

North Carolina Health and Wellness Trust Fund



Quitline NC Evaluation November 2005 - June 2007

Prepared for:
North Carolina Health and Wellness Trust Fund



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Table of Contents

| | | |
|----|--|----|
| A. | Executive Summary | 1 |
| B. | Background | 5 |
| C. | Methods..... | 8 |
| D. | Summary of Findings | 10 |
| | 1. Call Volume | 10 |
| | 2. Characteristics of HWTF Callers..... | 20 |
| | a. Primary Caregivers/School Employees | 20 |
| | b. Young Adults..... | 25 |
| | c. Youth..... | 32 |
| | 3. Fax Referral Service | 39 |
| | 4. Promotion | 42 |
| | 5. Satisfaction and Quit Rates | 48 |
| E. | Appendices..... | 49 |

A. Executive Summary

The NC Tobacco Quitline (Quitline NC) is a telephone-based, tobacco cessation service that provides free support to all NC residents who wish to quit their tobacco use. Research shows that quitlines are an effective and evidenced-based approach to tobacco cessation. Proactive quitlines, like Quitline NC, have been shown to significantly increase quit rates compared to quitting without support.¹

Quitline NC is jointly funded by the NC Health and Wellness Trust Fund Commission (HWTF) and NC Department of Health and Human Services (DHHS). Services for callers aged 24 years and younger, callers who are school or childcare employees, and callers who live with and/or are the primary caregiver of a child under 18 years old are funded by the HWTF. Funding for all other callers is provided by the DHHS.

The UNC School of Medicine Tobacco Prevention and Evaluation Program (UNC TPEP) was contracted by the HWTF to evaluate outcomes of the HWTF-funded portion of Quitline NC, particularly services provided to youth and young adults. A framework for this evaluation is outlined in the HWTF Quitline NC logic model developed by UNC TPEP in collaboration with the HWTF and DHHS (Figure 1).

Quitline NC completed its first year of operation between November 2005 and October 2006 (Year 1). Due to changes in the HWTF's fiscal year for Quitline NC (now beginning in July instead of November), Year 2 includes the eight-month period of November 2006 to June 2007. This report summarizes findings from UNC TPEP's analysis of HWTF-funded caller data for the first 20 months of Quitline NC operation (November 2005-June 2007). Some comparisons of Year 1 and Year 2 caller data are also included.

The following section highlights key outcomes of the HWTF-funded portion of Quitline NC in its first 20 months of operation and recommendations for Year 3.

A.1 Summary of Key Findings and Outcomes

Quitline Operation and Call Volume

- The HWTF funded approximately \$2.03 million to Quitline NC in its first 20 months of operation. Approximately 21% (\$430,000) of this funding was directed towards promotion. Overall HWTF funding for Quitline NC increased by approximately 54% in Year 2 compared to Year 1 (\$800,000 to \$1,230,000). HWTF funding for promotion increased by about 69% (\$160,000 to \$270,000).
- In total, Quitline NC received 8,801 calls in its first 20 months of operation. The average number of calls from tobacco users, general public, providers, and proxies during this time was 392 calls/month. This average increased by 67% from Year 1 to Year 2 (309 calls/month to 517 calls/month).
- The majority of calls (74% or 6,554) to Quitline NC its first 20 months of operation were from tobacco users (average 328 calls/month). Forty-six percent (2,988) of these callers were youth, young adults, or primary caregivers/ school employees funded by the HWTF (average 149 calls/month).

- In its first 20 months of operation, Quitline NC reached approximately 0.39% of NC's adult smoking population. Approximately 0.2% of this population was reached in Year 1 and 0.2% was reached in Year 2. While this is well below the targeted 2.0% annual reach of Quitline NC, recent data collected by the North American Quitline Consortium (NAQC) indicates that this is within the expected range of smokers reached by new state quitlines with minimal promotion.²
- Quitline NC call volume significantly peaked in January 2007 (26% of all HWTF-funded calls were received during this month). Various Quitline NC radio and TV ads were aired at this time, including the HWTF-funded "Happy Callers" radio campaign.
- Annual measurable objectives for HWTF call volume and fax referrals have not yet been established.

HWTF Target Populations

- The total number of callers from HWTF target populations increased by 38% in Year 2 compared to Year 1. This is particularly noteworthy as Year 2 includes only an eight-month period. Young adult callers had the most significant increase from Year 1 to Year 2 (76%↑), followed by youth (29%↑) and primary caregivers/school employees (20%↑).
- At least one HWTF-funded, tobacco-user from every county in North Carolina called Quitline NC in the program's first 20 months of operation.
- Two and a half percent (165) of all tobacco-using callers were youth (aged 12-17) and 13.2% (868) were young adults (aged 18-24). In its first 20 months, Quitline NC has reached approximately 0.15% of NC high school aged smokers and 0.31% of NC young adult smokers.
- Seventy percent of all youth callers who currently attend school (81 of 116) reported that their school had a 100% Tobacco-Free School (TFS) policy. Forty-one percent (33) of these youth said the policy motivated them to quit and utilized Quitline NC for support.
- Most (60%) young adult callers did not attend school, and 26% were college students. Of the 60% who did not attend school, 34% were Black/African American, 7% were pregnant, 70% were uninsured or using Medicaid, and 50% were working full-time.
- In its first 20 months of operation, Quitline NC reached a substantial number of adults who serve as care takers and role models of children and youth in their school and home environments. Thirty percent (1853) of all tobacco-using callers to Quitline NC were primary caregivers or childcare/school employees funded by the HWTF (62% of all HWTF-funded callers).
- At registration, 62% of HWTF-funded callers accepted participation in the Multi-Call Program and 32% accepted participation in the One-Call Program. Data on utilization of these programs post-registration are currently unavailable.

- Quitline NC has reached a significant number of tobacco-using youth, young adults, and primary caregiver/school employees from priority populations:
 - Almost half (48%) of all HWTF-funded, tobacco-using callers were either uninsured or using Medicaid.
 - More than one-third (36%) were Black/African American, 3.7% Hispanic, and 1.8% American Indian.
 - About 8% (144) of all female, HWTF-funded callers were either planning a pregnancy, pregnant, or breastfeeding (59% of these callers were young adults and 6% were youth).
 - Fifteen percent of all HWTF-funded callers had chronic asthma.

Fax Referral Service

- Utilization of the fax referral service is relatively low, with a total of 399 (6.1%) of all tobacco-using callers being referred by fax in Quitline NC's first 20 months of operation. About 166 (6%) of all HWTF-funded callers were referred by fax during this time, 77% of which were primary caregivers/school employees.

Promotion

- The HWTF focused on research and development of a young adult-targeted, Quitline NC media campaign in the program's first 20 months of operation, with plans for implementation in Year 3.
- A few small-scale, paid media campaigns were implemented by the HWTF in Years 1 and 2. Call volume for HWTF-funded callers generally increased during the months these and other campaigns were aired.
- The majority of Quitline NC promotional campaigns have not received formal evaluation other than linkages to call volume.
- Over 65 HWTF-funded Teen and College Initiative grantees promoted Quitline NC to youth and young adults at local schools, college campuses, and community events across NC.
- HWTF-funded callers reported that they most frequently heard about Quitline NC via TV, radio, and health professionals. Youth and young adult callers responded more significantly to TV and radio ads than health professionals and other types of promotions. In the absence of TV and radio promotions, calls by youth and young adults remained relatively low.
- Other than HWTF College Initiative grantee promotions to campus health care providers, no promotions in Year 2 specifically targeted health professionals.
- The majority of HWTF-funded, tobacco-using callers were ready to quit as 83% were in the preparation stage of quitting. About 92% of HWTF-funded smokers used cigarettes everyday. This suggests that promotions have been successful in reaching Quitline NC's overall target audience (i.e., everyday tobacco users who are ready to quit in the next 30 days).

Satisfaction and Quit Rates

- Analysis by Quitline NC vendor, Free & Clear, Inc., demonstrated an 11.1% intent-to-treat, 30-day quit rate among seven month follow-up survey respondents from HWTF target populations (including both One-Call and Multi-Call Program participants).³ About 92% of all HWTF respondents reported that they were satisfied with Quitline NC services.
- Intent-to-treat, 30-day quit rates for young adult and youth respondents were 13.2% (N=20) and 10.3%(N=3) respectively. Overall, 98% of young adults and 89% of youth respondents were satisfied with the service. Few youth callers completed the follow-up survey.

A. 2 Recommendations

The demand for Quitline NC services will continue to increase over the next few years due to increases in Quitline NC promotional campaigns and increases in secondhand smoke policy regulation and legislation. The following recommendations should continue to guide future planning and provision of Quitline NC services to HWTF target populations:

- Quitline NC should have annual measurable objectives for the target number of HWTF-funded callers (i.e., primary caregivers/school employees, young adults, youth), fax referrals, etc.
- A comprehensive, sustained promotional campaign approximately equal in funding to that spent on program services will not only drive call volume but will prevent spikes in callers due to episodic campaigns.
- Given the increased paid media campaigns that will occur for Quitline NC, more detailed evaluation to pinpoint the success of these campaigns is warranted (i.e., in addition to tracking call volume).
- Consistent with Year 1 recommendations, a promotional plan should also target health professionals as they are a top source of referrals to Quitline NC. Formative research will help to identify effective strategies for increasing NC health care providers' awareness and utilization of Quitline NC and its fax referral service.
- The relative success of Quitline NC in reaching significant numbers of tobacco-using youth, young adults, and primary caregivers/school employees from priority populations should receive wide dissemination.

B. Background

Tobacco use continues to be the leading cause of preventable death and disability in North Carolina (NC). Approximately 12,000 NC adults die from smoking each year and another 2,000 adults, children, and babies will lose their lives from exposure to secondhand smoke.⁵ Thousands more will survive with tobacco-related illnesses. Each year, North Carolina spends \$2.5 billion in health care costs directly related to smoking.⁵

Approximately 1.5 million (22.1%) of NC adults are smokers.⁶ Twenty percent of NC high school students and 5.8% of middle school students are current smokers, and about 40% of youth live in homes where others smoke.⁷ Smoking rates are highest among NC young adults, aged 18-24 years old, at 28.2%.⁶ While declines in smoking rates have slowed in the past decade, the need for policy changes that encourage quitting and improve access to proven cessation resources has increased.

Helping tobacco users quit is one of the most important steps to improving public health and reducing tobacco-related morbidity and mortality in NC. More than half of all NC youth and adult smokers have attempted to quit in the past year.^{6,7} While many studies show that most tobacco users want to quit, many of them are unable to do so without support.

B.1. The North Carolina Tobacco Quitline (Quitline NC)

In October 2005, the NC Health and Wellness Trust Fund Commission and the NC Department of Health and Human Services jointly funded the NC Tobacco Quitline, or Quitline NC (1-800-QUIT-NOW). Quitline NC is a proactive telephone service that helps tobacco users quit their addiction by offering callers advice, support, and referrals to local cessation resources.

Research has shown that quitlines are an effective and evidence-based approach to tobacco cessation. In a recent meta-analysis of 13 studies, proactive quitline use was shown to increase quit rates by 56% compared to quitting with no support.¹ Studies show higher quit rates for quitlines that offer pharmacotherapy in conjunction with telephone support services.^{4,8} Research has also shown that marketing campaigns that promote quitlines are effective at increasing utilization.^{4,9} One study reports that young adults respond to mass media quitline promotion, even when it does not target them.¹⁰

Call volume varies widely among state quitlines. The expected number of calls, or reach of a state quitline, is associated with several factors including state population, tobacco prevalence rates, quitline resources, years in operation, and level of promotion. According to recent data collected by researchers at the North American Quitline Consortium (NAQC),² the reach of quitlines to adult smokers averaged around 1% in the United States in 2005, with considerable variability among quitlines ranging from 0.01 to 4.28%.

According to a 2007 study published in the American Journal of Public Health, quitlines are a viable means of reaching young adult smokers.¹⁰ The study showed that young adult smokers used the California Smokers' Helpline (one of the most established quitlines in the U.S.) in proportion to their numbers in the state. Young adults from priority populations (e.g., ethnic minorities, low income groups) were also well represented among young adult callers.

The effectiveness of quitlines for youth populations is yet to be established, however empirical studies showing the results of youth-focused quitlines in Utah and California have been promising. An evaluation of the Utah Youth Tobacco Quitline demonstrated an overall 43%, 30-day smoking abstinence rate for youth callers.¹¹

Quitline NC is the first state-funded quitline in North Carolina. Prior to the launch of Quitline NC, NC residents could access a national tobacco cessation quitline provided through the National Cancer Institute (NCI) at 1-800-44U-QUIT. As of November 2005, NC residents calling 1-800-QUIT-NOW are routed to Seattle-based quitline vendor, Free & Clear, Inc. for Quitline NC services. Free & Clear was selected through a national Request For Applications (RFA) process in the spring of 2005 to provide services for Quitline NC. The contract was officially awarded in July 2005.

Free & Clear is a national leader in phone-based tobacco dependence treatment. They currently operate several state quitlines in the U.S. including Utah, Oregon, and South Carolina. They have experience providing quitline services to youth and helping states build public-private partnerships. In 2005, Free & Clear analyzed over 95,000 tobacco users who were enrolled in their Multi-Call Program between 1993-2004. Of those who responded to their follow-up survey, 34% reported being quit for more than 30 days.¹² This study only included data for Free & Clear's commercial quitlines, which do not offer the One-Call Program. Quit rates for commercial quitlines are typically higher than state quitlines due to differences in the types of callers and services available.

Since 2002, the HWTF has funded two statewide tobacco prevention and cessation initiatives targeting teens and college students in North Carolina. In an effort to supplement these initiatives, the HWTF funded Quitline NC research and provision of services to the following three populations:

- 1) All callers aged 24 years and younger;
- 2) All callers who are identified as school or childcare employees; and
- 3) All callers who live with and/or are the primary caregiver of a child under the age of 18, and thus are a role model for children/youth.

Services for all other Quitline NC callers are paid for through Centers for Disease Control and Prevention (CDC) and Blue Cross Blue Shield of NC (BCBS) funding received and administered through the NC DHHS, Division of Public Health, Tobacco Prevention and Control Branch. A DHHS priority is marketing Quitline NC services to at-risk populations and those who are least likely to have coverage for services (e.g., Medicaid eligible populations).

B.2. Quitline NC Services

Quitline NC was officially launched on November 1, 2005. All interested tobacco users, providers and proxies are eligible for free telephone assistance from one of Free & Clear's expert tobacco treatment specialists, or quit coaches. Services are provided in both English and Spanish, seven days a week between 8:00am and midnight.

Quitline NC is a proactive quitline service. The proactive nature of Quitline NC means that quit coaches can call the tobacco user back to answer questions and offer program services. Following Call 1 of the Multi-Call Program, tobacco users are offered an additional three proactive calls (Calls 2-4). Research has demonstrated the quitline callers who participate in multi-call interventions are more likely to succeed at quitting than callers who participate in single-call interventions.¹

Callers may request information about quitting for themselves, a friend or family member. Tobacco users may choose to participate in One-Call or Multi-Call Programs, ask general questions, and/or receive self help materials. All interested callers will receive printed cessation support materials and a referral to local programs, as required.

Quitline NC offers a customized youth program to serve callers 17 years of age and younger. Free & Clear's youth program involves specialized youth protocols including specialized call timing, "Youth Coaches," program incentives, and materials designed and tested for youth by the California Smokers' Helpline.

Quitline NC also offers a fax referral service. This service is designed to assist health professionals in connecting their patients to Quitline NC using a special fax referral form. Once this form is received by the quitline, a quit coach will initiate a call to the patient to assist them with their cessation needs. Information about Quitline NC and its fax referral service is accessible to the public via the internet at www.quitlinenc.com.

B.3. Evaluation

The UNC School of Medicine Tobacco Prevention and Evaluation Program (UNC TPEP) was contracted by the HWTF to conduct the outcomes evaluation for the HWTF-funded portion of Quitline NC. UNC TPEP responsibilities include logic model development and evaluation planning, analyzing Quitline NC data, providing recommendations, and disseminating results. The purpose of this report is to examine Quitline NC outcomes during its first 20 months of operation (Years 1 and 2, November 2005-June 2007), particularly in relation to its goal of reaching tobacco-using youth and young adult populations in North Carolina.

