Calling All Smokers: Quitlines' Reach Overall and for Priority Populations, FY2010

Jessie E. Saul, Ph.D.[1], Ryan Seltzer, M.S., M.A.[2], Mignonne Guy, Ph.D.[3]

[1]North American Quitline Consortium; [2]Arizona Smokers' Helpline, University of Arizona; [3]Cancer Prevention & Control Program Arizona Cancer Center & Center for Health Outcomes and PharmacoEconomic Research

The authors have no conflicts of interest to disclose.

INTRODUCTION AND BACKGROUND

The North American Quitline Consortium has conducted a survey of publicly-funded tobacco cessation telephone quitlines annually since 2004, collecting information on quitline budgets, operations, service offerings and protocols, utilization, and outcomes (FY2010 survey only). As of the FY2009 survey, aggregate demographic information on callers (e.g., age, gender, race, ethnicity, education level, sexual orientation) was collected for the population of tobacco users seeking help for themselves. NAQC used these data to calculate promotional reach rates overall and for priority populations. (Promotional reach = the number of unique tobacco users calling for help for themselves divided by the estimated number of smokers in the population of interest; prevalence estimates from the 2009 Behavioral Risk Factor Surveillance System (BRFSS) were used to obtain the estimated number of smokers overall and for each sub-population of interest.)

In FY2010 the population of interest was modified to include only those tobacco users who received counseling or medications so that NAQC could report on treatment reach overall, and for specific priority populations. (Treatment reach = the number of unique tobacco users in the population of interest who received counseling or medications divided by the total number of smokers in the population of interest; prevalence estimates from the 2010 BRFSS were used to obtain the estimated number of smokers overall and for each sub-population of interest.)

METHODS

The FY2009 Annual Survey of Quitlines was conducted in two waves. Wave 1 was fielded from September - October 2009, and Wave 2 was fielded from November 2009 - January 2010. All 53 U.S. quitlines (all 50 states, the District of Columbia, Puerto Rico, and Guam) participated in the survey. Each quitline provided information for its own Fiscal Year 2009.

The FY2010 Annual Survey of Quitlines was conducted from October - December, 2010. Of the 50 U.S. states, the District of Columbia, Puerto Rico, and Guam, all but one participated in the survey (n=52). Each quitline provided information for its own Fiscal Year 2010. Most U.S. quitlines (n=41, 79%) reported a July 1 – June 30 fiscal year, four (8%) reported an October 1 – September 30 fiscal year, two (4%) reported a January 1 – December 31 fiscal year, and the remaining five (10%) reported something else.

Reach calculations were performed by summing the numerator of the reach calculation for all state quitlines reporting (e.g., number of tobacco users receiving counseling or medications), and dividing that by the sum of the estimated number of smokers for only those states reporting the numerator, thus weighting the reach calculations by the population size of the population of interest for the states whose quitlines reported a given item.

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ANALYSIS

The demographic data provided for FY2010 was limited due to a lack of definitional clarity in the data collection process; only 23 U.S. quitlines provided aggregate demographic data on unique (de-duplicated) tobacco users who received evidence-based treatment during the quitline's fiscal year (Group A quitlines). To determine how comparable Group A quitlines are to those quitlines that were not able to provide demographic data for the population of interest for FY2010 (Group B), we compared the aggregate demographic data provided for FY2009 between Group A and Group B quitlines. A z-test for comparing proportions was used to evaluate differences in reach rate between Group A and Group B quitlines. For FY2009, overall promotional reach (total number of unique tobacco users calling for help to quit using tobacco for themselves, divided by the total number of estimated smokers in each state or territory using 2009 BRFSS prevalence estimates) was higher for Group A quitlines (2.42%, n=22), than for Group B quitlines (0.70%, n=27) ($z = 413.28$, $p < .0001$). This relative difference held for all population groups with the exception of Native Hawaiian/ Pacific Islanders: in FY2009, Group A quitlines reached fewer NHPI smokers (0.72%, n=21) than Group B quitlines (1.09%, n=27) ($z=-8.27$, $p<.0001$). (See Table 1 for more details.) While the population quitlines reported demographic information for in FY2009 (total number of unique tobacco users calling for help for themselves) was different than for FY2010 (total number of unique tobacco users who received counseling or medications through the quitline), we can assume similar relative differences in treatment reach rates for FY2010 between Group A and Group B quitlines as we observed for promotional reach rates for FY2009, namely that reach rates for Group A quitlines will be higher than Group B quitlines with the possible exception of NHPI.

