NAQC Issue Paper

NAQC's Issue Papers aim to provide critical knowledge on important quitline topics and guidance for decision-making.

Tobacco Cessation Quitlines

A Good Investment to Save Lives, Decrease Direct Medical Costs and Increase Productivity

Tobacco use is the single most preventable cause of death and disease in the U. S., causing approximately 438,000 deaths each year.[1] Currently, over 19% of U.S. adults smoke cigarettes and 40% of smokers report having tried to quit in the past year.[2] In the U.S., tobacco use costs more than $96 billion per year in direct medical expenses and over $97 billion in lost productivity.[1] To address tobacco's societal burden, the Centers for Disease Control and Prevention (CDC) recommends comprehensive, sustainable and accountable statewide tobacco control programs. An essential component of any comprehensive tobacco-control effort must include easily accessible, cost-effective and proven services to help tobacco users quit.[1]

What is the Role of Quitlines in Tobacco Cessation?

Quitlines are telephone-based tobacco cessation services that help tobacco users quit through a variety of services, including counseling, medications, information and self-help materials. Quitline services can be tailored to an individual tobacco user's experience, tobacco use behavior and motivations. Quitline effectiveness is documented by numerous research studies,[3] and the evidence for quitline efficacy continues to build.

Through the leadership of state and federal governments, quitlines have become increasingly popular in the U.S. They provide a quick and easy service for smokers to use, require no travel and are readily available in rural and urban areas. Many factors including centralization and service delivery by telephone contribute to quitlines' cost-effectiveness.[4] Currently, all U.S. tobacco users have access to telephone counseling services through quitlines operated by all 50 states, the District of Columbia, Puerto Rico and Guam. The availability of services varies by state from 48 hours a week to 24 hours a day. The range of services provided by each quitline also varies from state to state depending on available funding, the quitline's role in the state's overall tobacco control program and other state tobacco cessation resources. With state budget cuts on the rise, the ability of quitlines to provide cost-effective tobacco cessation services is under threat. Yet, without adequate, sustained funding for quitlines, tobacco use prevalence is unlikely to decline.

Do Tobacco Users Call Quitlines?

Yes. In fiscal year 2006, a total of 328,795 tobacco users called U.S. quitlines to seek help (47 quitlines reporting). The median number of calls per quitline was 3,844 with a maximum of 75,737 and a minimum of 25.[5] Although many tobacco users have been served to date, additional funding for services and promotions would help increase the number of tobacco users who receive quitline services. In the U.S., quitlines reach only about 1% of the country's 46 million smokers each year.[6] Researchers estimate that with adequate funding and promotional activities, quitlines could actually reach 16% of the smokers annually.[7] This could increase the number of tobacco users receiving quitline services to 7.1 million per year.[8,9]

The degree to which quitlines are promoted is tied to the level of funding available for services (i.e. counseling and/or NRT). Currently, states must carefully manage quitline promotional activities to maintain adequate funds for services and to ensure high quality service. Without adequate funding for services, promotional activities must remain restricted to fit capacity, thus limiting quitlines' potential reach.

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NORTH AMERICAN QUITLINE CONSORTIUM

Who Calls Quitlines?

Quitlines serve a wide range of tobacco users including those disproportionately impacted by tobacco use. Tables (1-2) demonstrate the race, ethnicity, gender, age and education level of quitline callers from a sample of states. These data illustrate a significant proportion of callers from high-risk populations such as the uninsured and Medicaid, non-white, less educated and high-prevalence age groups (i.e. 18-24 year olds) use quitlines, yet there is room for improvement.

Table 1: Low Socioeconomic (SES) Quitline Callers*

Three major quitline service providers supplied the data below with permission from 25 states. Data are not representative of all U.S. quitlines, but rather provide a picture of what some states are experiencing with respect to low SES callers.

Type of Population	Number of State Quitlines Represented	Percent of All Callers
Medicaid Beneficiaries	24	17% to 20% of callers
Uninsured Tobacco Users	24	20% to 36% of callers
Total Low SES *(Medicaid and Uninsured Combined)*	25	33% to 54% of callers