C. Methods

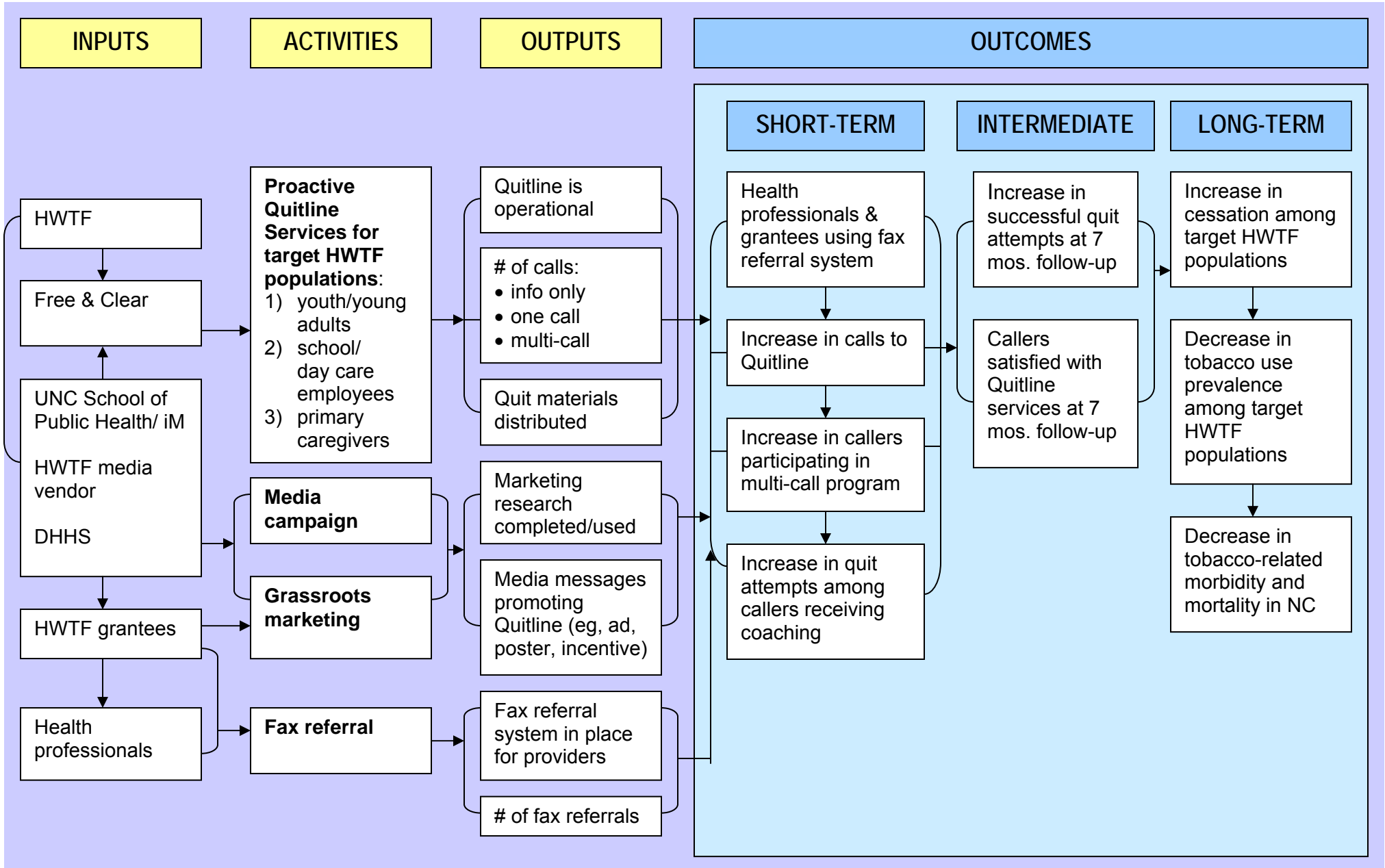
In January 2006, UNC TPEP, in cooperation with the HWTF and DHHS, developed a logic model to guide the outcomes evaluation for the HWTF-funded portion of Quitline NC (Figure 1). This model outlines the resources, activities, outputs, short-term, intermediate, and long term outcomes for the HWTF-funded portion of Quitline NC.

The Quitline NC vendor, Free & Clear, is responsible for collecting, cleaning, and managing all Quitline NC intake data, call utilization data, and end-of-program survey data. Intake data collection includes Minimum Data Set (MDS) questions outlined by the North American Quitline Consortium. Additional custom questions were added based on recommendation of the HWTF, DHHS, and UNC TPEP to ensure that all necessary data are being collected for the evaluation.

Intake and call utilization raw data extracts are sent to UNC TPEP by Free & Clear. Data were analyzed by UNC TPEP using SPSS with a specific focus on data for tobacco-using callers from HWTF-funded populations (i.e., youth, young adults, school/childcare employees, and primary caregivers).

The primary data sets used for this report were raw demographic data extracts produced by Free & Clear for UNC TPEP and DHHS evaluators. Utilization data extracts from Free & Clear are currently unavailable.

Figure 1. Logic Model for the HWTF-funded Portion of Quitline NC (January 2006)



D. Summary of Findings

D.1. Call Volume

Quitline NC completed its first 20 months of operation between November 1, 2005 and June 30, 2007. During this period, 8,801 people called Quitline NC (Table 1). The majority of callers (6,554 or 74%) were tobacco users. On average, 328 tobacco users called each month during this time period.

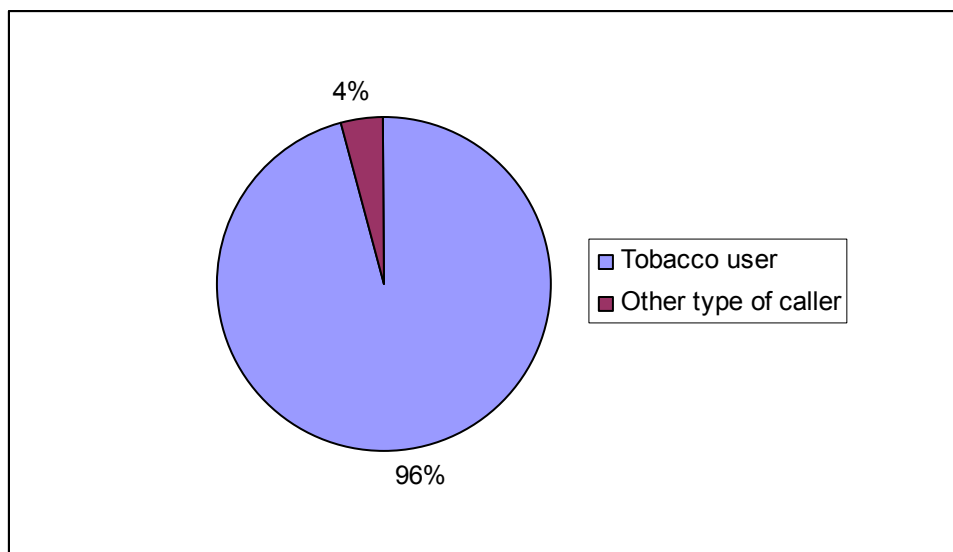
The HWTF funded 35% (3,121) of all Quitline NC callers and 46% (2,988) of all tobacco-using callers in Quitline NC's first 20 months of operation. Ninety-six percent of all HWTF-funded callers were tobacco users (Figure 2). The remaining four percent of HWTF-funded callers included proxies, providers, wrong numbers, pranks, hang ups, and members of the general public. Wrong numbers, pranks, and hang ups occur at no charge to either the HWTF or DHHS.

Table 1. Total Callers by Type of Caller and Funding Source, Nov 05-Jun 07 (n=8801)

| Type of Caller | Funding Source | | | | Total | |
|----------------|----------------|-------|------|-------|-------|-------|
| | HWTF | | DHHS | | | |
| | # | % | # | % | # | % |
| Tobacco User | 2988 | 95.7 | 3566 | 62.8 | 6554 | 74.5 |
| General Public | 18 | 0.6 | 752 | 13.2 | 770 | 8.7 |
| Proxy | 63 | 2.0 | 204 | 3.6 | 267 | 3.0 |
| Provider | 2 | 0.1 | 244 | 4.3 | 246 | 2.8 |
| Other* | 50 | 1.6 | 914 | 16.1 | 964 | 11.0 |
| Total | 3121 | 100.0 | 5680 | 100.0 | 8801 | 100.0 |

* Includes hang ups (9.0%), pranks (1.6%), and wrong numbers (0.4%).

Figure 2. HWTF-Funded Callers by Type of Caller, Nov 05-Jun 07 (n=3121)



Ninety-seven percent (6,389) of all tobacco users were adults (18 years old and older) and 2.5% (165) were youth (12-17 years old). Ninety-three percent of all tobacco users smoked cigarettes.

Based on CDC recommendation, Quitline NC aims to reach 2.0% of NC tobacco users each year. Since tobacco use prevalence rates are not available for NC, current smoking prevalence rates were used to calculate NC reach rates for Quitline NC. Based on an analysis of the number and age of NC smokers who called Quitline NC between November 2005-June 2007 (n=5924), Quitline NC has reached approximately 0.4% of NC adult smokers, 0.3% of NC young adult smokers (aged 18-24), and 0.2% of NC high school aged smokers (aged 14-17) (Table 2). Figures 3-5 highlight the cumulative percent of NC adult, young adult, and youth smokers reached by Quitline NC over time.

Quitline NC is currently well below its goal of reaching 2.0% of NC adult smokers each year. On average, Quitline NC has reached approximately 0.2% of NC adult smokers in both Year 1 and Year 2. According to the NAQC, this percent reach is within the expected range for new state quitlines with minimal promotion.²

Table 2. Cumulative Percent of NC Smokers Reached by Quitline NC, Nov 05-Jun 07

| NC Population* | Prevalence of Current Smoking** | # of Callers Who Smoke | % Cumulative Reach | Target % Annual Reach |
|---|---------------------------------|------------------------|--------------------|-----------------------|
| Adults, 18 & older (6,668,948) | 22.1% (1,473,838) | 5,773 | 0.39 | 2.0 |
| Young Adults, 18-24 (918,787) | 27.8% (260,897) | 818 | 0.31 | -- |
| High School Aged Youth, 14-17 (483,189) | 20.3% (98,087) | 145 | 0.15 | -- |

* US Census Bureau (2006) and NC State Data Center (2006); ** BRFSS (2006) and NC YTS (2005).
Note: Targets for youth and young adult smokers have not yet been established.

Figure 3. Cumulative Percent of NC Adult Smokers Reached by Quitline NC, Nov 05-Jun 07

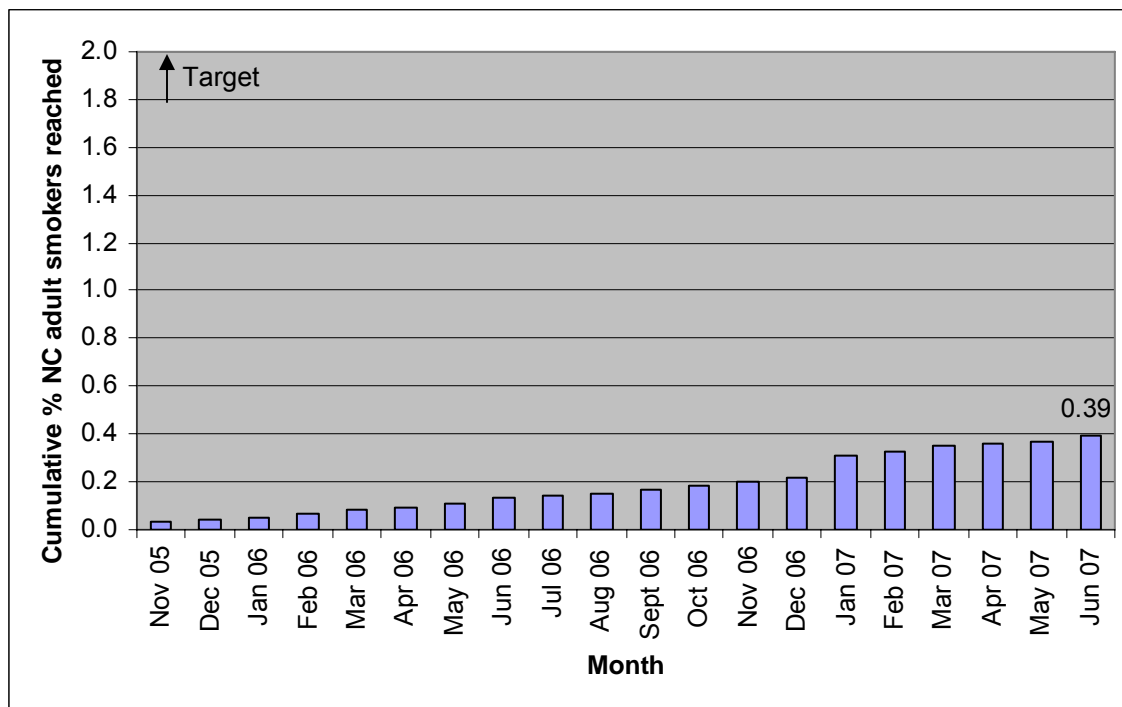


Figure 4. Cumulative Percent of NC Young Adult Smokers Reached by Quitline NC, Nov 05-Jun 07

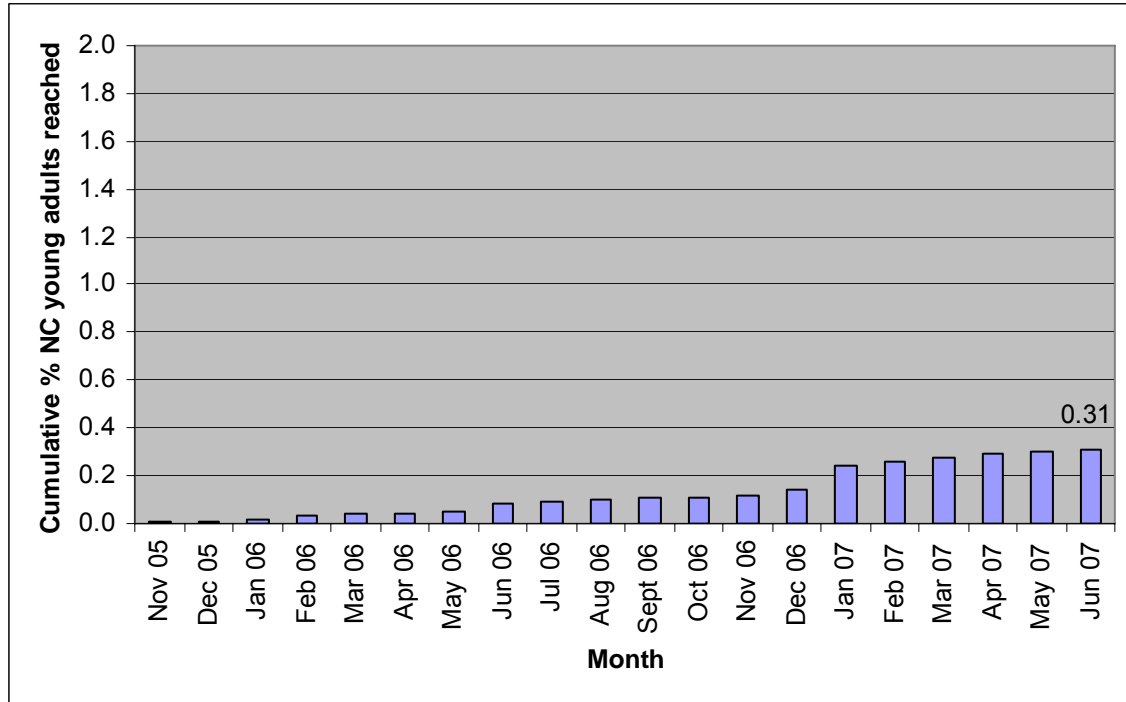


Figure 5. Cumulative Percent of NC Youth Smokers Reached by Quitline NC, Nov 05-Jun 07

