

Evidence in Action

Can a Texting Program Help a Patient Quit Smoking?

By James C. Boysen, DC, MS

A YOUNG MALE PATIENT VISITS YOUR OFFICE. He sets his smartphone down next to his pack of cigarettes before getting onto your adjusting table. You can smell tobacco on his clothes. Taking in the evidence of a nicotine habit, the age of your patient and the fact that he is comfortable with electronic technology, you wonder: “Is there any evidence for mobile phone interventions for cigarette use?”

The Concern

According to the Centers for Disease Control and Prevention (CDC), the leading cause of preventable disease and death in the United States is cigarette smoking.¹ Almost one in five adults over the age of 18 smokes cigarettes. Generally speaking, the rates for smoking are higher for those who have less education, are impoverished, are non-Hispanic American Indians/Alaska Natives, younger than 65, disabled, live in the Midwest or South or are lesbian/gay/bisexual. Mobile phone use is estimated at \$326 million in the United States.² In addition, according to the CDC, 70 percent of smokers want to quit.³

Your curiosity takes you to *PubMed.gov*. Using the search terms “mobile phone” and “quit smoking,” you

find a variety of articles related to smoking cessation interventions that are assisted by mobile devices. You pick one article you feel you can trust: Whittaker R, McRobbie H, Bullen C, Borland R, Rodgers A, Gu Y. Mobile phone-based interventions for smoking cessation. *Cochrane Database Syst Rev* 2012;11:CD006611.⁴

The Cochrane Review

You know the Cochrane Database Systematic Review will stringently review, analyze and combine the results of several studies in a systematic way to produce the best available evidence-based recommendations on a topic. Delving into the article, you find the primary outcome of interest was smoking abstinence at six months’ duration using any type of mobile phone intervention.

Text messaging was the primary intervention (ranging from one to five messages per day).

The Search Methods

The authors of this systematic review produced five studies that met the inclusion criteria. The definition of abstinence allowed up to three lapses, or up to five cigarettes.

Three trials were based on the same program, which included setting a day to quit within three weeks, then receiving automated text messages five to six times a day for a month, followed by a maintenance message every two weeks. These participants could also be matched with a “Quit Buddy” they could text for extra support.

Another study provided text messaging, a web-based program, a minimal treatment option, or a choice of all three. Depending on the person’s stage of quitting, these text messages were used to provide advice and motivation.

People who signed up for this program could also get messages when they communicated a crisis by text. The frequency of messages varied according to need.

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The final trial involved text messages with a link to a web-based video clip. The videos were short messages chosen from six “role models” that conveyed struggles and the strategies that were used. Texting was daily until the quit day, then twice a day, tapering down over the course of six months. Participants could ask for more texts and more than one role model.

When all five studies were pooled, there was a statistically significant advantage in using a mobile phone intervention to help individuals quit smoking at six months from quitting day over control programs (RR 1.71, 95% CI 1.47 to 1.99, P = 0.001 over 9,000 participants total). The control groups were more passive in nature for smoking cessation, from a text or video message every two weeks to information on the Internet and phone-based cessation services. This means that mobile phone-based smoking cessation programs have a 1.71 times chance (or almost twice as likely) of success of those in the control groups.

Resource for Smoking Cessation

While the above studies used a fee-for-service texting program, when you search for a free texting service for quitting smoking, you will find that *Smokefree.gov* (<http://smokefree.gov/>) offers a free six-to-eight week texting-support program designed for adults and young adults. This service provides one to five messages per day along with special on-demand messages should the smoker experience a craving, mood change or setback in the desire to quit. The National Cancer Institute claims this text message support program doubles the quit rates in teens, which is close to what you found out in the study you just read.⁵

As additional resources at this website, there are also Smokefree apps: one to help the process of quitting (QuitSTART) and one using evidence-based smoking cessation methods and behavior change theory (NCI QuitPal), as well as one for longer-term support (QuitGuide). The site also has free support from online counselors/coaches and other evidence-based, third-party programs for smoking cessation.

These could all be suggested to your patient in a five-minute consultation for stopping smoking.

The Takeaway

As a primary-care/portal-of-entry health care practitioner, you should consider providing support for those who want to quit a habit that is the leading cause of preventable disease and death in the United States. Interactive mobile phone

messaging has the potential to exert a positive impact on smoking cessation. Mobile messaging services, such as text messaging, may offer a cost-effective way to change behavior in at-risk individuals. When your patient grabs his cigarettes and his smartphone after the adjustment, you can now start a conversation by asking, “Would you like a free, evidence-based, mobile phone approach to stop smoking?” ■

References

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