**Data are from 2006-2008. Sources: American Cancer Society, Free & Clear, Inc and National Jewish Health.*

Table 2: Demographics of Quitline Callers*

Tobacco Users by Race	Number of Callers	Percent of All Callers
Alaska Native	197	0.16%
American Indian	44	0.04%
American Indian or Alaskan Native	4,350	3.61%
Asian	1,010	0.84%
Black or African American	14,234	11.81%
Native Hawaiian/Other Pacific Islander	1,015	0.84%
White	90,687	75.26%
Other	7,168	5.95%
Does not know	124	0.10%
Not asked	198	0.16%
Not collected	552	0.46%
Refused	915	0.76%
Total	*120,494*	
Tobacco Users by Ethnicity	**Number of Callers**	**Percent of All Callers**
Does not know	233	0.19%
Hispanic	7,693	6.38%
Non-Hispanic	111,018	92.14%
Not Asked	194	0.16%
Not Collected	676	0.56%
Refused	680	0.56%
Total	120,494	
Tobacco Users by Gender	**Number of Callers**	**Percent of All Callers**
Female	70,683	58.66%
Male	49,766	41.30%
Not collected	9	0.01%
Refused	36	0.03%
Total	*120,494*	

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Tobacco Users by Age	Number of Callers	Percent of All Callers
17 and under	1,626	1.35%
18-24	15,001	12.45%
25-30	15,773	13.09%
31-40	23,108	19.18%
41-50	31,185	25.88%
51-60	22,475	18.65%
61-70	8,566	7.11%
71-80	2,239	1.86%
80+	209	0.17%
Not collected	8	0.01%
Refused	304	0.25%
Total	*120,494*	
Tobacco Users by Education	**Number of Callers**	**Percent**
< grade 9	3,911	3.25%
Grade 9-11, no degree	16,717	13.87%
High School Degree	37,919	31.47%
GED	7,549	6.27%
Some college or university	33,613	27.90%
College or University Degree	16,101	13.36%
Does not know	88	0.07%
Not asked	3,292	2.73%
Not collected	617	0.51%
Refused	687	0.57%
Total	*120,494*	

**Data are from July 1, 2007 – June 30, 2008. Source: Free & Clear, Inc. with permission from 17 states.*

Are Quitlines Effective?

Yes. Quitlines represent a best practice in tobacco cessation with demonstrated broad reach. The most recently updated Public Health Service Clinical Practice Guideline, *Treating Tobacco Use and Dependence: 2008 Update*, concludes that counseling, in person or by phone, is more effective at helping people quit than no counseling. Counseling that provides general problem solving or skills training is 50% more effective than no counseling, with an estimated quit rate of 16.2%. Counseling that provides social support as part of the treatment protocol is 30% more effective than no counseling, with an estimated quit rate of 14.4%. When medication is added to counseling, the combination is 70% more effective than counseling alone, with an estimated quit rate of 22.1%.[3]

What Level of Quit Rates Are Achieved by U.S. Quitlines?

The level of quit rates achieved by a quitline will vary depending on the population being served and type and intensity of services delivered. As reflected in Table 3, a review of published studies from 2005-2008 found that quitlines' quit rates increase commensurate with nicotine replacement therapy (NRT) being offered as part of the counseling service.

All quit rates listed in Table 3 were measured at or around six months after registration for services, ranging from four to seven months. Readers should note not all studies reported all measures at all time periods. No distinction is made in this table for intensity of counseling services or amount of NRT provided. Additional details including confidence intervals, sample sizes, etc. can be found in the supplementary table, *Review of U.S. Quitlines Quit Rates* (Please contact NAQC at naqc@naquitline.org for more information on these data).

Table 3: Quitline Quit Rates From Published Literature*

NRT Provided as Part of Quitline Counseling Service	7-Day Point Prevalence Abstinence	30-Day Point Prevalence Abstinence
Responder rate	26%-39%	30%-36%
Intention to treat rate (Assumes that those callers who cannot be located are smoking)	16%-25%	14%-24%

NRT Not Provided as Part of Quitline Counseling Service	7-Day Point Prevalence Abstinence	30-Day Point Prevalence Abstinence
Responder rate	6%-27%	16%-23%
Intention to treat rate (Assumes that those callers who cannot be located are smoking)	9%-21%	8%-13%

**Data are from 2005-2008. Source: NAQC Review of U.S. Quitlines Quit Rates, 2009.*

What is the Current Status of Quitline Funding?