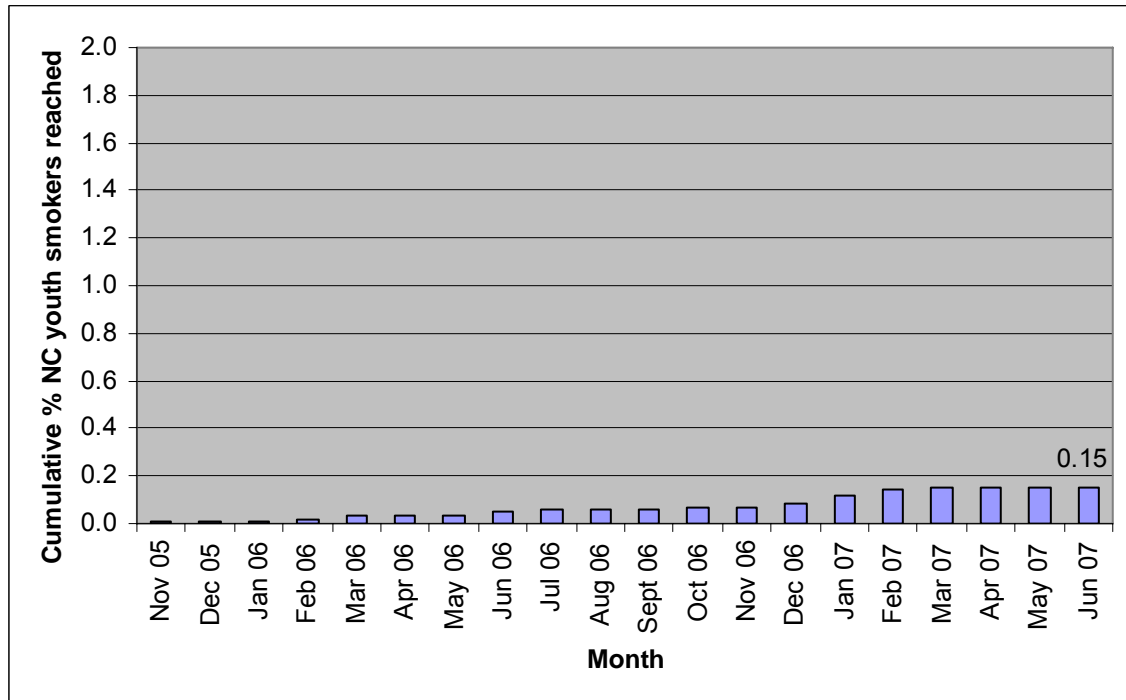
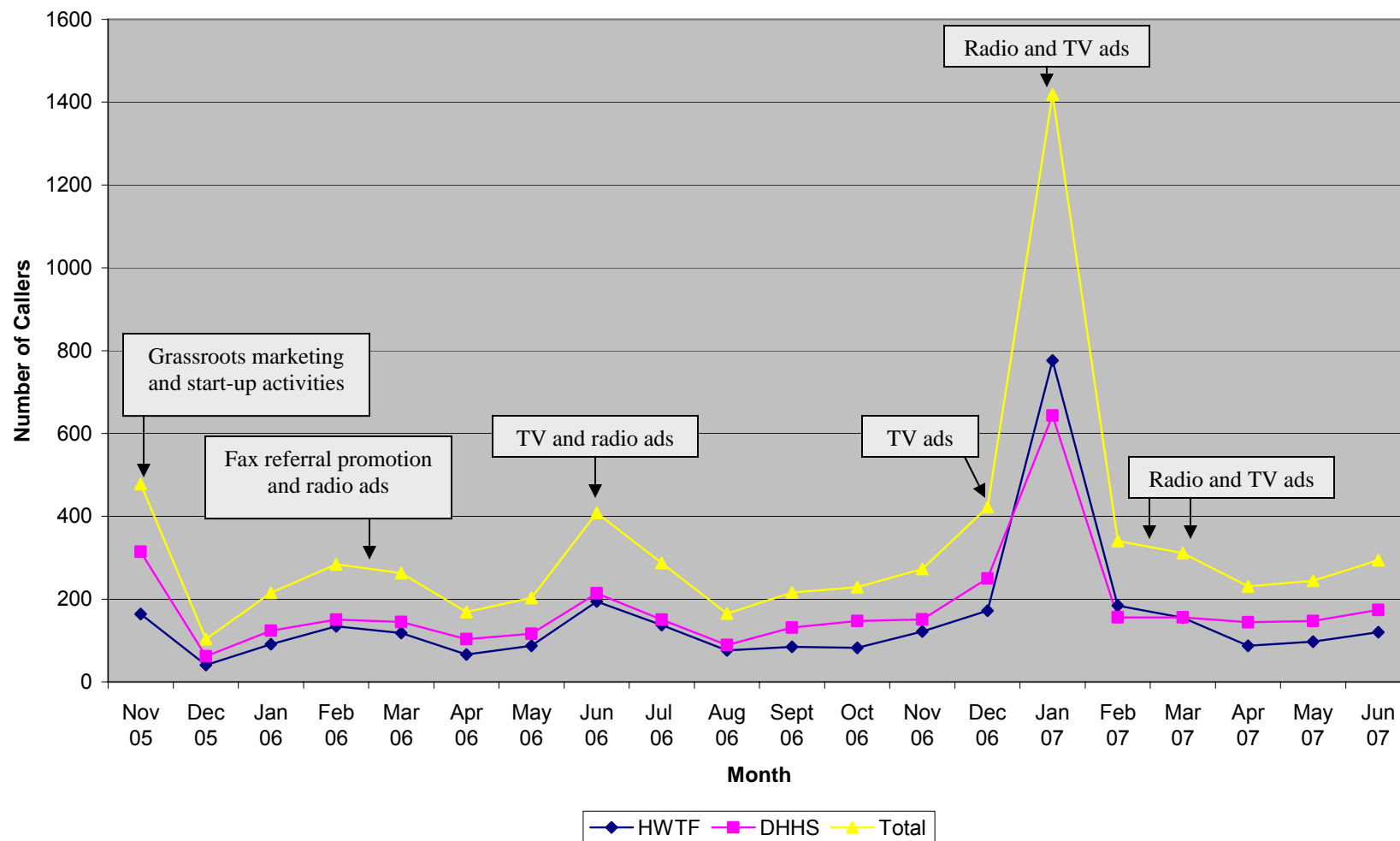


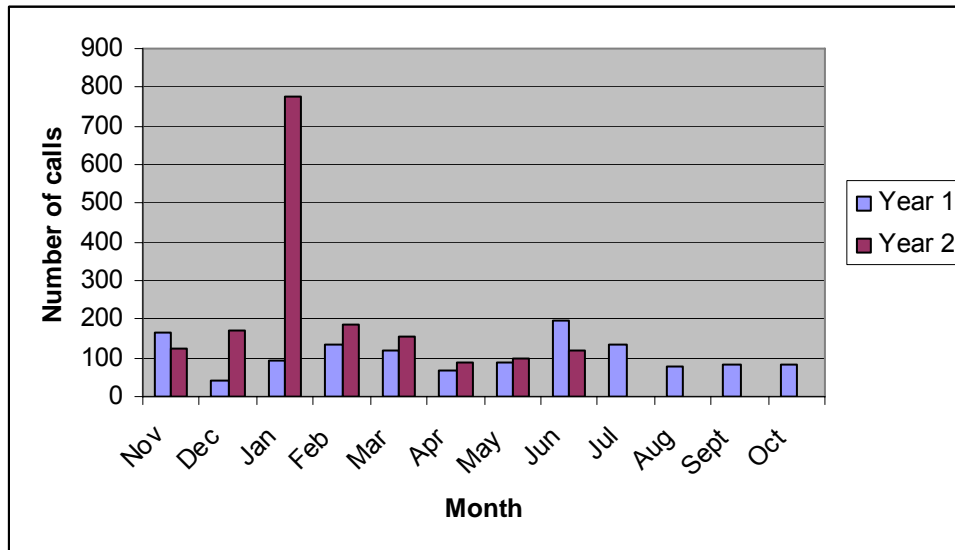
Figure 6 shows the total number of calls to Quitline NC by NC tobacco users in the quitline's first 20 months of operation. The number of calls fluctuated over time, with peaks occurring around times of promotions (See Section D.4 for a list of promotions). The most significant peak in call volume occurred in January 2007. Multiple radio and TV ads were aired in NC during this month. These include the HWTF-funded "Happy Callers" radio ad campaign, DHHS-funded Rick Stoddard TV ad campaign, and National Cancer Institute (NCI) radio ad campaign. Each of these campaigns aired at different intensities in various NC media markets. None of these campaigns were officially evaluated to determine their individual impacts on call volume.

**Figure 6. HWTF and DHHS call volume over time (Tobacco users only, n=6554)
November 2005 - June 2007**



The number of calls by HWTF-funded tobacco users increased six out of the eight months in Year 2 compared to Year 1 (Figure 7). These exceptions are likely due to promotions that occurred in Year 1 (i.e., November 2005 and June 2006) that did not occur in Year 2. The most significant differences between Year 1 and Year 2 call volume rates occurred during the months of December and January. These differences are likely associated with Quitline NC radio and TV ads that were aired in NC during the months of December 2006 and January 2007.

Figure 7. Number of HWTF Callers by Year 1 and Year 2 Months (Tobacco Users Only, n=2998)



Note: Year 2 includes the eight-month period of November 2006-June 2007.

Figure 8 highlights the percentage of HWTF tobacco-using callers among all Quitline NC callers in the quitline's first 20 months of operation. Overall, HWTF funded 46% of all callers who use tobacco, 13% of which were young adults and 3% were youth.

Figure 9 highlights the percentage of HWTF target populations (i.e., primary caregivers, school/childcare employees, young adults, and youth) among all HWTF-funded callers. The largest number of HWTF-funded callers were primary caregivers (1,853 or 62%)[†], followed by young adults (868 or 29%), youth (165 or 6%), and childcare/school employees (102 or 3%).

Figure 8. Percentage of HWTF Callers Among All Callers, Nov 05-Jun 07 (Tobacco Users Only, n=6554)

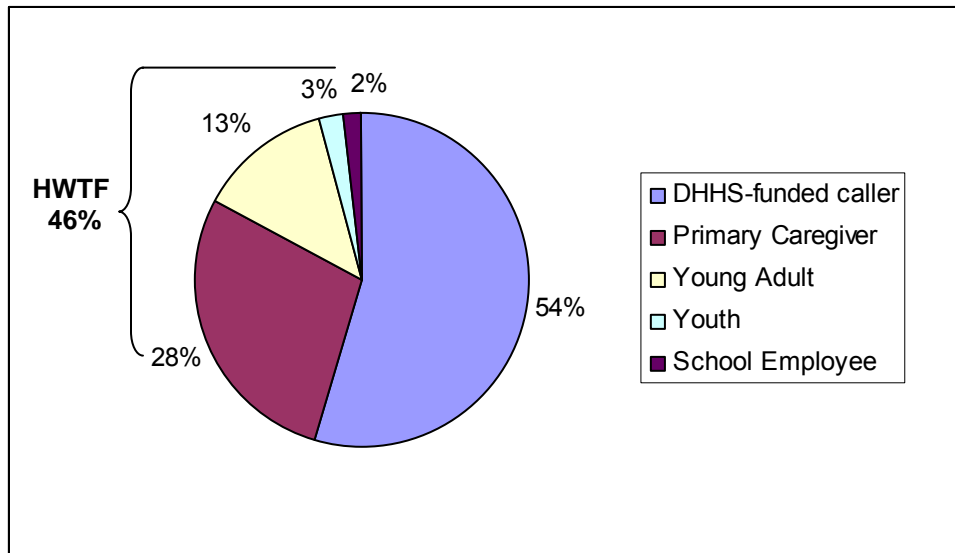
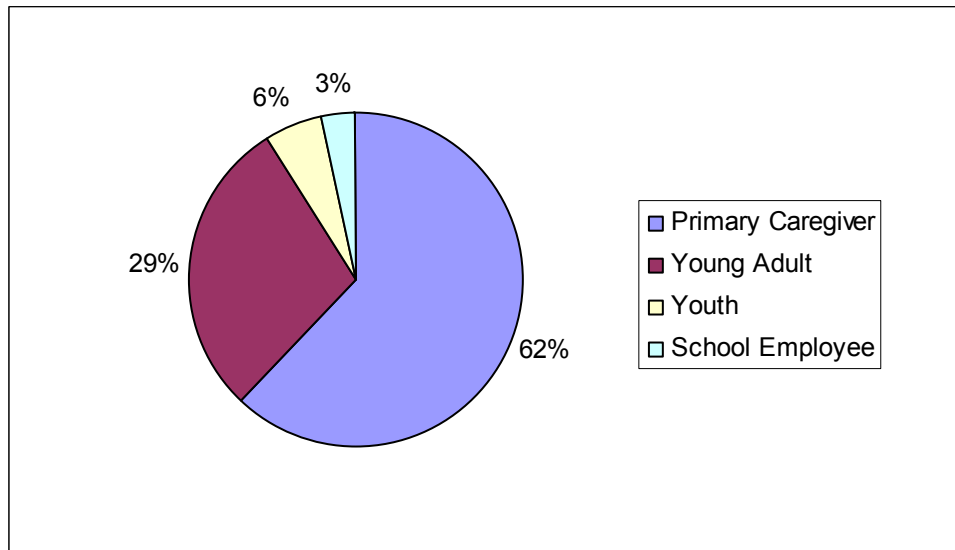


Figure 9. Percentage of Target Populations Among HWTF Callers, Nov 05-Jun 07 (Tobacco Users Only, n=2998)

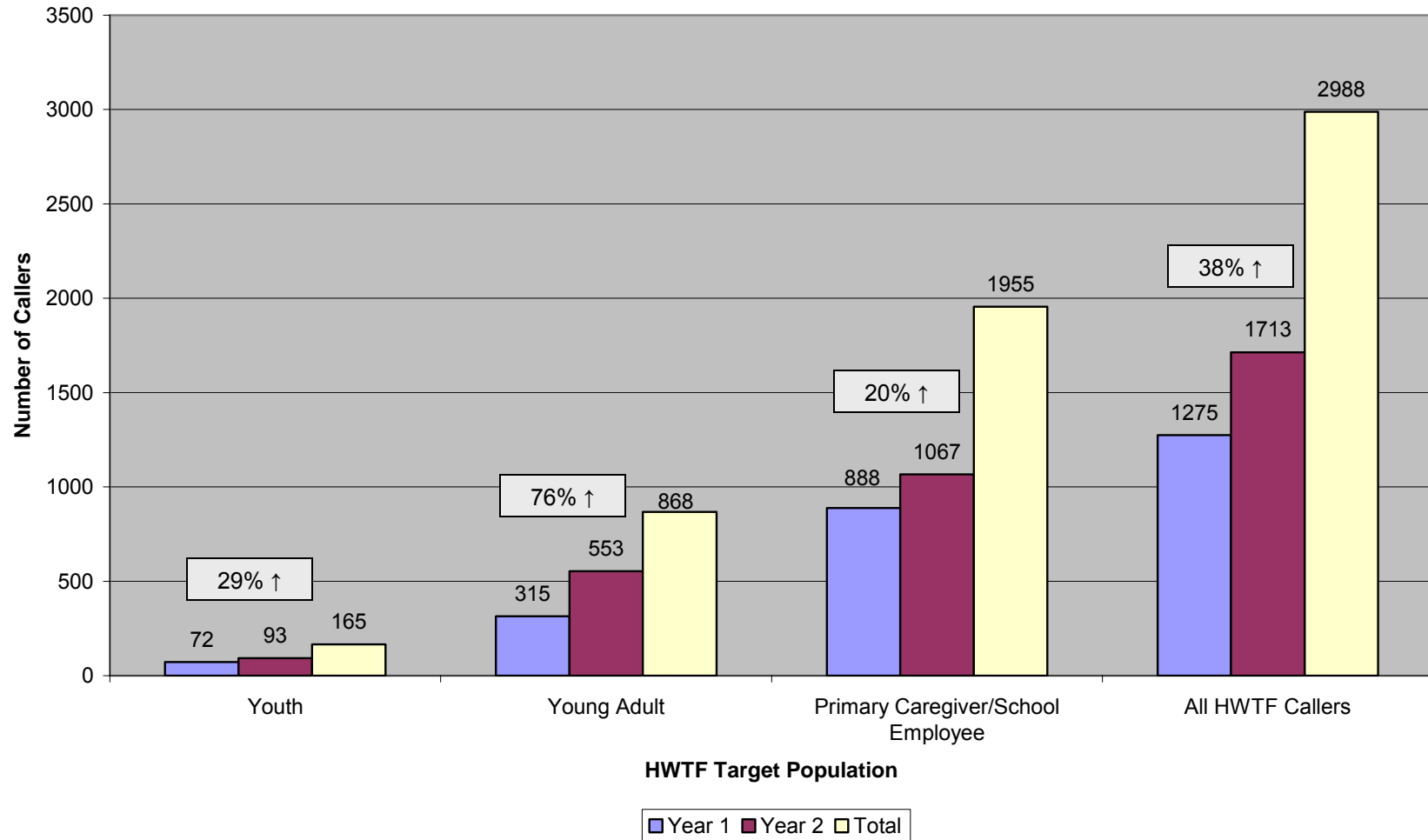


[†] 2% (134) of HWTF-funded, tobacco-using adult callers were both childcare/school employees and primary caregivers of children in their homes. For the purposes of this report, these callers are categorized as primary caregivers only.

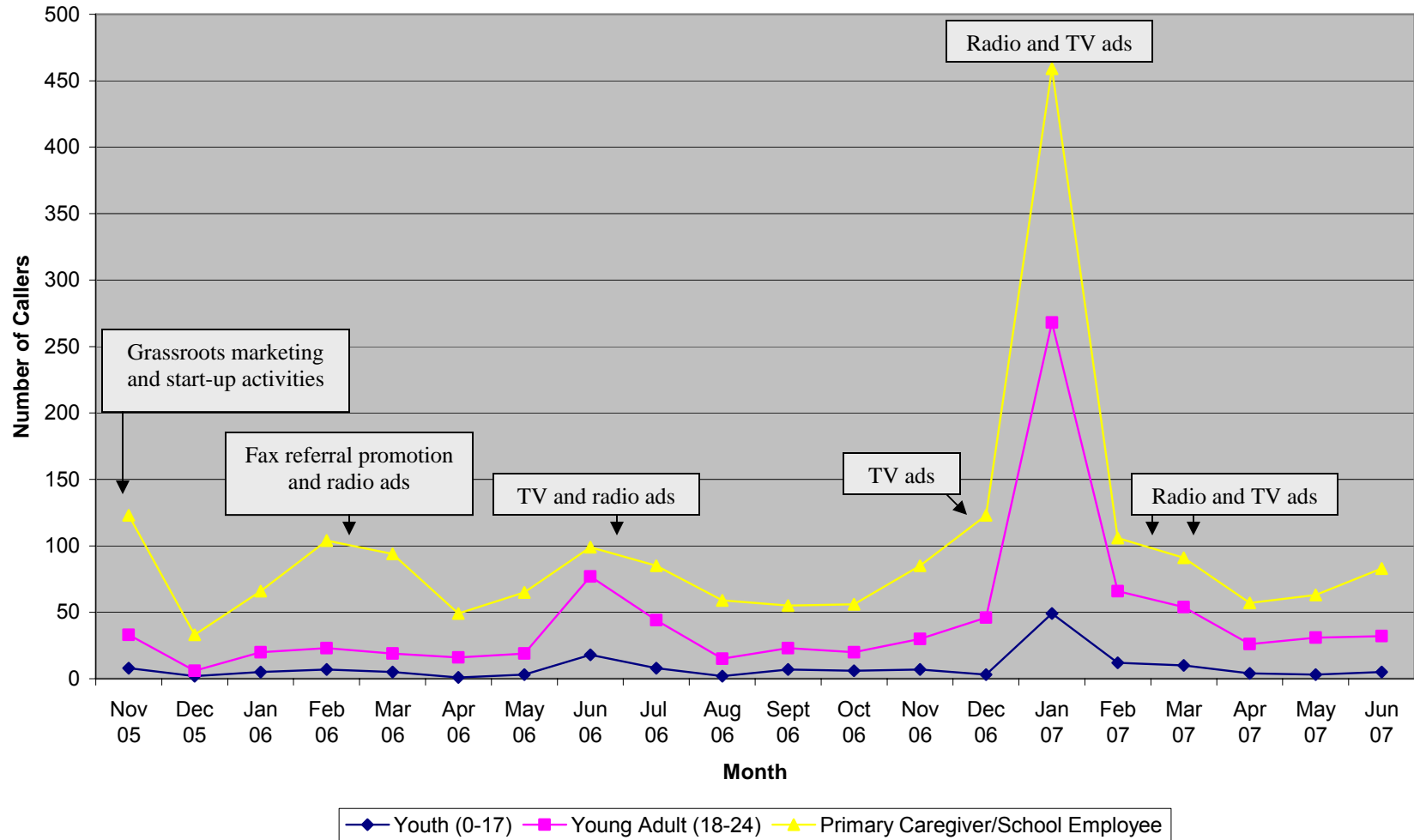
The number of youth, young adults, primary caregiver/school employees all increased in Year 2 compared to Year 1 (Figure 10). This is particularly notable since Year 2 only includes eight months of callers versus twelve months of callers in Year 1. The most significant increase was among young adult callers, who increased by 76% from Year 1 to Year 2. Overall, the number of HWTF-funded callers increased by 38% between Years 1 and 2.

