

# Should oral health promotion efforts be integrated into tobacco quitline programs?

A survey of callers to the Washington State QuitLine

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## Introduction

Tobacco users are at particularly high risk for oral diseases and represent an important group for oral health promotion efforts.

One innovative strategy for promoting oral health among smokers is to partner with tobacco quitlines to offer an integrated oral health promotion-tobacco cessation program. State-sponsored tobacco quitlines are offered in all 50 states and reach hundreds of thousands of people each year.

We previously found that quitline providers are receptive to this integrated intervention approach. In this study, we surveyed WA State QuitLine (WAQL) callers to further understand the need for this type of program and the acceptability of these services.

## Methods

**Sample.** Callers to the WAQL were randomly selected between June and October, 2010 and invited to participate in a mailed oral health survey (n = 1591). Respondents received \$10 as a thank you for participation. Sixty-one percent of surveys were returned complete (n = 816).

**Analyses.** Descriptive statistics were used to summarize results. Data were examined for the entire sample, and among key sub-groups who would be likely targets of future intervention. Chi-square tests were used to compare interest in oral health promotion services based on demographics, tobacco use status, and whether or not people engaged in oral hygiene best-practices.

All activities were approved by the Group Health Institutional Review Board.

## Results

### Sample characteristics.

	All (N = 816) n (%)	Dentate only (N = 647) n (%)	No dental insurance (N = 445) n (%)	Poor oral hygiene <sup>a</sup> (N = 532) n (%)
<b>Demographics</b>				
Female	503 (61.9)	403 (62.5)	262 (59.0)	318 (60.0)
White, non-Hispanic	643 (79.9)	506 (79.1)	356 (81.3)	318 (60.0)
High school or less	419 (51.5)	311 (48.2)	231 (52.0)	265 (50.0)
Household income				
< \$20,000	500 (61.7)	387 (60.0)	275 (62.1)	329 (61.7)
\$20k-39,999	160 (19.7)	128 (19.8)	100 (22.6)	107 (20.2)
≥ \$40,000	84 (10.4)	76 (11.8)	31 (10.6)	70 (13.18)
Age				
18-34	239 (29.5)	218 (34.0)	83 (25.7)	187 (35.5)
35-64	535 (66.1)	405 (63.1)	228 (70.6)	326 (61.9)
≥ 65	36 (4.4)	19 (3.0)	12 (3.7)	14 (2.7)
<b>Oral Health</b>				
Edentulate <sup>b</sup>	163 (20.1)	n/a	83 (18.8)	n/a
Ever treated for gum disease	n/a	140 (21.8)	72 (20.2)	110 (20.7)
Think they have gum disease <sup>c</sup>	n/a	277 (43.2)	154 (43.3)	230 (43.4)
Diagnosed with dental bone loss	n/a	132 (20.7)	69 (19.4)	99 (18.7)

<sup>a</sup> Defined as dentate individuals who reported brushing less than twice daily and flossing less than daily.

<sup>b</sup> Having no natural, permanent teeth.

<sup>c</sup> Based on symptoms of swollen gums, receding gums, sore or infected gums, or loose teeth.

### Oral health behaviors.

	All (N = 647) n (%)	No dental insurance (N = 359) n (%)	Poor oral hygiene <sup>a</sup> (N = 532) n (%)
Met ADA brushing recommendation <sup>a</sup>	474 (62.7)	264 (63.8)	266 (50.5)
Met ADA flossing recommendation <sup>b</sup>	140 (20.7)	84 (22.2)	27 (5.1)
Met ADA oral hygiene recommendations <sup>c</sup>	104 (16.4)	61 (17.4)	n/a
Visited dentist in last 12 months	307 (47.7)	133 (37.3)	239 (45.0)
Self-reported health of teeth and gums 'good' or better <sup>d</sup>	255 (40.1)	107 (41.0)	201 (38.3)
	<b>Mean (SD)</b>	<b>Mean (SD)</b>	<b>Mean (SD)</b>
Times brush teeth daily	1.8 (0.9)	1.8 (0.9)	1.6 (0.9)
Days floss per week	2.9 (2.7)	2.9 (2.8)	2.1 (2.2)

