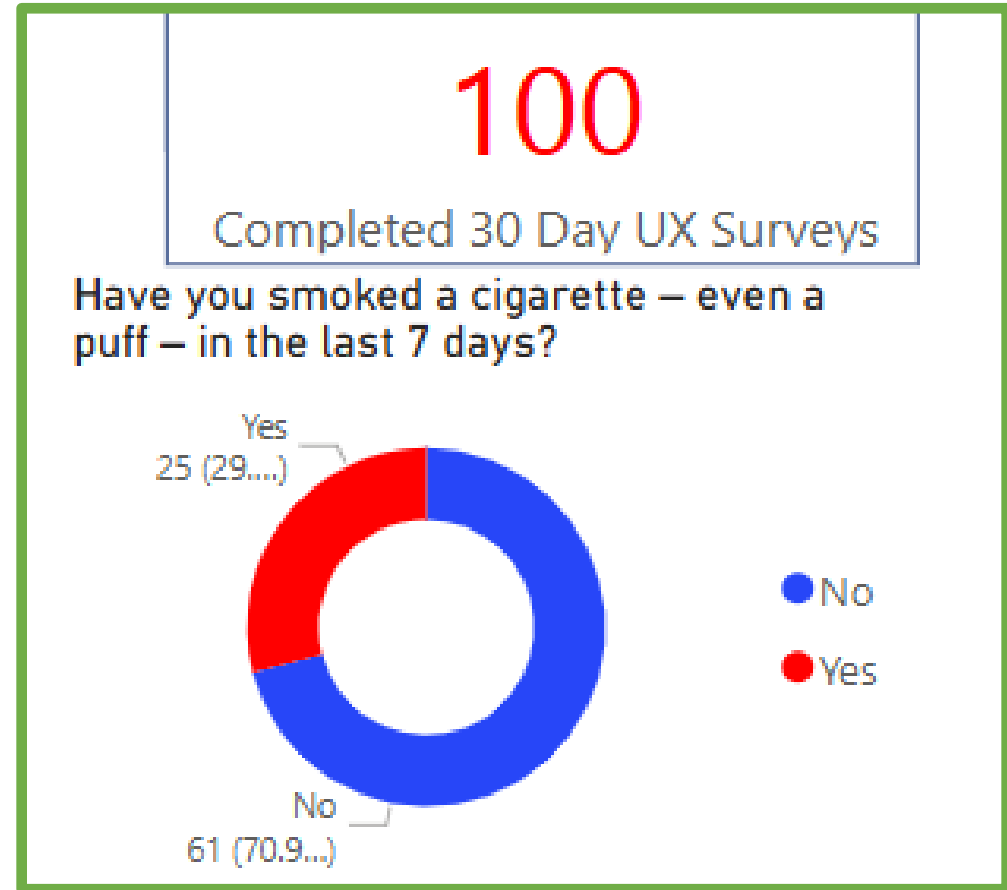
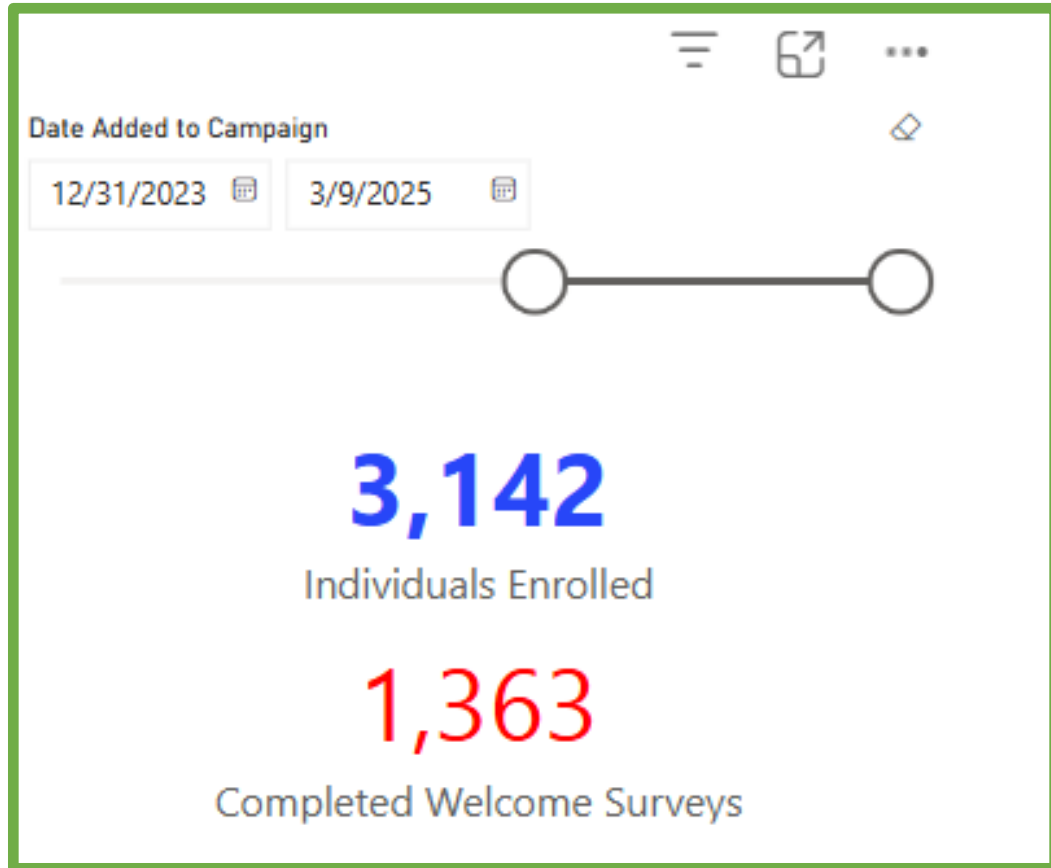
Reset My Quit Date