Similar to trends observed for all callers in Figure 3, call volume for HWTF target populations fluctuated over time, with peaks generally occurring around the time of promotional campaigns (Figure 11). While both youth and young adults seemed to respond well to TV and radio ads aired in June-July 2006 and January-March 2007, young adults responded at higher rates than youth. Primary caregivers/school employee callers peaked around the time of Quitline NC's start-up in November 2005, the HWTF fax referral promotional campaign in February 2006, and other Quitline NC radio and TV ad campaigns. Most notably, callers from all HWTF target populations significantly peaked in January 2007 during the time of multiple Quitline NC radio and TV promotions, including HWTF's Happy Callers radio ad campaign targeting young adults. Twenty-six percent of all HWTF-funded calls between November 2005 and June 2007 occurred in this month.

**Figure 10. HWTF callers by year and target population (Tobacco users only, n=2988)
November 2005 - June 2007**



**Figure 11: HWTF population call volume over time (Tobacco users only, n=2988)
November 2005 - June 2007**



D.2. Characteristics of HWTF Callers

The following section highlights the characteristics of HWTF-funded, tobacco users who called Quitline NC between November 2005 and June 2007. The section is divided into three sub-sections focusing on primary caregivers and school/childcare employees (D.2.a), young adults (D.2.b) and youth (D.2.c). Additional data tables to accompany this section are included in Appendix A.

D.2.a. Primary Caregivers and School/Childcare Employees (25 years and older)

The majority (84.2%) of Quitline NC callers were adults over 25 years old. Thirty-five percent (1955) of these callers were primary caregivers and/or school/childcare employees funded by the HWTF. Primary caregivers/school employees made up 62% of all HWTF-funded callers.

Seventy-four percent of primary caregiver/school employee callers were between the ages of 25-44. Two thirds (1297) were female. About 4%(50) of female callers were either pregnant, planning a pregnancy, or breast feeding.

Just over half (53%) of all primary caregivers/school employee callers were white. A substantial proportion (39%) of primary caregiver/school employee callers were Black/African American and 3% were Hispanic. Ninety-nine percent spoke English.

Over half (58%) of all primary caregiver/school employee callers had obtained a high school degree or some college/university education (no degree). Eighteen percent had a college or university degree. Sixteen percent had no high school degree or a level of education less than grade nine.

Over one quarter (567 or 29%) of all primary caregiver/school employee callers were uninsured. Eighteen percent were covered by Medicaid and 4% were covered by Medicare. About one third (32%) of primary caregiver/school employees were covered by some type of commercial insurance. Approximately 11% of all primary caregiver/school employee callers had chronic asthma, 6% had diabetes, 5% had chronic obstructive pulmonary disease (COPD), and 3% had coronary artery disease.

Primary caregiver/school employees from 99 out of NC's 100 counties have called Quitline NC. Counties with the highest number of primary caregiver/school employee callers include Mecklenburg (182 callers), Guilford (149), and Wake (149). Buncombe, Cumberland, Durham, Forsyth, and Gaston counties also each had over 50 callers from this group.

The majority (94%) of primary caregiver/school employee callers smoked cigarettes. Ninety-two percent smoked every day. About 1% of primary caregivers/school employee callers used smokeless tobacco, 1% used cigars, and 1% used multiple forms of tobacco.

The majority (82%) of all primary caregiver/school employee callers were in the preparation stage of quitting, indicating they were ready to quit in the next 30 days. About 10% were in the action stage (i.e., had already quit in last six months).

Most (92%) of primary caregiver/school employee callers entered Quitline NC via an inbound English call. Seven percent (128) were referred by fax. Almost two thirds (64%) of primary caregiver/school employee callers accepted participation in the Multi-Call Program and 31% accepted participation in the One-Call Program at the time of intake.

See Figures 12-15 for visual highlights of primary caregiver/school employee callers.

Figure 12. Primary Caregivers/School Employee Demographics (n=1955)

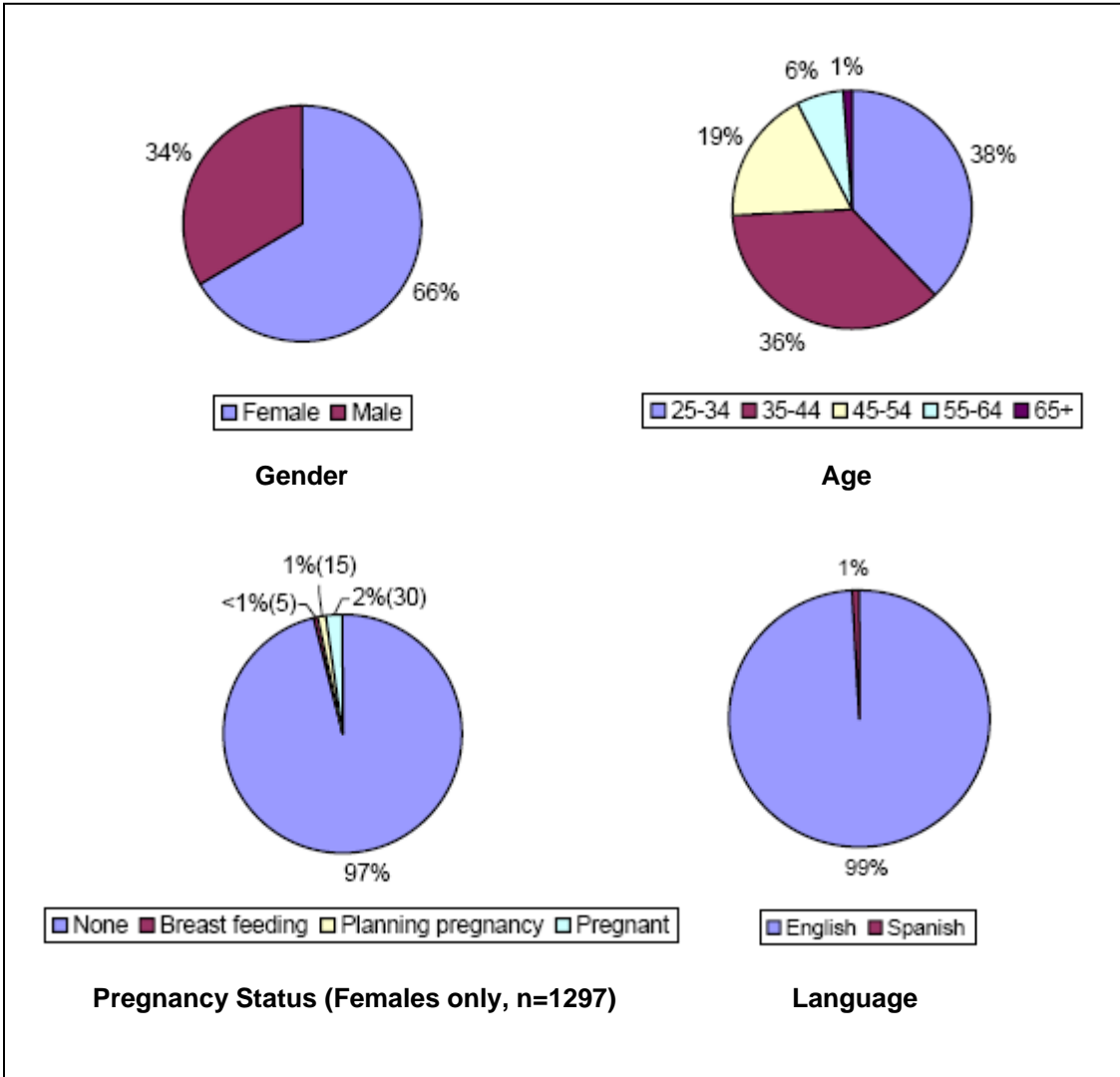


Figure 12. Primary Caregivers/School Employee Demographics (continued)

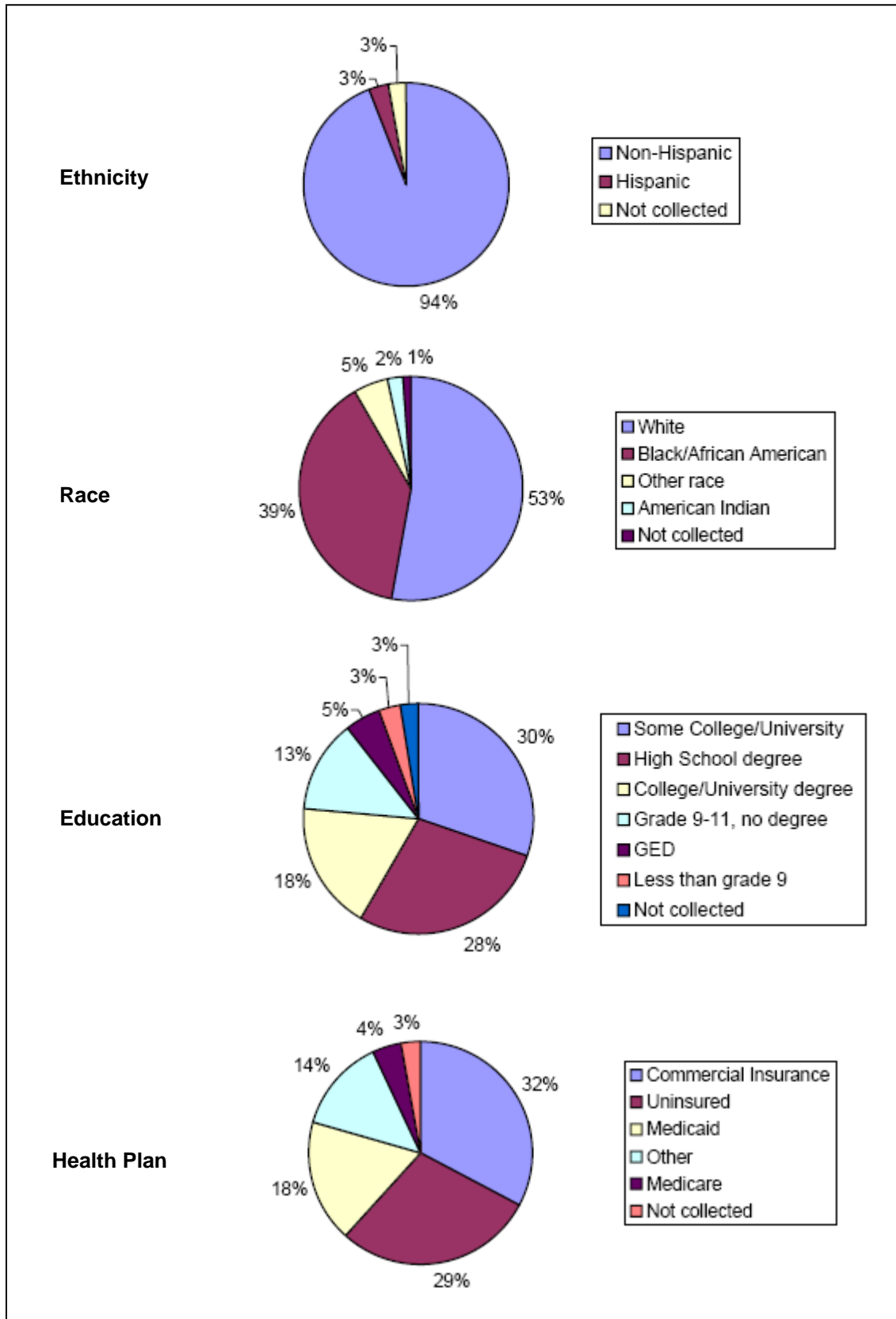


Figure 13. Primary Caregiver/School Employee Call Volume by County of Residence (n=1955)

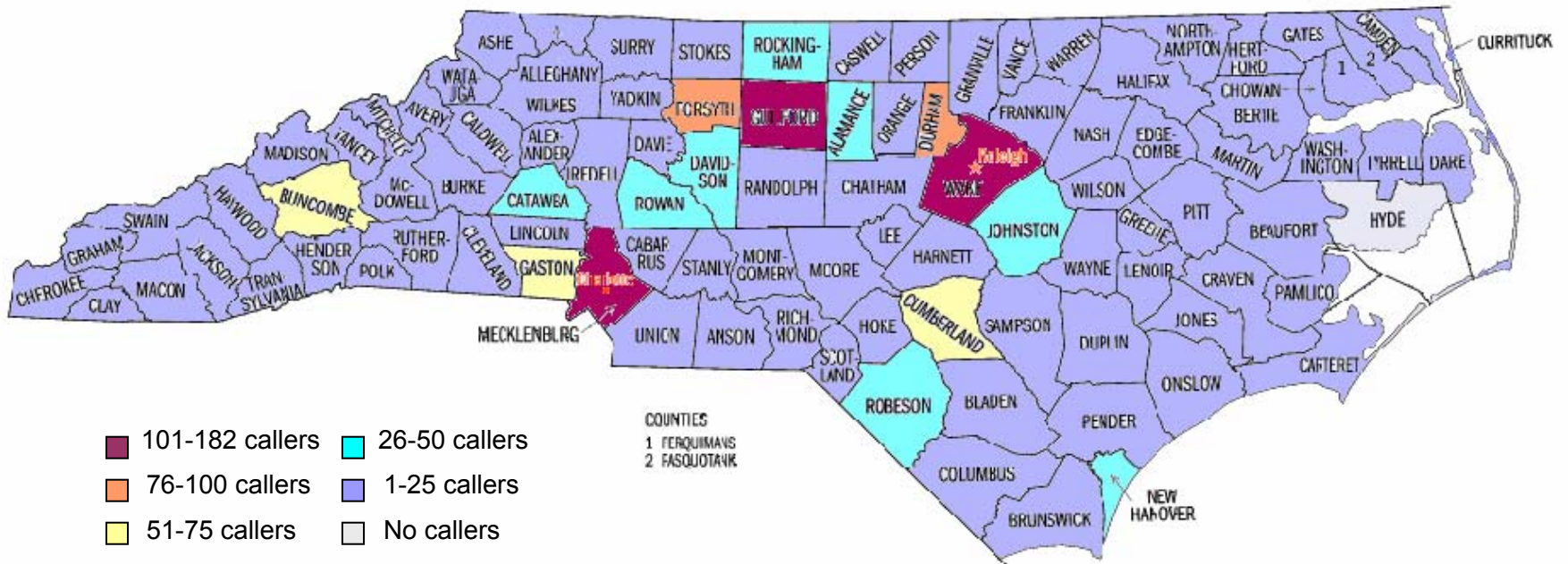


Figure 14. Tobacco Use and Stages of Change for Primary Caregivers/School Employees (n=1955)