Table 1: FY2009 Promotional Reach* Comparison Between Group A and Group B Quitlines

Demographic Category	Group A Promotional Reach*	Group A # of quitlines reporting	Group B Promotional Reach*	Group B # of quitlines reporting	Z	p
Overall	2.42%	22	0.70%	27	413.28	<.0001
Race/Ethnicity						
Hispanic	1.43%	22	0.28%	28	136.96	<.0001
White	2.24%	23	0.67%	28	352.38	<.0001
Black	2.37%	23	0.59%	28	148.16	<.0001
Asian	1.52%	23	0.27%	28	58.84	<.0001
Native Hawaiian/Pacific Islander	0.72%	21	1.09%	27	-8.27	<.0001
American Indian/Alaska Native	1.41%	22	0.92%	28	24.10	<.0001
Other Race	4.65%	23	0.98%	27	107.27	<.0001
Education						
Less Than Grade 9	1.74%	21	0.82%	27	48.29	<.0000
Grade 9 to 11	2.69%	21	0.83%	28	143.00	<.0001

*Promotional reach = Unique tobacco users calling for help for themselves divided by estimated # of smokers in the state/territory (2009 BRFSS prevalence estimates used to determine # of smokers in the state or territory)

RESULTS

Results are reported for the 23 U.S. quitlines that were able to report aggregate demographic information for the population of unique tobacco users who received counseling or medications during Fiscal Year 2010 (Group A quitlines).

While treatment reach (the number of tobacco users receiving counseling or medications from quitlines divided by the total number of estimated smokers as calculated by 2010 BRFSS) was 1.35% for all populations combined, reach varied widely for sub-populations of interest. Treatment reach among the 23 Group A quitlines ranged from 0.31% for NHPI to 2.20% for "Other" race (see Table 2).

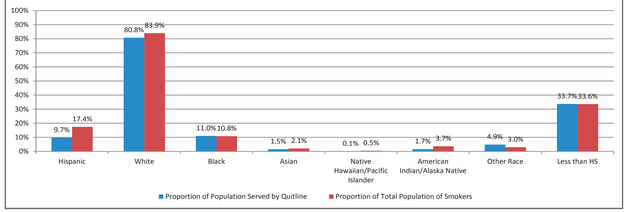
Table 2: FY2010 Treatment Reach* for Group A Quitlines

Demographic Category	Group A Treatment Reach*	Group A # of quitlines reporting
Overall	1.35%	20
Race/Ethnicity		
Hispanic	0.75%	23
White	1.30%	22
Black	1.36%	22
Asian	1.00%	22
Native Hawaiian/Pacific Islander	0.31%	21
American Indian/Alaska Native	0.61%	22
Other Race	2.20%	23
Education		
Less than HS	1.35%	22

*Treatment reach = Unique tobacco users receiving counseling or medications divided by estimated # of smokers in the state/ territory (2010 BRFSS prevalence estimates used to determine # of smokers in the state or territory)

The proportion of quitline callers receiving counseling or medications in population sub-groups of interest was compared to the proportion of smokers made up by members of those sub-groups (see Figure 1). For every sub-group of interest (race, ethnicity, and less than high school education), quitlines served proportionally fewer tobacco users than they represented in the general population of smokers (See Figure 1). The sole exceptions were African Americans (10.98% of quitline clients, 10.85% of smokers) and "Other" race (4.86% of quitline clients, 2.98% of smokers).

Figure 1: Comparison of Population Served by Group A Quitlines (FY2010) to Population of Smokers for Group A Quitline States (BRFSS 2010)



DISCUSSION

These findings suggest that quitlines are not serving as many tobacco users from sub-populations of interest as might be expected given their prevalence nationwide. Given that promotional reach for Group A quitlines was higher than for Group B quitlines in FY2009 overall and for sub-populations of interest with the exception of NHPI, we can assume that results for Group A quitlines for FY2010 would be higher than the national total with the possible exception of NHPI.

Results from this study can be used to inform decision-making about promotional efforts for the future, and can serve as baseline measures to assess the impact of national promotions such as the National Tobacco Education Campaign launching in March, 2012 or implementation of FDA graphic health warnings on cigarette packs. Additional research needs to be conducted on successful strategies for increasing utilization of quitlines and other evidence-based cessation services among populations of interest, including racial and ethnic minorities and individuals with low education.

RESOURCES

NAQC has compiled several resources on effective strategies for increasing the reach of quitlines:

Innovative Approaches and Proven Strategies for Increasing Reach: This web repository includes case studies on quitlines that have achieved a reach at least three times higher than the median reach of all quitlines. http://www.naquitline.org/?page=casestudies

Increasing Reach of Tobacco Cessation Quitlines: A Review of the Literature and Promising Practices: This 2009 paper provides an overview of the published literature as well as examples from practice on ways to increase the reach of quitlines. It is divided into several sections by topic area, including:
. Paid, earned and new media;
. Online recruitment;
. Referral networks;
. NRT and other medications;
. Targeting priority populations;
. Quit and Win contests; and
. Clean indoor air laws and graphic health warnings.
The paper is available at http://www.naquitline.org/resource/resmgr/ issue_papers/naqc_issuepaper_increasingre.pdf

For questions, please contact Dr. Jessie Saul at jsaul@naquitline.org.

Acknowledgments: The authors would like to acknowledge the work of the Annual Survey workgroup for all their efforts and advice, as well as the survey vendors for the 2009 and 2010 surveys: the Evaluation and Research & Development Unit, University of Arizona; and Westat, respectively.

Funding for this work was provided by: The Centers for Disease Control and Prevention, Pfizer, Inc., Novartis Consumer Health, Inc., the Robert Wood Johnson Foundation, the American Legacy Foundation, and NAQC membership dues.