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Power BI Dashboard (analytics)



Power BI Dashboard (analytics)



User Experience Survey (30 days post-enrollment)

“The support I’ve felt from the frequent emails. I save them and re-read when I’m struggling.”

“The reminders of why I’m doing it and the support with tips and help along the way.”

“...Just to know I was not alone.”

“The emails-hold me accountable.”

“The useful tips/advice about things to do to help with withdrawal.”

“The whole journey, including the certificate after one week, was helpful.”

“The kindness and knowing what would happen if I had kept smoking”

“The encouraging emails and comments.”

Considerations for Replicating E2Q to change drinking behavior

- Assess demand
- Similarities in treatments for problematic drinking & smoking
 - ❑ Identify Triggers (e.g., alcohol, tobacco often used together)
 - ❑ Possible solutions for coping with triggers
 - ❑ Reasons for changing drinking behavior
 - ❑ Describe medications that help
 - ❑ How to obtain psychosocial support
 - ❑ Motivational messages, reward progress
 - ❑ Links to other resources (e.g., treatment programs, group support)



Thank You

Questions?

Next Steps

- Increase visibility (Kristen Sullivan)
 - Social media strategy (Marketing & Communication)
 - Increase prominence on cancer.org website: StayAwayFromTobacco/GASO
 - Consider other opportunities for promotion
- Use feedback to maximize satisfaction
- Research- incentivize f/u survey completion
- Develop versions tailored to vulnerable populations (SED, LGBTQ+)



Every cancer. Every life.



Empowered to Quit

Quit smoking with help from the American Cancer Society

Let's face it, taking your life back from smoking is hard. But with help, you can be empowered to quit smoking for good.

American Cancer Society researchers developed **Empowered to Quit**, an email-based program to help you quit smoking.

How it works:

- You set your quit day and make a plan.
- Our quit team sends you emails filled with information specific to your needs.
- You get encouragement and personalized tips along your quit journey

With **Empowered to Quit**, you'll harness the power of American Cancer Society research on your journey to quit smoking. Learn more about the program and start your quit journey today.

Scan the QR code to start your quit journey



Or visit:
cancer.org/EmpoweredToQuit

cancer.org | 1.800.227.2345

Huge Thanks to

- Alpa Patel, PhD FACSM, SVP Population Science
- Laura Makaroff, DO, SVP Prevention & Early Detection
- Arif Kamal, MD, MBA, MHS, FACP, FAAHPM, FASCO Chief Patient Officer
- Jane Duggan, Dir. Digital Solutions
- Taylor Yurchuk, Dir. Email Marketing & Implementation; Direct Marketing & Ops
- Patrick Egan, Sr. Business Intelligence Analyst
- Kristen Sullivan, Dir. Prevention & Survivorship, Patient Support
- Amanda Schneider, Senior Marketing Manager, Mission Execution



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Good luck and stay strong,
Your Empowered to Quit Team

My Quit Information

My Quit Date: 12/05/2022

Quitting Resources

My Top Reason(s) for Quitting

1. To improve my health
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My Social Support: William

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My Quit Date: 12/05/2022

Quitting Resources



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Take care and you'll hear from us again soon!
Your Empowered to Quit Team