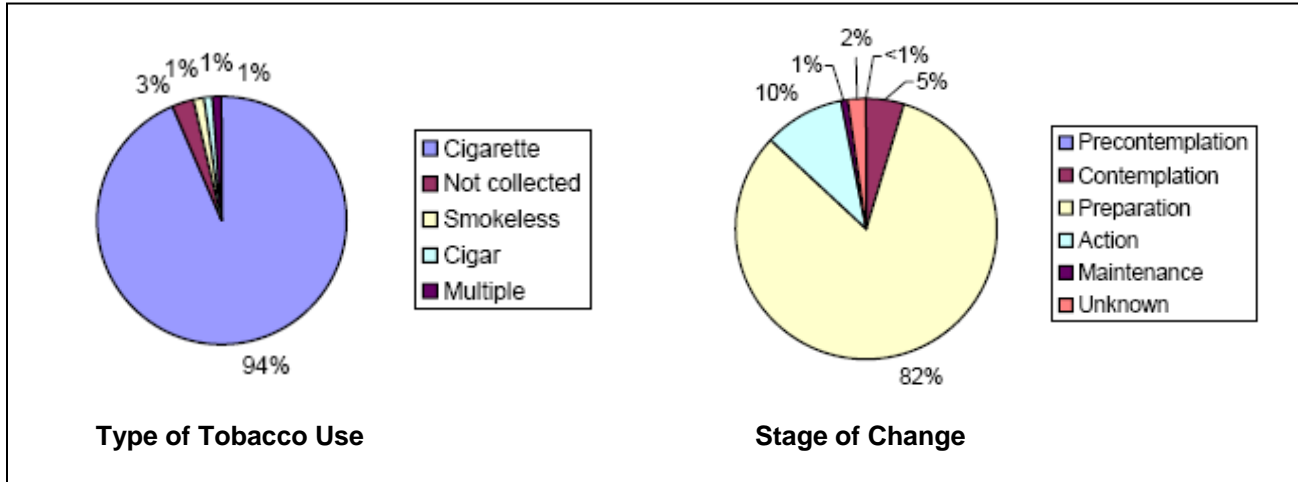
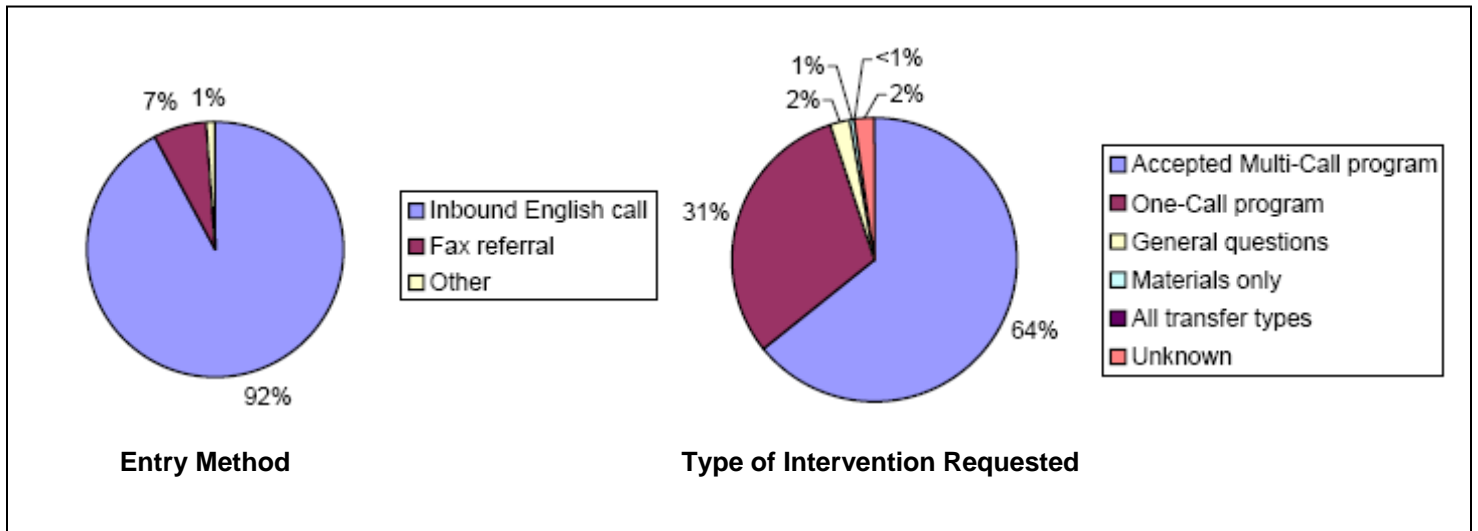


Figure 15. Entry Method and Services Requested by Primary Caregivers/School Employees (n=1955)



D.2.b. Young Adults (18-24 years old)

During the Quitline NC's first 20 months of operation, 13% (868) of all tobacco-using callers were young adults aged 18 to 24 years old. Young adults made up 29% of all tobacco-using, HWTF-funded callers during this time.

Young adult callers were approximately half male and half female (49% and 51%). About 20% (85) of all female, young adult callers were either pregnant, planning a pregnancy, or breast feeding. Young adult females made up 46% (85 of 183) of all female Quitline NC callers who reported being in one of these three pregnancy stages.

The majority (57%) of young adult callers were white, followed by Black/African American (31%), Hispanic (4%), and American Indian or Alaskan Native (1%). Seven percent reported being another race. One percent of young adult callers used Spanish services.

Thirty-two percent of young adult callers had a high school degree or GED. Twenty-five percent had some level of college/university education and 7% had obtained a college/university degree. Nineteen percent of young adults had some high school education or a level of education less than grade nine.

Compared to adult callers over 25 years old, young adult callers were more likely to not have health insurance. Over half (60%) of all young adult callers were either uninsured (364 or 42%) or received health coverage through Medicaid (158 or 18%). Twenty-one percent of young adults were covered through some type of commercial insurance. About 17% of young adult callers reported that they had chronic asthma. Fourteen young adult callers (1.6%) reported that they had diabetes and one caller had COPD.

Young adults from 87 of NC's 100 counties have called Quitline NC. Counties with the highest number of young adult callers include Mecklenburg (110), Wake (97), and Guilford (66). Durham, Forsyth, and Cumberland counties also each had over 25 young adult callers. With the exception of one county (Alamance), all top ten counties by number of young adults callers have college campuses with either direct or indirect support from a HWTF Tobacco-Free Colleges Initiative grantee. College grantees work to promote policy adoption and Quitline NC usage by young adults on NC campuses.

Most young adult tobacco users (88%) used cigarettes. Ninety-three percent smoked every day. About 3% used multiple forms of tobacco, 1% used cigars, and 1% used smokeless tobacco. The majority (86%) of young adult callers were in the preparation stage of quitting their tobacco use. About 7% were in the action stage, 3% were in the contemplation stage, and 1% were in the maintenance stage.

The majority (95%) of young adult callers entered Quitline NC via an inbound English call. Four percent were referred by fax. Almost 60% of young adults accepted participation in the Multi-Call Program and 32% accepted participation in the One-Call Program at intake. Three percent called with general questions and 3% asked for materials only.

See Figures 16-21 for visual highlights of young adult callers.

Figure 16. Young Adult Demographics (n=868)

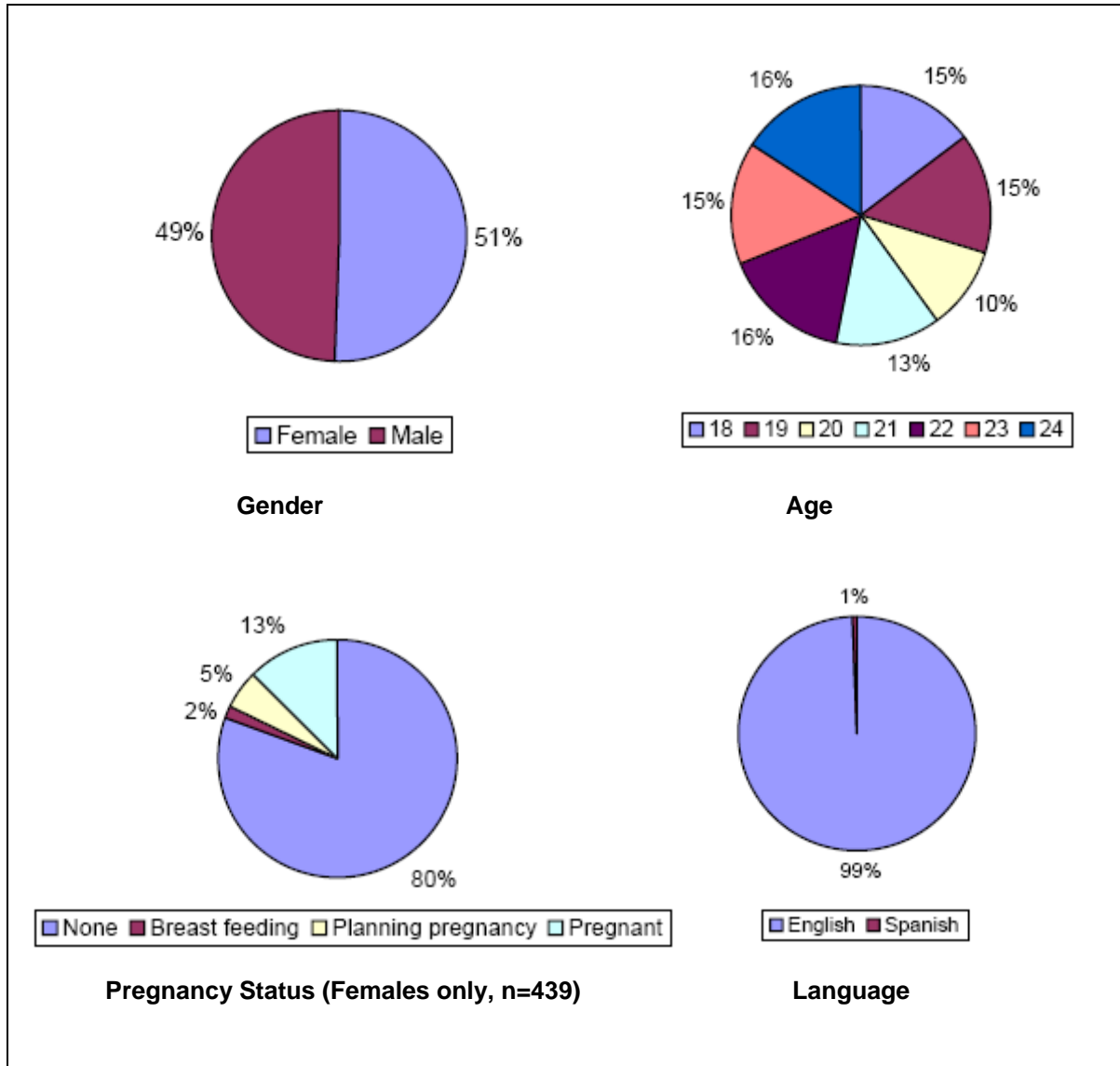


Figure 16. Young Adult Demographics (continued)

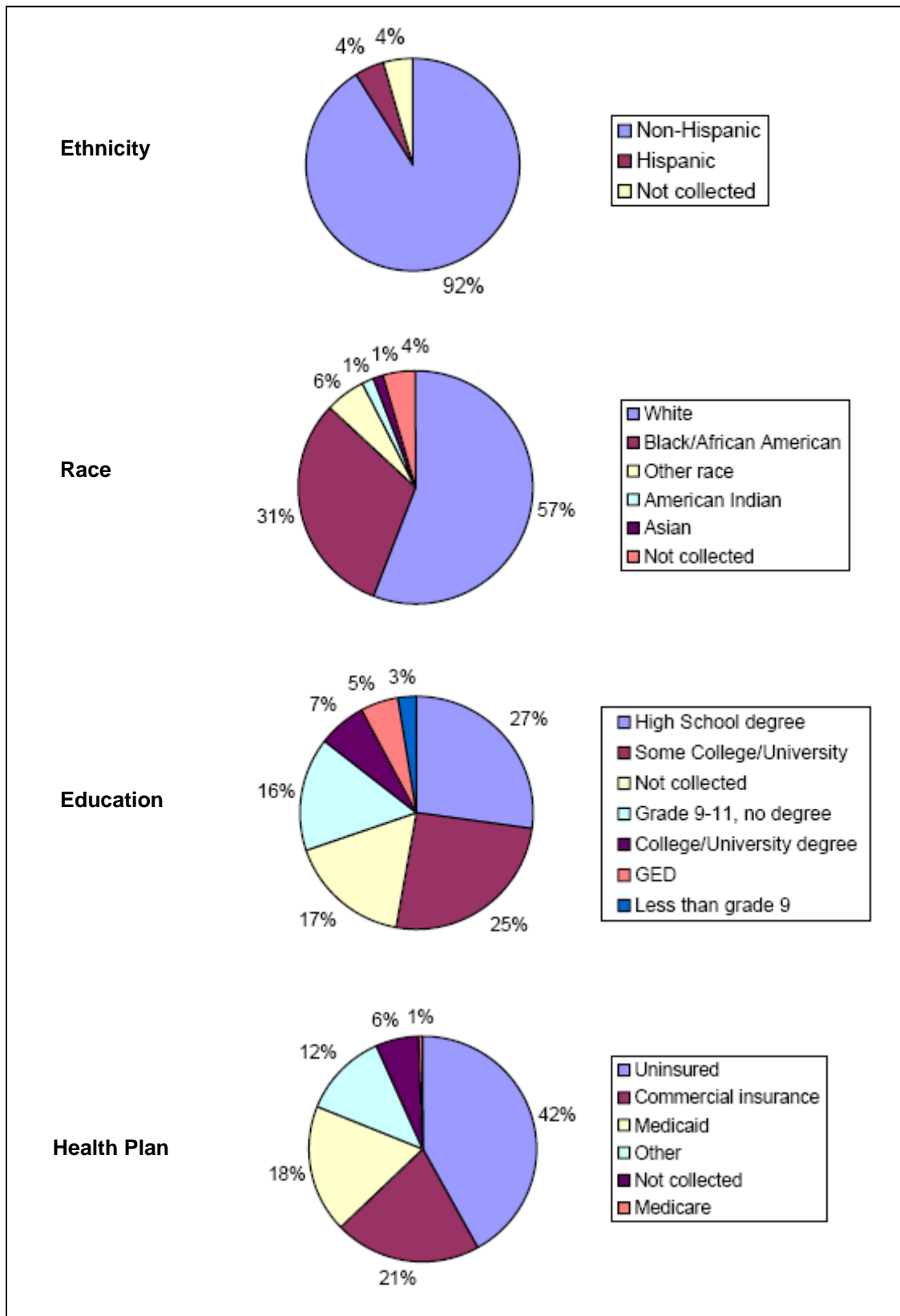


Figure 18. Tobacco Use and Stages of Change for Young Adults (n=868)

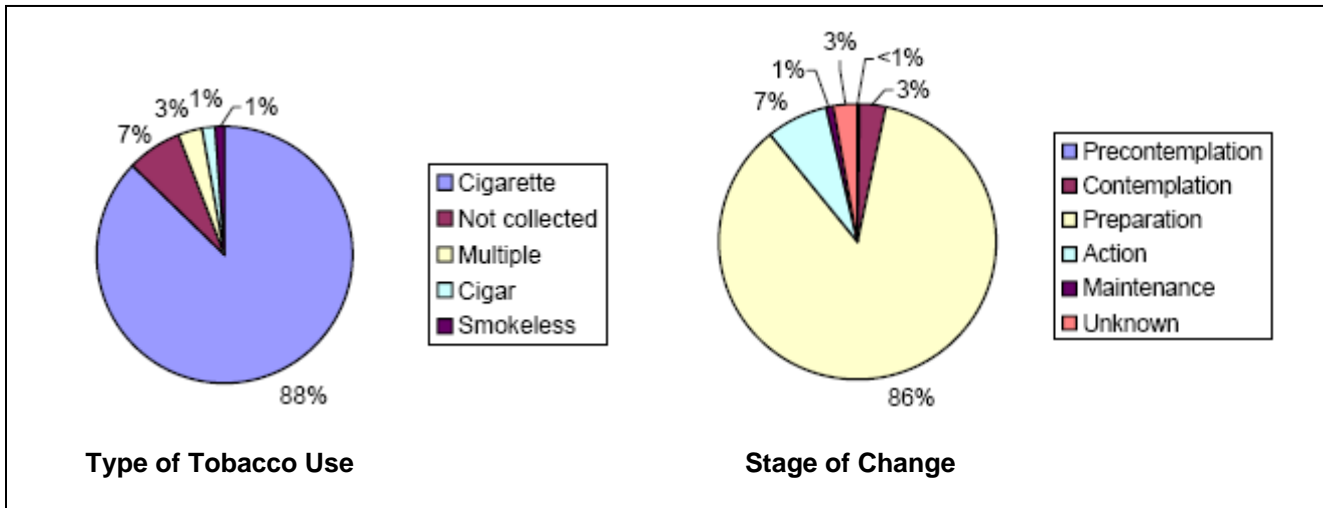


Figure 19. Entry Method and Services Requested by Young Adults (n=868)

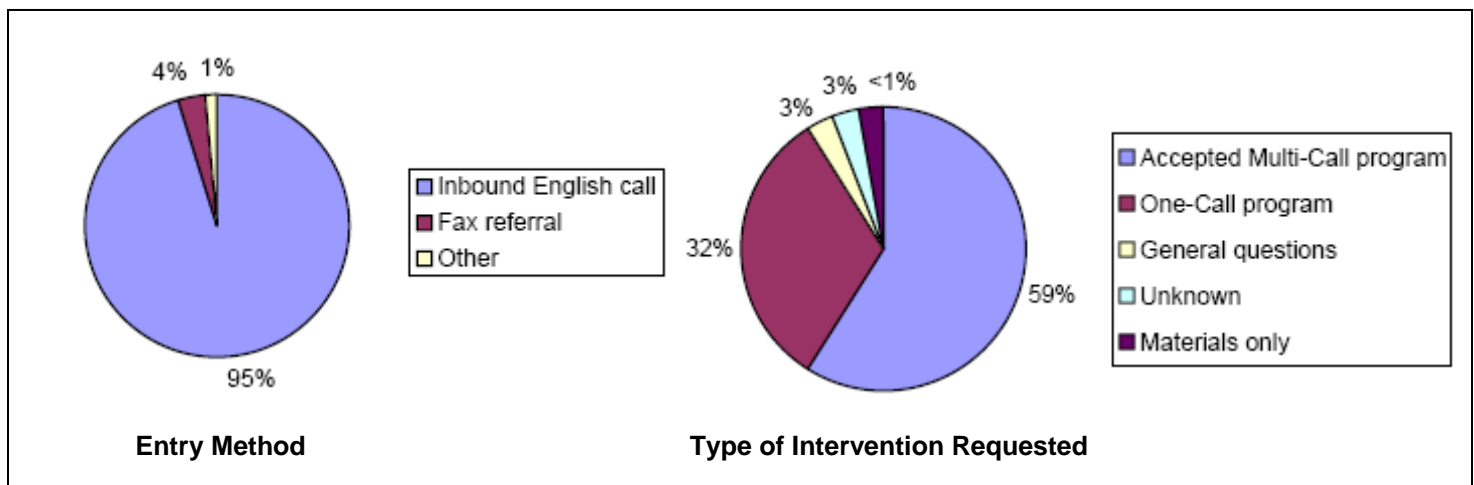


Figure 20 describes the current school status of young adults who have called Quitline NC. Sixty percent of all young adult callers (519) reported that they were not currently attending school. Thirty-three percent (290) said they were currently attending school. Of those who reported that they were currently attending school, 78% (225) were in college (26% of all young adult callers) and 21% (61) were in high school (7% of all young adult callers). Seven percent (59) of all young adult callers had no information about school attendance.

