

# Tobacco Cessation and the Internet

## Background

Web-based tobacco cessation programs are a promising strategy for reaching smokers and supporting their cessation needs. These programs have the potential to reach millions of smokers, many of whom do not have access to other forms of cessation support; increase the types of therapies available to patients; and reduce the costs, and increase the population impact, of smoking cessation support programs.<sup>1</sup> Hundreds of websites also attempt to provide tobacco cessation information but may not offer a formal cessation program.

## Program features and examples

A number of online cessation programs exist that incorporate methods known to be effective in helping smokers quit, including various counseling methods, support groups, and several pharmacotherapies. Features of these web-based programs may include:

- Providing educational materials and online counseling.
- Offering social support through community resources like chat rooms, discussion forums, or message boards.
- Designing individually tailored programs.
- Providing guidance and support for medication usage.

Examples of online cessation programs that incorporate treatment methods consistent with national guidelines include:

- *Freedom from Smoking® Online*,  
<http://ffsonline.org> (American Lung Association)

- *You Can Quit Smoking Now!*,  
<http://www.smokefree.gov> (Department of Health and Human Services)
- *Committed Quitters®*, <http://www.committedquitters.com> (GlaxoSmithKline)
- *Trytostop.org*, <http://www.trytostop.org> (Massachusetts Department of Health)
- *QuitNet®*, <http://www.quitnet.com> (Healthways Quitnet, Inc.)

## Program effectiveness

Despite the proliferation of online tobacco cessation programs and websites offering cessation information, few have been evaluated. There is little information regarding the efficacy, content and quality. A review of smoking cessation websites available in June 2002 reported great variability and usability of these sites. Of the 202 sites reviewed, only 46 offered cessation treatment, only five provided extensive coverage of the Public Health Service (PHS) Clinical Practice Guidelines, and few sites used real-time interactivity to tailor treatment.<sup>2</sup>

More research is needed to help understand which online components have the most potential for motivating and helping smokers quit and avoid relapse. The potential impact of the Internet on smoking prevalence remains unknown; however, several recent studies have shown promising results.

- A recent study evaluated the use of web-based, tailored materials vs. web-based, non-tailored materials. The program was based on cognitive-behavioral methods of smoking cessation and relapse prevention. The data showed that continuous abstinence rates at six weeks were 29% in the tailored condition versus 23.9% in the non-tailored condition; at 12 weeks, continuous abstinence rates were 22.8% versus 18.1%, respectively<sup>3</sup>
- Another study examined an intervention that consisted of a video-based website that presented current strategies for smoking cessation and tailored motivational materials. At follow up, the cessation rate at 90 days was 24.1% for the treatment group and 8.2% for the control group.<sup>4</sup>
- To take advantage of the interactive and multimedia capabilities of the web, one study designed a cessation website that included modules on social support and cognitive-behavioral coping skills. The evaluation reported a three-month, seven-day point prevalence abstinence rate of 18%.<sup>5</sup>
- One study examined a series of four Internet smoking cessation studies conducted in English and Spanish. Studies one and two evaluated a standard smoking cessation guide (the “Guía”). Studies three and four were randomized trials comparing the Guía and individually timed e-mail messages to the Guía, the emails, and a mood management course. At six months, self-reported seven-day abstinence rates were 6% in studies one and two, 10%–14% in study three, and 20%–26% in study four.<sup>6</sup>

<sup>1</sup>Nicotine & Tobacco Research Volume 7, Number 2 (April 2005) 207–216 Initial evaluation of a real-world Internet smoking cessation system. Nathan K. Cobb, Amanda L. Graham, Beth C. Bock, George Papandonatos, David B. Abrams

<sup>2</sup>Bock, B., Graham, A., Sciamanna, C., Krishnamoorthy, J., Whiteley, J., Carmona-Barros, R., Niaura, R., & Abrams, D. (2004). Smoking cessation treatment on the Internet: Content, quality, and usability. Nicotine & Tobacco Research, 6, 1–13.

<sup>3</sup>Strecher VJ, Shiffman S, and West R. (2005) Randomized controlled trial of a web-based computer-tailored smoking cessation program as a supplement to nicotine patch therapy. Addiction, 100:682-688.

<sup>4</sup>Swartz LHG, Noell JW, Schroeder SW, Ary DV (2006) A randomized control study of a fully automated internet based smoking cessation program. Tobacco Control, 15:7-12.

<sup>5</sup>Feil, E., Noell, J., Lichtenstein, E., Boles, S. M., & McKay, H. G. (2003). Evaluation of an Internet-based smoking cessation program: Lessons learned from a pilot study. Nicotine & Tobacco Research, 5, 189–194

<sup>6</sup>Mun?oz RF, Lenert LL, Delucchi K, Stoddard J, Perez JE, Penilla C, and Pérez-Stable EJ (2006) Toward evidence-based Internet interventions: A Spanish/English Web site for international smoking cessation trials. Nicotine and Tobacco Research, 8(1):77-87.