Currently, state governments and state trusts provide the majority of funding for quitlines with some additional funding provided by the CDC. In fiscal year 2006, the estimated total expenditures in the U.S. for state quitline services were $43.5 million. The median state budget for quitline services was $515,000 in fiscal year 2006 with a range from $57,600 to $4.6 million. Nationally, per capita funding for quitlines in fiscal year 2006 was 22 cents and per smoker funding was $1.10.[5]

The CDC recommends $3.49 per capita funding for cessation services. Although this recommendation is for all cessation services (including quitlines and face-to-face counseling), quitlines account for the majority of cessation services in the states. The CDC budget recommendations assume 6% of adult smokers in each state receive treatment each year, a six-fold increase over the current overall quitline reach of 1%. To attain this 6% reach, CDC estimates total quitline funding would need to increase to approximately $1 billion per year.[1] With increased funding, quitlines could reach more tobacco users, significantly impacting the overall burden of tobacco use.

What Approaches Can Help Sustain and Increase Quitline Funding?

Many approaches exist to sustain and increase quitline funding to the CDC recommended level of about $3.49 per capita, ranging from increased general revenues from state and federal governments to more targeted approaches such as earmarks on state and federal tobacco taxes, contributions from state Master Settlement Agreement (MSA) funds and reimbursement from Medicaid and other third-party payers. As policy makers consider funding approaches, three stand out as most promising for the short-term.

U.S. House and Senate Economic Stimulus Packages

As we go to press with this publication, the U.S. House and Senate have passed Economic Stimulus Packages, which includes funding for quitlines.[10,11] The Senate bill explicitly sets aside $75 million for cessation services. These funds, if disbursed in an expedited way, may make it possible for all state quitlines to continue service delivery through the inevitable cuts to their FY09 and FY10 budgets. In addition, these funds would create about 1,500 new jobs – many filled by racial and ethnic minorities and women. However, these funds alone are unlikely to be at an adequate level to make significant progress toward the CDC recommended level of funding. Therefore, additional funding strategies should be pursued.

Earmarks on State and Federal Tobacco Taxes

The tobacco cessation community stands united with broader tobacco control in supporting increases in tobacco taxes as an effective strategy for encouraging tobacco users to decrease their consumption of tobacco and increase quit attempts. However, there is a growing concern within the cessation community about the

regressive nature of tobacco taxes and social injustice of increasing tobacco taxes on smokers without an increase in the availability of cessation treatment services. [12,13,14] Concerns have escalated as more and more tobacco tax increases are proposed with earmarks for initiatives such as early childhood education (Arizona) and the State Children's Health Insurance Program – SCHIP (federal).

As important and beneficial as these programs are, there is an injustice to have such programs funded by tobacco users without some equivalent earmark for treatment services to help them quit. The economic gap between smokers and non-smokers has grown substantially in the recent past. At no time in our history, have smokers been as poor or uneducated as they are now.[15] This economic disparity, coupled with the inadequate level of currently available cessation services, argues for action by state and federal governments.

At a time when there is widespread support for tax increases among smokers and non-smokers[16,17] and the federal government is about to increase the federal tobacco tax by $0.61 to pay for SCHIP, it seems promising to consider adding an additional increase of $0.06 for tobacco cessation services. This six cent per pack increase, if earmarked for quitlines, could raise $870-960 million toward CDC's recommended level of quitline funding—greatly improving quitlines ability to reach and serve tobacco users and decrease the societal burden of tobacco use.[18,19]

Medicaid Reimbursement

Although the federal Medicaid program allows states to cover tobacco cessation counseling and medications, the level of coverage for tobacco-cessation counseling and medications varies from state to state.[20] Among states with Medicaid coverage for tobacco-cessation treatment, only three receive some form of payment from Medicaid for state quitline services. A significant barrier to reimbursement is that quitlines are not on the Medicaid provider list and are therefore not eligible for reimbursement by Medicaid. Given the significant proportion of quitline callers who are Medicaid beneficiaries and the need for cessation treatment in the Medicaid population (approximately one-third of Medicaid recipients are current smokers[19]), it would be reasonable for Medicaid programs to reimburse state quitlines for services. Possible solutions to this challenge may exist at the federal level (e.g. legislative change to include quitlines on the provider list) and at the state level (e.g. applying for a Medicaid demonstration program or a waiver).

Conclusion

Sustained quitline funding is critical to continue supporting tobacco users in their attempts to quit tobacco. Moreover, increased quitline funding is essential to meeting the demand for quitline services and realizing the potential impact of these services. With adequate funding at the CDC recommended level, every tobacco user, including populations disproportionately affected by tobacco use, could have access to effective cessation services to help them lead longer, healthier lives. The potential public health benefits and societal healthcare savings illustrate the importance of identifying sustainable funding sources for quitlines now and in the future.