Figure 21 highlights the current employment status of young adult callers. Sixty-one percent (525) of all young adult callers reported that they were currently employed. Of those that were currently working, 66% worked full-time and 30% worked part-time. Thirty-two percent of young adults said they were not currently employed. Seven percent were missing information about their work status.

Figure 20. Young Adult School Status (n=868)

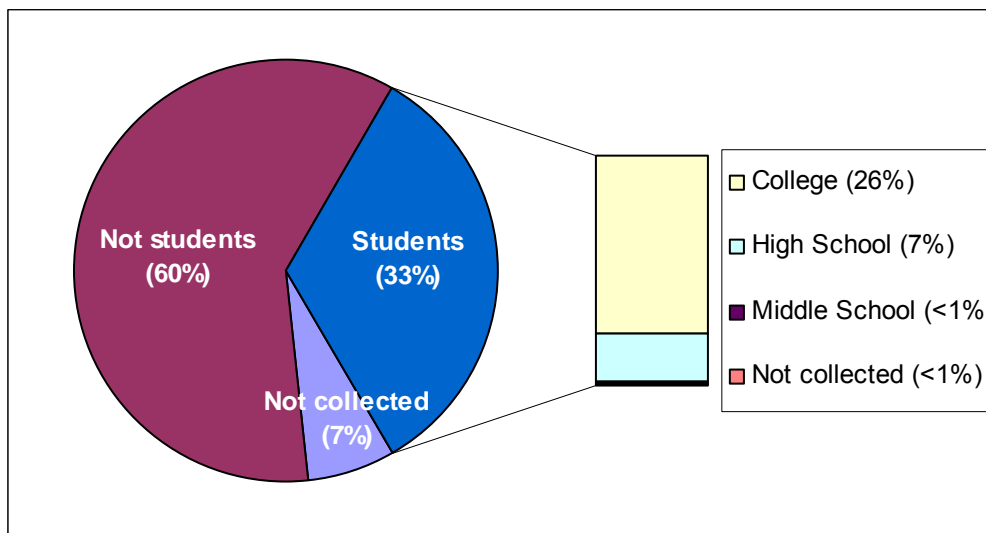


Figure 21. Young Adult Employment Status (n=868)

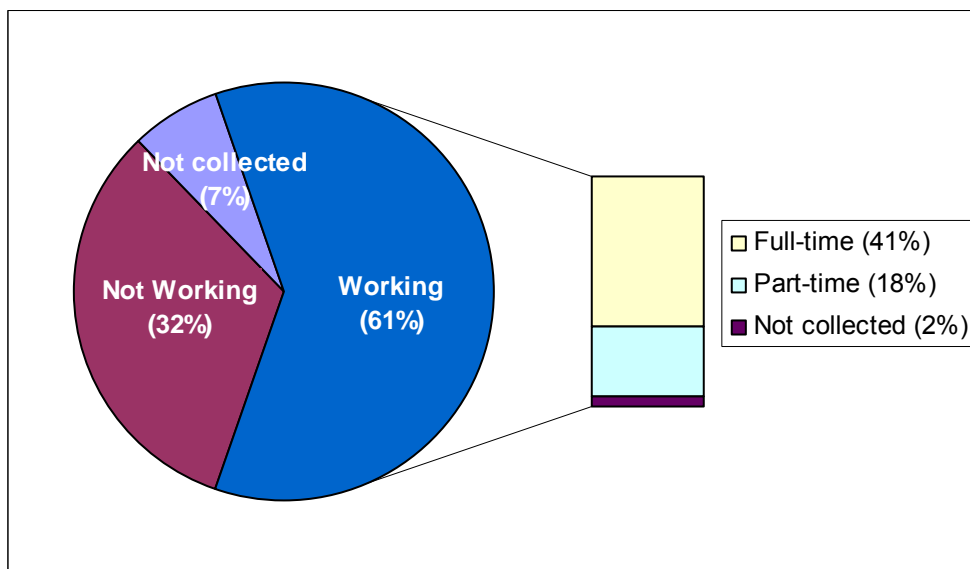


Table 3 compares characteristics of young adult callers who currently attend college (i.e., college students) with young adult callers who do not currently attend school (i.e., non-college students). More female college students called than male college students, while male and female non-college students called at approximately the same rate. Female non-college students were more likely to be in a stage of pregnancy than female college students. Female non-college students made up 33% (60 of 183) of all female callers who reported that they were either planning a pregnancy, pregnant, or breast feeding (female college students made up 9% of the same group). A greater percentage of non-college students were Black/African American, Hispanic, uninsured, or using Medicaid. Non-college students were also more likely to use multiple forms of tobacco than college students. Over 60% of both college and non-college students were currently employed; however, non-college students were more likely to work full-time.

Table 3. Comparison of Young Adult College and Non-College Students

| Characteristic | College Students* (n=225) | | Non-College Students** (n=519) | |
|--|------------------------------|------|-----------------------------------|------|
| | # | % | # | % |
| Gender | | | | |
| Female | 121 | 53.8 | 263 | 50.7 |
| Male | 104 | 46.2 | 256 | 49.3 |
| Age | | | | |
| 18 | 26 | 11.5 | 63 | 12.1 |
| 19 | 33 | 14.7 | 71 | 13.7 |
| 20 | 32 | 14.2 | 49 | 9.4 |
| 21 | 34 | 15.1 | 67 | 12.9 |
| 22 | 42 | 18.7 | 81 | 15.6 |
| 23 | 32 | 14.2 | 89 | 17.2 |
| 24 | 26 | 11.6 | 99 | 19.1 |
| Race/Ethnicity | | | | |
| White | 137 | 60.9 | 304 | 58.6 |
| Black/African American | 61 | 27.1 | 177 | 34.1 |
| Hispanic | 7 | 3.1 | 28 | 5.4 |
| American Indian/Alaskan Native | 5 | 2.2 | 6 | 1.2 |
| Pregnancy Status (Females, n=121 and n=263) | | | | |
| Breast Feeding | 0 | 0 | 7 | 2.7 |
| Planning Pregnancy | 5 | 4.1 | 15 | 5.7 |
| Pregnant | 11 | 9.1 | 38 | 14.4 |
| Health Plan | | | | |
| Uninsured | 74 | 32.9 | 246 | 47.4 |
| Medicaid | 21 | 9.3 | 115 | 22.2 |
| Commercial Insurance | 81 | 36.0 | 80 | 15.4 |
| Tobacco Use | | | | |
| Cigarettes | 203 | 90.2 | 465 | 89.6 |
| Cigars | 3 | 1.3 | 7 | 1.3 |
| Smokeless Tobacco | 3 | 1.3 | 4 | 0.8 |
| Multiple | 4 | 1.8 | 20 | 3.9 |
| Currently Working | | | | |
| Yes | 143 | 63.6 | 344 | 66.3 |
| <i>Full Time</i> | 69 | 48.3 | 261 | 75.9 |
| <i>Part Time</i> | 69 | 48.3 | 68 | 19.8 |

* 18-24 year old callers who currently attend school and report college as the school level.

**18-24 year old callers who report that they do not currently attend school.

D.2.c. Youth (12-17 years old)

In total, 165 (2.5%) of all tobacco-using, Quitline NC callers during the first 20 months of Quitline NC's operation were youth. Youth made up 5.5% of all tobacco-using, HWTF-funded callers during this time.

Over three quarters (76%) of youth callers were 16-17 years old. Only 3% were middle school-aged (12-13 years old). Male and female youth generally called at the same rate, with only slightly more female than male callers (52% vs. 48%). Nine youth (11% of all female youth) were either pregnant, planning a pregnancy, or breastfeeding. Youth made up 5% of all Quitline NC female callers who reported being in one of these three stages of pregnancy.

The majority (61%) of youth callers were white, followed by Black/African American (24%), and Hispanic (7%). No callers under 18 years old used Spanish services.

Health plan information was not collected for the majority (90%) of youth callers. Of those that reported health plan information, 5% reported that they were uninsured and 2% reported health coverage through Medicaid. Sixteen percent (26) of all youth callers reported that they had chronic asthma. Two youth reported that they had COPD and one had more than one chronic disease.

Youth from 49 of NC's 100 counties have called Quitline NC. Counties with the highest number of youth callers include Guilford (16), Mecklenburg (14), Forsyth (13), Durham (9), and Wake (7). The remaining counties each had less than five callers. Eight of the top ten counties for youth callers received direct support from a HWTF Teen Tobacco Prevention and Cessation Initiative Community/School grantee. Community/School grantees work to promote tobacco-free policy adoption and cessation among youth in local schools and communities across the state.

Most youth tobacco users (84%) used cigarettes. Among all youth callers who used cigarettes, 90% smoked every day and 8% smoked some days. Three youth callers used smokeless tobacco, three used cigars, and five used multiple forms of tobacco. The majority (83%) of youth callers were in the preparation stage of quitting. Eight percent were in the contemplation stage and 4% were in the action stage.

The majority (94%) of youth entered Quitline NC via an inbound English call. Four percent were referred by fax (same rate as young adults). Over half (53%) accepted participation in the Multi-Call Program and 36% accepted participation in the One-Call Program at intake. About 4% called with general questions and 3% asked for materials only.

See Figures 22-28 for visual highlights of youth callers.

Figure 22. Youth Demographics (n=165)

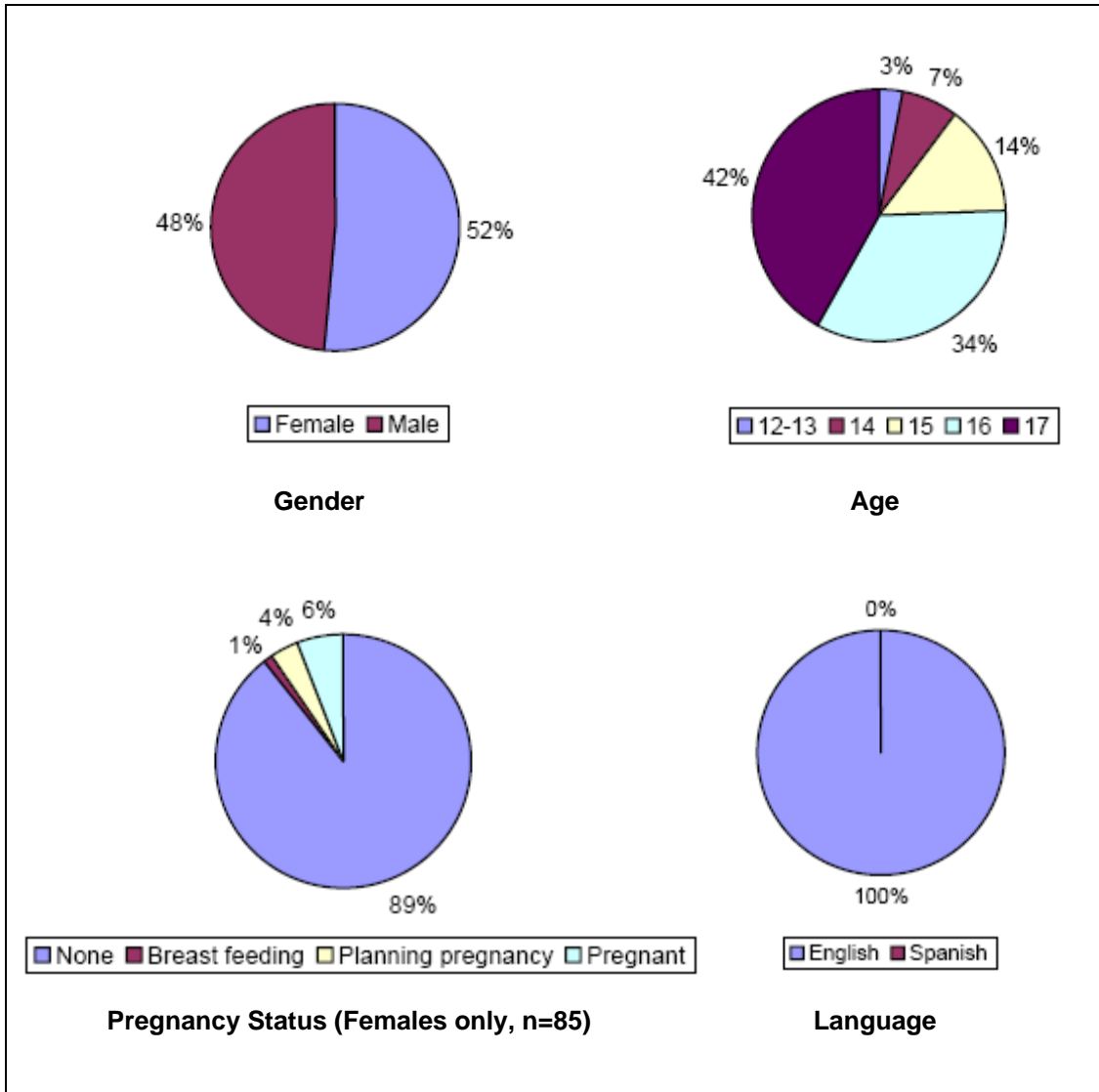


Figure 22. Youth Demographics (continued)

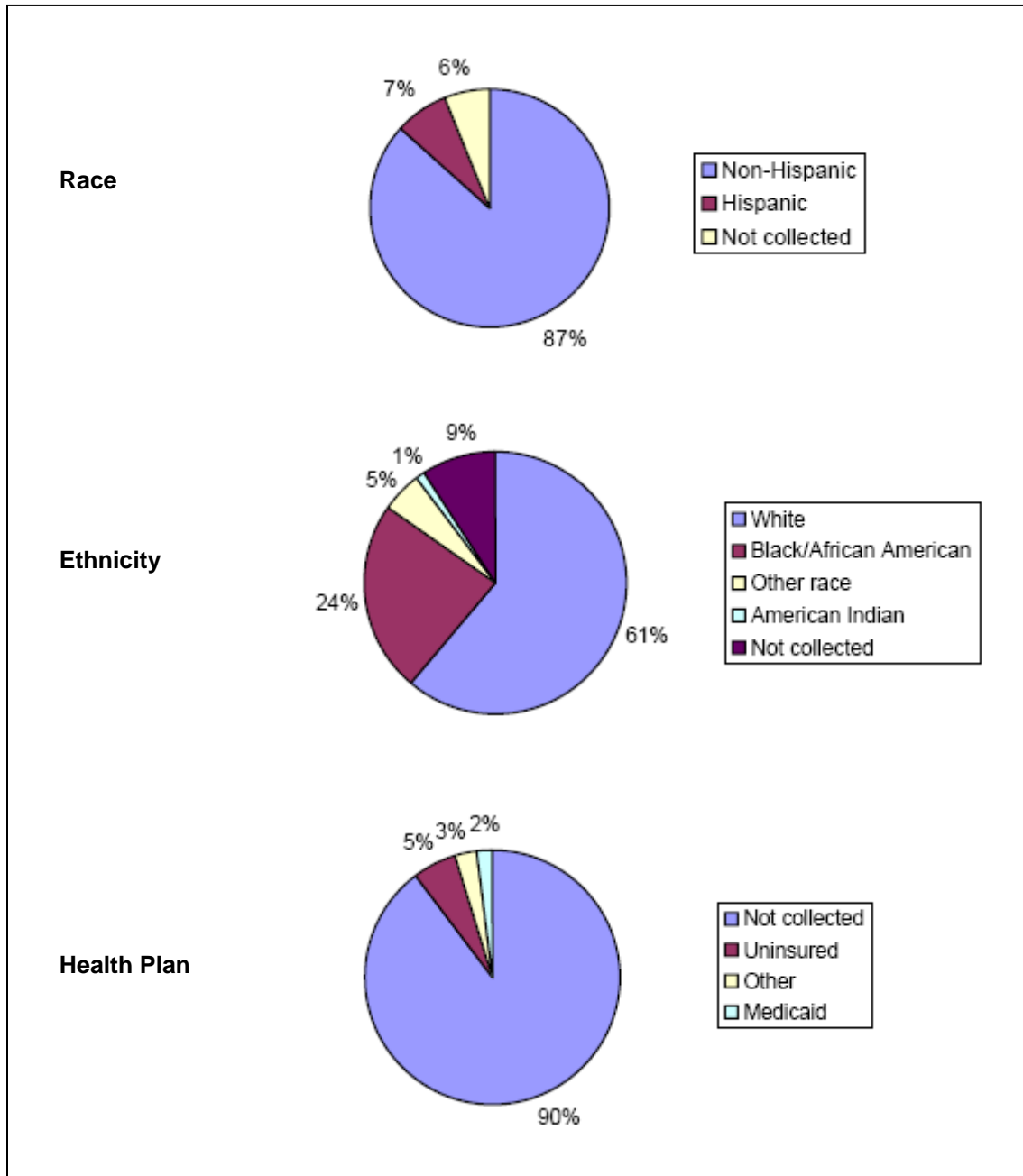


Figure 23. Youth Call Volume by County of Residence (n=165)