My Quit Information

My Quit Date: 11/30/2022

Quitting Resources

My Top Reason(s) for Quitting

1. To improve my health
2. For my family and/or friends

My Social Support: Bill

Reset My Quit Date

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- Talk to a quit smoking counselor at 1-800-QUIT-NOW
- Visit the Great American Smokeout Challenge

Email Examples

Welcome Email Survey



In order to help customize your quit journey and to help us improve our programs for all users, we ask that you complete this brief survey:

Enter or update your quit date

1. What year were you born?

2. Please choose your top reasons for wanting to quit smoking
(Select up to 5)

- “Information from the form will help
 - personalize your email journey
 - improve the program for constituents”
- Age

Empowered to Quit

Welcome Survey Responses - 30 Day UX Survey Responses

Which of the following best describes your experience with the Empowered to Quit program?

Option	Responses	% of Total
I enrolled to quit smoking myself	16	94.12%
I don't smoke but I enrolled for other reasons (e.g., to possibly recommend to others, to see how it works, etc.)	1	5.88%
Total	17	100.00%

American Cancer Society

Overall, how would you rate your experience with the Empowered to Quit program so far?

Rating	Responses	% of Total
e) Very good	6	37.50%
d) Good	4	25.00%
c) Average	3	18.75%
b) Poor	1	6.25%
a) Very poor	2	12.50%

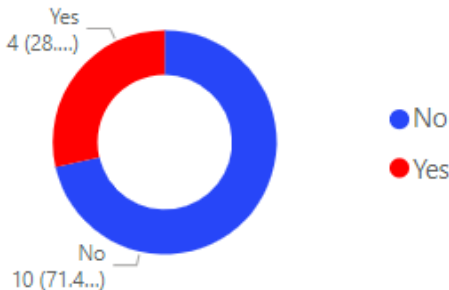
How much do you agree or disagree with this statement? "The program has made me feel supported along my journey to quit smoking."

Rating	Responses	% of Total
e) Strongly agree	4	25.00%
d) Agree	6	37.50%
c) Neither agree nor disagree	1	6.25%
b) Disagree	3	18.75%
a) Strongly disagree	2	12.50%

17

Completed 30 Day UX Surveys

Have you smoked a cigarette – even a puff – in the last 7 days?



How would you rate the following aspects of the emails you've received through the Empowered to Quit program?

Frequency of the emails	Responses	% of Total	Length of the emails	Responses	% of Total
e) Very good	6	37.50%	e) Very good	7	43.75%
d) Good	2	12.50%	d) Good	4	25.00%
c) Average	3	18.75%	c) Average	4	25.00%
b) Poor	2	12.50%	a) Very poor	1	6.25%
a) Very poor	3	18.75%			

Tone of the email content	Responses	% of Total
e) Very good	6	37.50%
d) Good	6	37.50%
c) Average	3	18.75%
a) Very poor	1	6.25%

Relevance of the email content	Responses	% of Total	Clarity/Ease of understanding the email content	Responses	% of Total
e) Very good	6	37.50%	e) Very good	6	37.50%
d) Good	3	18.75%	d) Good	7	43.75%
c) Average	6	37.50%	c) Average	2	12.50%
a) Very poor	1	6.25%	a) Very poor	1	6.25%

How did you first learn about the Empowered to Quit program?

Option	Responses	% of Total
A friend or family member (word of mouth)	2	12.50%
Cancer.org (The American Cancer Society website)	5	31.25%
My physician, or at a hospital or clinic	1	6.25%
Other	4	25.00%
Social Media (e.g., Facebook, Twitter, YouTube, WhatsApp, Instagram)	4	25.00%
Total	16	100.00%

Other Responses

Self search
Mail from BC/BS.
I googled it
Enuate NRA

What has been the most helpful aspect of the program so far?

Open-ended Response

Didn't find it useful or helpful
I am still not smoking
I didn't find it to be very useful. Emails stopped after about 2 weeks. I also kept getting requests to fill out a survey that I'd already filled out when I first signed up. I didn't find

What suggestions do you have for how we could improve the program or make it more helpful?

Open-ended Response

None, everything has been wonderful
none
More frequent emails with statistics and tips on fighting cravings and triggers.

In general, how would you describe your engagement with the program so far?

Option	Responses	% of Total
I've read most of the emails	1	11.11%
I haven't really been opening or reading the emails	2	22.22%
I've read all of the emails	6	66.67%
Total	9	100.00%

How would you rate the usefulness of the personalized email footers, which contain your reasons for quitting and other customized informa...