References

[1]Centers for Disease Control and Prevention. (October 2007). *Best Practices for Comprehensive Tobacco Control Programs – 2007*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

[2]Centers for Disease Control and Prevention. (November 14, 2008). Cigarette Smoking Among Adults --- United States, 2007. *MMWR Weekly*; 57(45):1221-1226. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a2.htm.

[3]Fiore MC, Jaen CR, Baker TB, et al. (May 2008). *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline*. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service.

[4]World Bank. (May 2004). *Tobacco Quitlines, at a Glance*. (May 2004). Available at http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTHEALTHNUTRITIONANDPOPULATION/EXTPHAAG/0,,contentMDK:20799774~menuPK:1314851~pagePK:64229817~piPK:64229743~theSitePK:672263,00.html.

[5]North American Quitline Consortium. (2006). *Unpublished Data from the Annual Survey of Quitlines in North America*. Phoenix, AZ.

[6]SE Cummins, L Bailey, S Campbell, C Koon-Kirby, SH Zhu. (2007). Tobacco Cessation Quitlines in North America: A Descriptive Study. *Tobacco Control*;16 (Suppl I):i9-i15.

[7]Fiore, Michael C. (February 13, 2003). *Preventing 3 Million Deaths Helping 5 Million Smokers Quit: A National Action Plan for Tobacco Cessation*. Interagency Committee on Smoking and Health. Subcommittee on Cessation.

[8]U.S. Census Bureau. (January 13, 2007). American Community Survey, 2005-2007 American Community Survey 3-Year Estimates; ACS Demographic and Housing Estimates: 2005-2007; generated by Jessie Saul; using American FactFinder; http://factfinder.census.gov.

[9]Centers for Disease Control and Prevention. *Percentage of adults who were current, former, or never smokers, overall and by sex, race, Hispanic origin, age, education and poverty status.* National Health Interview Surveys, Selected Years – United States, 1965—2006. Available at: http://www.cdc.gov/tobacco/data_statistics/tables/adult/table_2.htm.

[10]United States House of Representatives. Committee on Appropriations. (2009). *Summary Update American Recovery and Reinvestment – As Passed by the Full Committee*. Available at http://appropriations.house.gov.

[11]United States Senate Committee on Appropriations. (2009). *Text of S336, The American Recovery and Reinvestment Plan*. Available at http://appropriations.senate.gov.

[12]Franks P, Jerant AF, Leigh JP, et al. (2007). Cigarette Prices, Smoking, and the Poor: Implications of Recent Trends. *American Journal of Public Health*;97:1873-1877.

[13]Farrelly MC, Engelen M. (2008). Cigarette Prices, Smoking, and the Poor, Revisited. *American Journal of Public Health*;98(4):582-583.

[14]Franks P, Jerant AF, Leigh JP. Franks et al. (2008). Respond. *Am J Public Health*;98(4):583-584.

[15]Graham, H. (December 1, 2008). *Presentation on Social Inequalities Between Tobacco Users and Non-Users*. US DHHS Meeting. Federal Collaboration to Make A Difference: Tobacco and Young, Low-SES Women. Hubert Humphrey Building, Washington, D.C.

[16]Campaign for Tobacco Free Kids. (July 2008). *Voters in Al States Support Significant Increase in State Cigarette Taxes*. Available at http://www.tobaccofreekids.org/research/factsheets/pdf/0309.pdf

[17]The Mellman Group. (June 5, 2007). Memo to the Campaign for Tobacco Free Kids. National Tobacco Tax Survey Results. Available at http://www.tobaccofreekids.org/reports/prices/National TobaccoTaxMemo.pdf.

References cont' next page.

[18]Orzechowski, W. & Walker, R.D. (2006). *The Tax Burden on Tobacco: Historical Compilation, Volume 41*. Arlington, VA, USA.

[19]Joint Commission on Taxation. (October 19, 2007). *Modeling the Federal Revenue Effects of Proposed Changes in Cigarette Excise Taxes*. JCX-101-07. Washington, D.C. Available at http://www.house.gov/jct/x-101-07.pdf.

[20]Halpin, HA, McMenamin, SB, Cella, CA, Bellows, NM, Husten, CG. (February 8, 2008). Office on Smoking and Health, CDC. State Medicaid Coverage for Tobacco-Dependence Treatments --- United States, 2006. *MMWR Weekly*;57(05):117-122.

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Learn more about NAQC: www.naquitline.org
3030 N. Central Avenue, Suite 602, Phoenix, AZ 85012-2713
Ph: 602.279.2719. Fax: 602.279.2740. Email: naqc@naquitline.org.

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