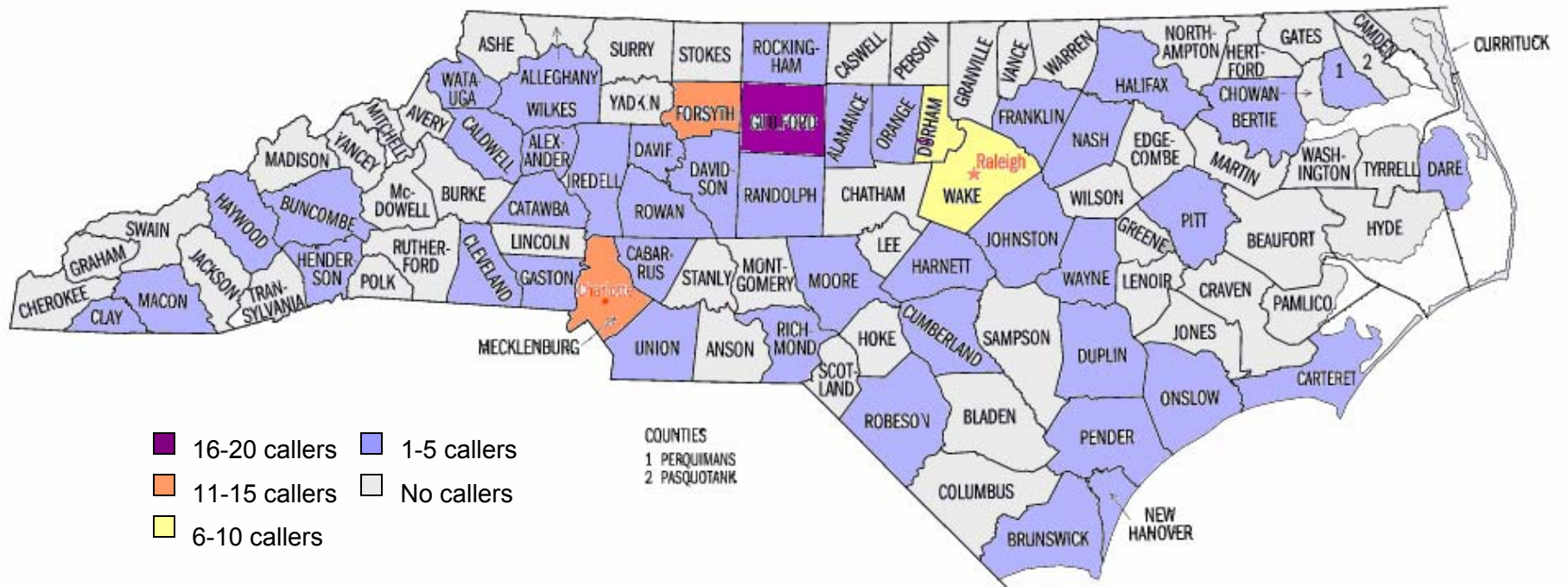


Figure 24. Tobacco Use and Stages of Change for Youth (n=165)

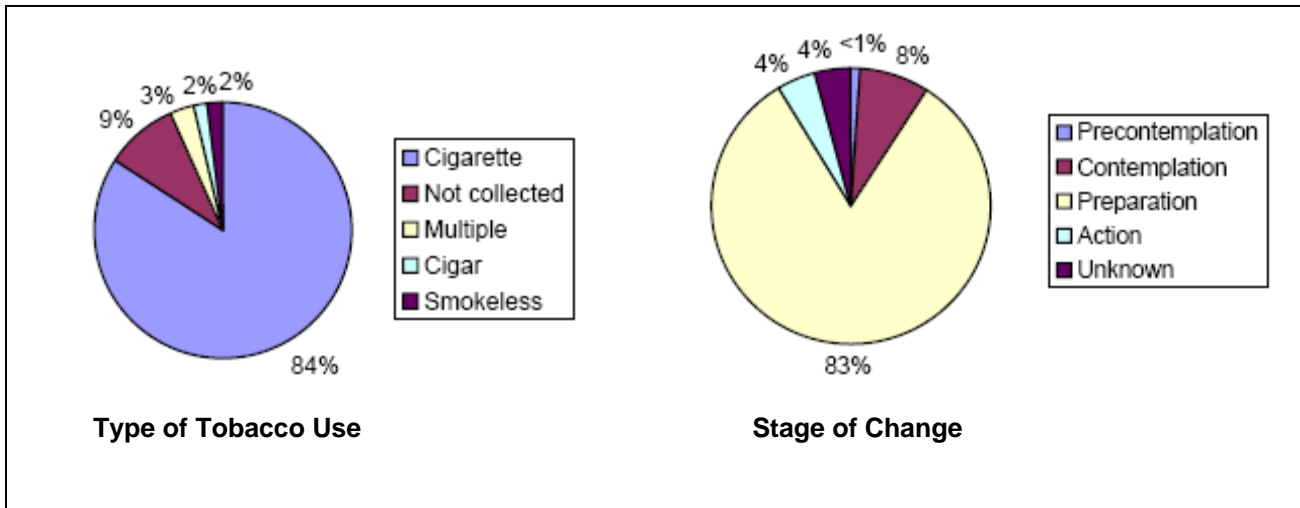
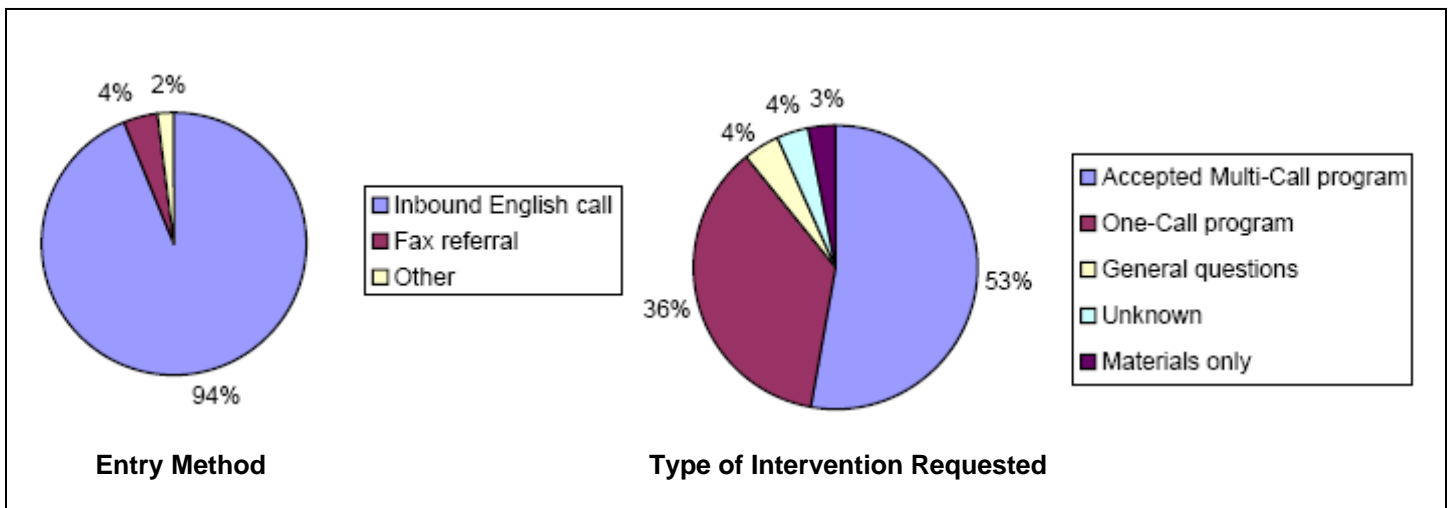


Figure 25. Entry Method and Services Requested by Youth (n=165)



Most youth callers (116 or 71%) reported that they were currently attending school (Figure 26). Among youth currently attending school, 90% (104) were in high school (63% of all youth callers), 8%(9) were in middle school, two were in college, and one was in grade school.

Seventy percent (81 of 116) of all youth who were currently attending school reported that their school had a 100% Tobacco-Free School (TFS) policy (Figure 27). Of those who said they attended a school with a 100% TFS policy, 41%(33) reported that the policy motivated them to quit and 54%(44) reported that it did not motivate them to quit.

Figure 26. Youth School Status (n=165)

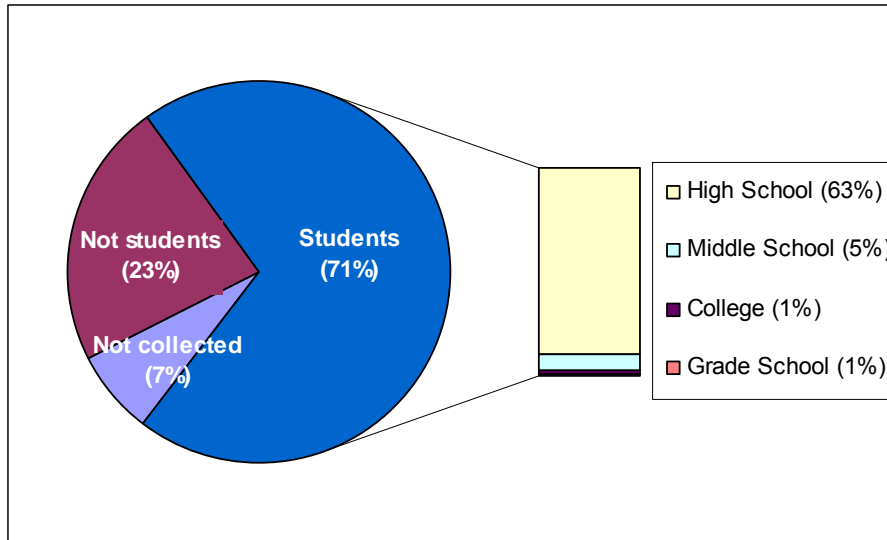
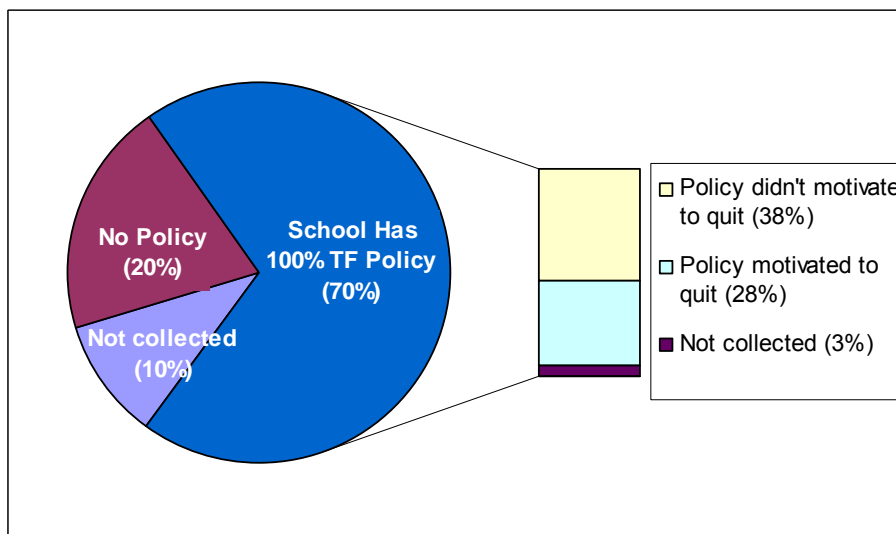
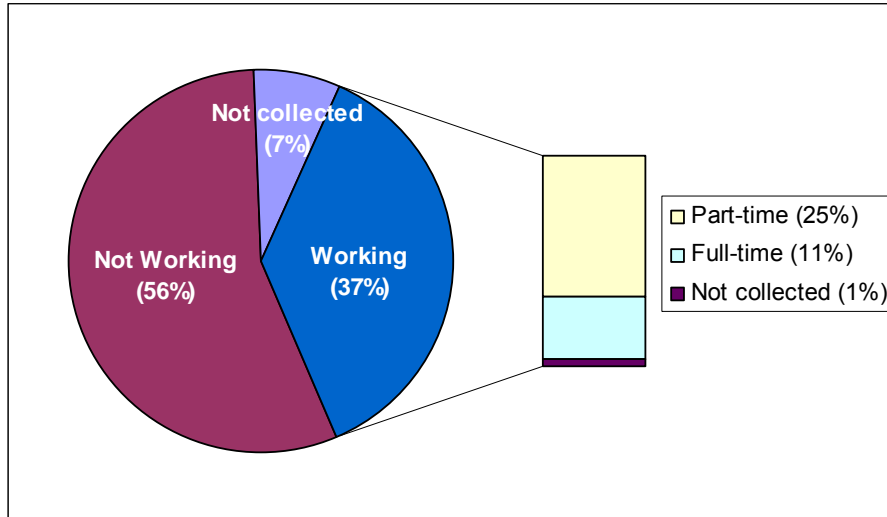


Figure 27. Youth School Policy Status (n=116)*



Over one third (61 or 37%) of all youth callers reported that they were currently employed (Figure 28). Of those who reported working, 41(67%) reported working part time and 18 (30%) reported working full-time.

Figure 28. Youth Employment Status (n=165)



D.3. Fax Referral Service

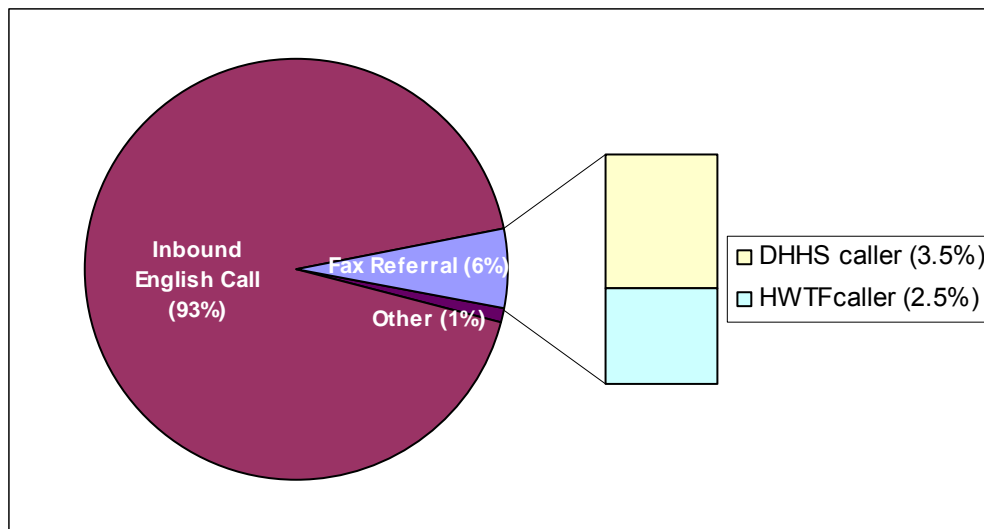
The fax referral service is a special feature of Quitline NC designed to assist health professionals in connecting their patients to the quitline. Using this service, physicians and medical staff can easily refer people to Quitline NC using a fax referral form. Once a patient has agreed to attempt to quit their tobacco use within 30 days and signed the form, the provider faxes it to the quitline at 1-800-483-3114. A Quitline NC quit coach then initiates an intake call to the patient to assist them with their cessation needs.

In total, 6.1% (399) of all tobacco users who called Quitline NC between November 2005 and June 2007 entered via the fax referral service (Figure 29). The majority of all callers (93%) entered the quitline via an inbound English call. Less than one percent entered via an inbound Spanish call. Forty-one percent (166 of 399) of all callers who were referred by fax were funded by the HWTF.