Rating	Responses	%
d) I did not notice the personalized email footers	2	
c) Very useful	5	
b) Somewhat useful	6	
a) Not at all useful	3	

Tailored Emails for Smoking Cessation:

Results

- Quitting over 6-month significantly higher in DEG vs. control group (SEG)*
- DEG; opened mean of 14 emails.

*(OR=1.47, Wald $\chi^2=5.78$, CI 1.07 to 2.02, $p=0.02$)

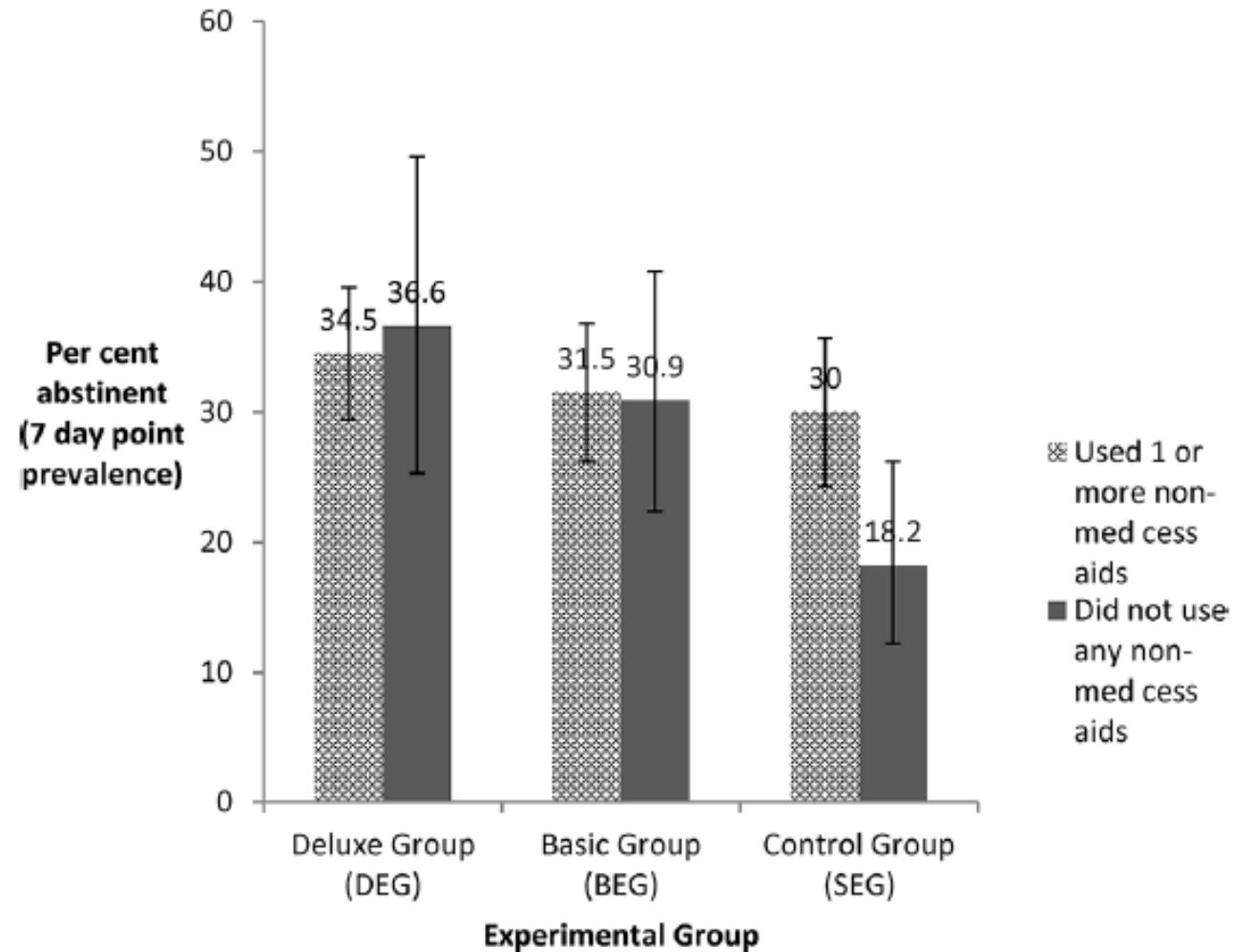


Figure 5 Results of the GEE model indicating interaction of use of non-medication cessation aids with condition on abstinence across follow-ups. BEG, basic email group; DEG, deluxe email group; SEG, single email group.