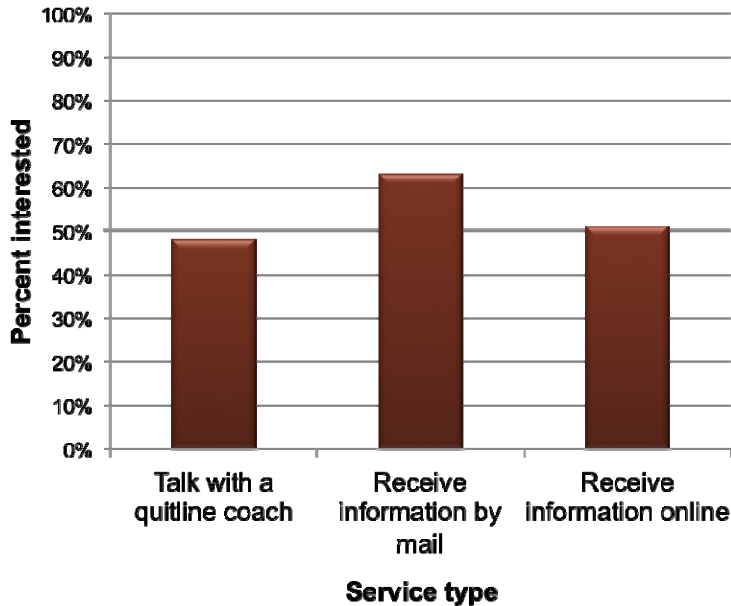
<sup>a</sup> Defined as brushing at least twice per day.

<sup>b</sup> Defined as flossing 7 days per week.

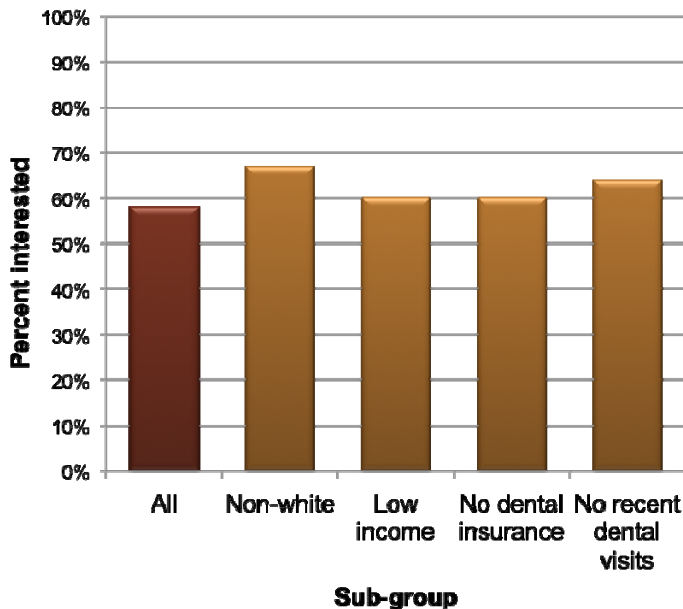
<sup>c</sup> Defined as brushing at least twice per day and flossing 7 days per week.

<sup>d</sup> Five-point Likert-scale ranging from Excellent (1) to Poor (5).

**Interest in quitline-based oral health promotion services, by service type.**



**Interest in learning more about ways to improve oral health, by sub-group<sup>a</sup>.**



<sup>a</sup> Only groups that differ from their demographic or behavioral counterpart are shown.

**Summary**

**Need**

Few respondents (16%) met ADA recommendations for regular brushing and flossing.

More than half (52%) had not seen a dentist in the past year, and 58% had no dental insurance.

Many (43%) currently had symptoms of gum disease. Twenty percent had no permanent teeth, and another 21% were diagnosed with dental bone loss.

**Acceptability**

Most respondents were interested in learning more about improving their oral health (58%). Nearly half (48%) were willing to speak with a quitline coach about it, and many were open to receiving information by mail (63%) or online (51%).

Interest did not differ between most groups, but was significantly higher among those who were non-white ( $P = 0.04$ ), had a low income ( $P = 0.007$ ), did not have dental insurance ( $P = 0.008$ ), or had no recent dental visits ( $P = 0.026$ ).

**Conclusion**

- There is considerable need to provide quitline callers with oral health promotion services.
- A majority of callers were interested in quitline-based oral health promotion.
- Those with the greatest need were particularly interested in these services.
- Additional research on the effectiveness of this oral health promotion strategy is warranted.