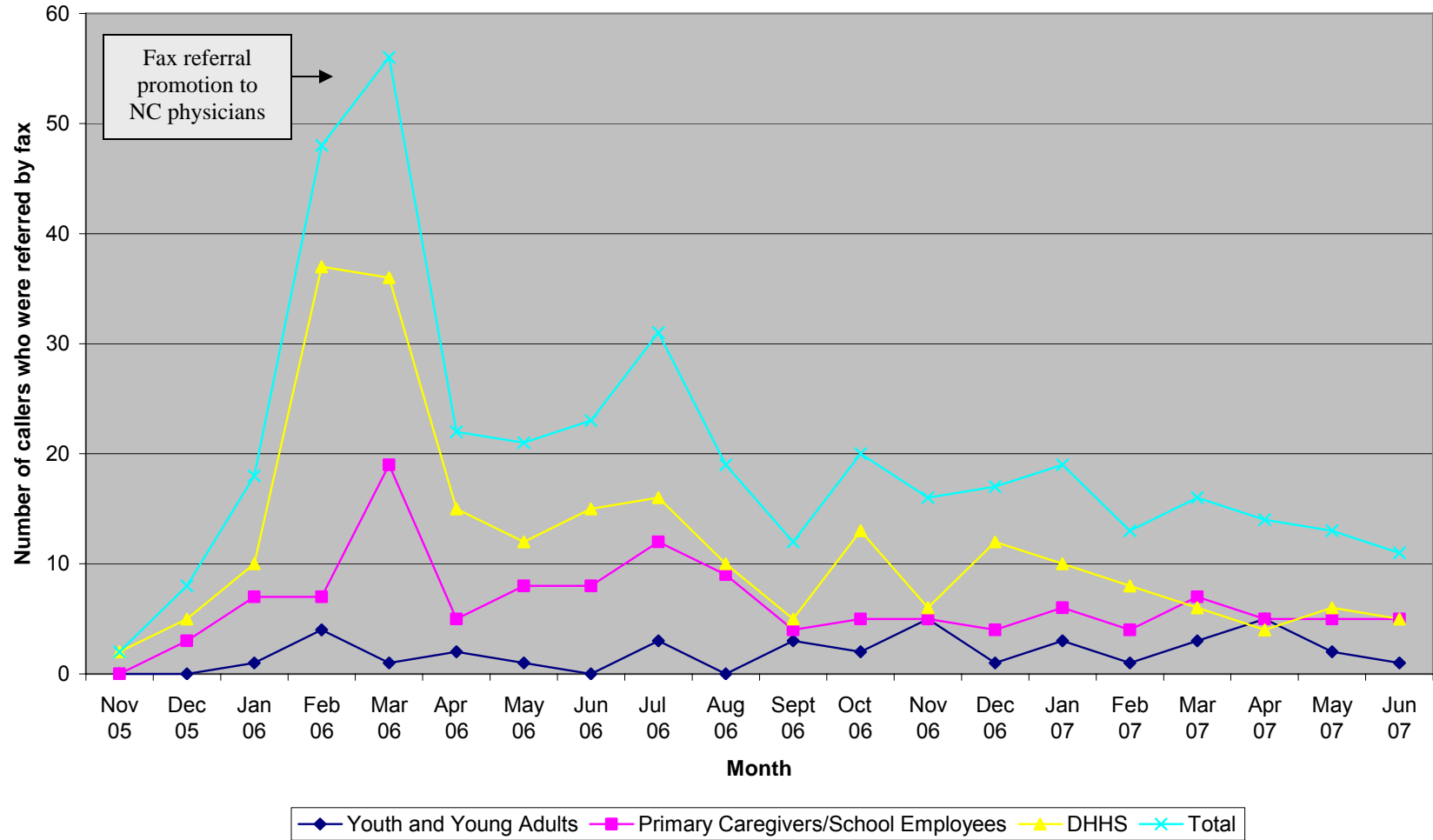
The number of fax referrals fluctuated over the first 20 months of the quitline, with peaks occurring at various times for different target populations (Figure 30). Fax referrals increased significantly around the time of the HWTF-funded, fax referral promotional campaign in Year 1 (February 2006). After this promotion, the number of fax referrals generally declined with some peaks occurring around times of other Quitline NC media campaigns (e.g., Quitting Takes Practice TV/radio campaign in June-July 2006). With the exception of HWTF grantee efforts to promote the fax referral service among health care providers in local schools, college campuses, and communities, no specific fax referral promotional campaigns were implemented by the HWTF in Year 2.

The majority of callers who were referred to the quitline by fax, or who entered via an inbound call, were ready to quit in the next 30 days. Eighty-four percent (139) of all HWTF-funded callers who entered the quitline via the fax referral service were in the preparation stage of quitting. About 84% of HWTF-funded callers who entered via an inbound English call were also in the preparation stage.

Figure 29. Entry Method for All Quitline NC Callers, Nov 05-Jun 07 (n=6554)



**Figure 30. Number of fax referrals over time (Tobacco users only, n=399)
November 2005 - June 2007**



Overall, the number of fax referrals for HWTF-funded callers remains relatively low. Approximately 5.6%(166) of all HWTF-funded, tobacco-using callers were referred by fax between November 2005 and June 2007 (average 8.3 HWTF callers referred by fax/month). The majority (77%) of these callers were primary caregivers and/or school employees (Figure 31). Nineteen percent were young adults and 4% were youth

Figure 32 highlights the number of HWTF-funded callers who were referred by fax during Year 1 and Year 2. Fax referrals appear to be declining, with 104 HWTF-funded callers being referred by fax in Year 1 and 62 referred by fax in Year 2 (40%↓). This difference is likely due to the increase in fax referrals observed in Year 1 around the time of the fax referral promotional campaign to physicians (February-March 2006). Additional data tables to accompany this section are included in Appendix B.

Figure 31. Type of HWTF Callers Who Were Referred by Fax, Nov 05-Jun 07 (n=166)

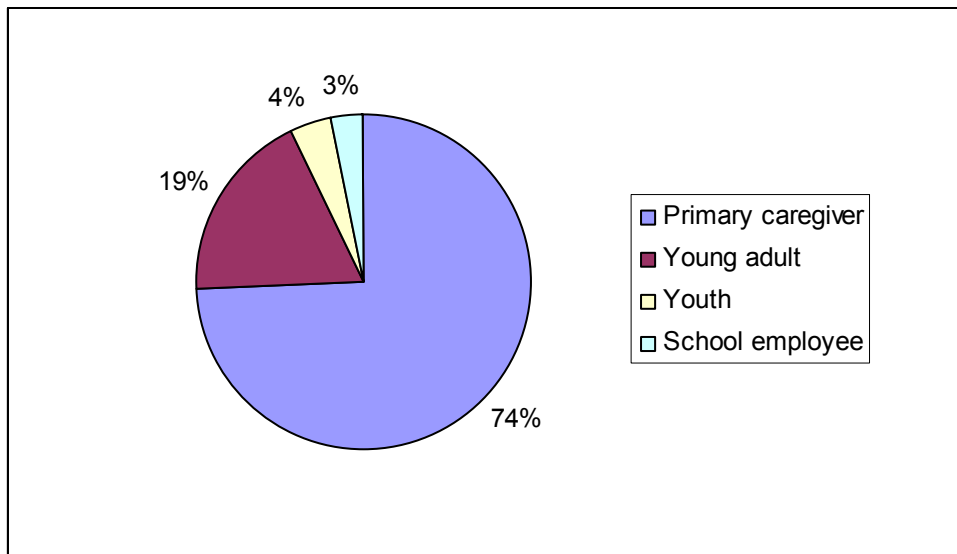
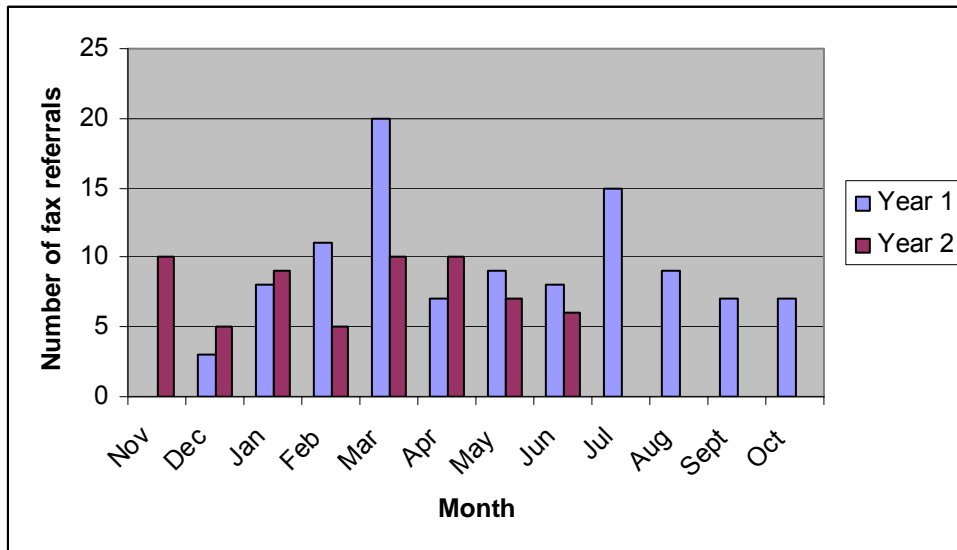


Figure 32. Number of HWTF Callers Who Were Referred by Fax by Month, Nov 05-Jun 07 (n=166)



D.4. Promotion

Research indicates that targeted quitline promotional campaigns are effective at driving callers to the quitline.^{4,8} Large-scale, paid media campaigns to promote Quitline NC were not implemented between November 2005 and June 2007. However, various small-scale, statewide and local level promotions occurred during this time, along with significant investment by the HWTF in market research and the development of a new paid Quitline NC media campaign targeting young adults. This campaign, to be implemented in Year 3, will include new TV and radio ads, posters, and a newly designed Quitline NC website.

During Quitline NC's first 20 months of operation, the HWTF has spent approximately \$430,000 on Quitline NC media promotion. This total does not include dollars spent on market research, local HWTF grantee promotions, or media campaigns funded by other sources (e.g., DHHS). In Year 1, the HWTF spent approximately \$160,000 towards Quitline NC promotion and an additional \$350,000 for formative market research to assist with future promotional campaigns. In Year 2, approximately \$268,000 of HWTF funds were spent on Quitline NC paid media, including \$4,600 for print media, \$83,700 for radio ads, and \$180,000 for TV/cable ads.

Several small-scale media campaigns and community resources were utilized to promote Quitline NC in its first 20 months of service. While none of these campaigns were officially evaluated by UNC TPEP, spikes in callers during key promotional months have been noted in this report.

Table 4 provides an outline of HWTF-funded, Quitline NC paid media campaigns during Years 1 and 2. Other Quitline NC media efforts (funded by the DHHS, Blue Cross Blue Shield of North Carolina [BCBS of NC] or the National Cancer Institute [NCI]) which may have influenced HWTF call volume are listed in Table 5.

Table 4. HWTF-funded Quitline NC Media Promotions, Nov 05-Jun 07

| Campaign | Type of media | Time Period |
|---|---------------------------|--------------------|
| "Cold Turkey" Grassroots Marketing Campaign | Print, website | Fall 2005 |
| CIAA Tournament Radio Campaign | Radio | Feb 27-Mar 1, 2006 |
| "Happy Callers" Radio Campaign | Radio | Jan 1-14, 2007 |
| CIAA Tournament Radio Campaign | Print and radio | Feb 26-Mar 3, 2007 |
| ACC/NCAA Tournament TV/Radio Campaign | TV and radio | Mar 16-Apr 2, 2007 |
| HWTF Teen and College Initiative Grantee Promotions | See description next page | Ongoing |

Table 5. Other Quitline NC Media Promotions, Nov 05-Jun 07

| Campaign | Funder | Type of media | Time Period |
|---|--------|---------------|---------------------------------|
| "Quitting Takes Practice" TV/Radio Campaign | BCBS | TV and radio | Jun 1-Jul 14, 2006 |
| Rick Stoddard TV Campaign | DHHS | TV | Dec 18-24, 2006 & Jan 1-7, 2007 |
| NCI Radio Campaign | NCI | Radio | Jan 1-Feb 24, 2007 |
| NCI "I'm a Quitter" TV PSA Campaign | NCI | TV | Feb 6-25, 2007 |

HWTF Teen and College Initiative Grantee Promotions

The HWTF currently funds two statewide tobacco initiatives, involving 66 grantees, targeting teens and young adults. These initiatives include the NC HWTF Teen Tobacco Use Prevention and Cessation Initiative and the NC HWTF Tobacco-Free Colleges Initiative. In addition to policy advocacy, grantees are encouraged to promote Quitline NC to youth and young adults in their communities, schools, and college campuses through the use of media (e.g., TV interviews, school newspapers), publicity at community events, college class presentations, meetings with student health services, etc. College Initiative grantees alone reported over 1,000 Quitline NC promotions (e.g., class presentations, distribution of Quitline NC materials at campus events, etc.) between April 2006 and June 2007. Paid media is not currently funded for the sole purpose of promoting Quitline NC to youth.

How Callers Heard About Quitline NC

TV, radio, and health professionals were the three most frequently reported ways HWTF callers heard about Quitline NC between November 2005 and June 2007 (Figure 33). TV and radio promotions included both commercials (i.e., paid media) and news broadcasts (i.e., earned media). Overall, HWTF callers more frequently heard about Quitline NC via TV commercials (26%) versus TV news reports (3%). Other frequent “how heard about” responses included family/friends, brochures/newsletters/flyers, health departments, website, and other type of promotions not listed on the caller intake form.

Figure 34 highlights the top ten promotions for primary caregivers/school employees, young adults, and youth. Primary caregivers/school employees and young adults reported the same top five promotions (i.e., TV, radio, health professionals, family/friends, brochure/newsletter/flyers). Websites were also reported by both primary caregivers/school employees and young adults as one of the top ten ways they heard about the quitline.

Compared to adult callers, youth and young adults responded more significantly to TV and radio ads than health professionals. Both youth and young adults were about as likely to hear about Quitline NC from a friend or family member as they were to hear about it from a health professional.

More youth callers appeared to hear about the quitline from the radio than adult and young adult callers. They also more frequently reported hearing about the quitline from a cigarette pack. Cigarette pack refers to QuitAssist™ advertisements placed on Phillip Morris cigarette packs. QuitAssist™ is a free information resource offered by Phillip Morris USA. Information about state Quitlines is referred to on the QuitAssist™ website.

The majority of HWTF callers who heard about Quitline NC from TV, radio, or a health professional were in the preparation stage of quitting (87%, 82%, and 87% respectively). This implies that the top three methods of promotion are reaching the quitline’s target audience of tobacco users who want to quit within the next 30 days.

Additional data tables to accompany this section are included in Appendix C.

**Figure 33: How HWTF callers heard about Quitline NC (Tobacco users only, n=2988)
November 2005-June 2007**

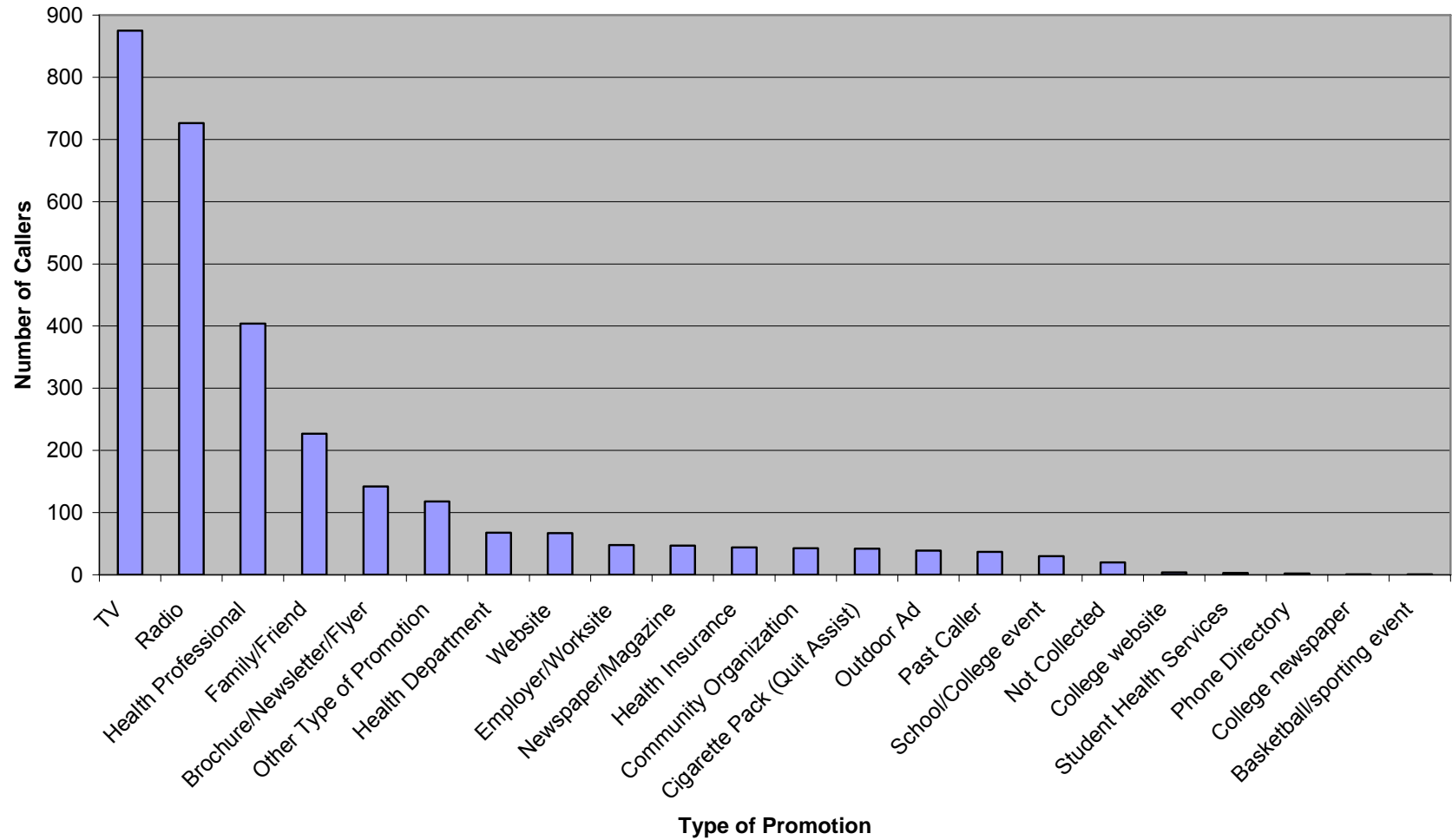
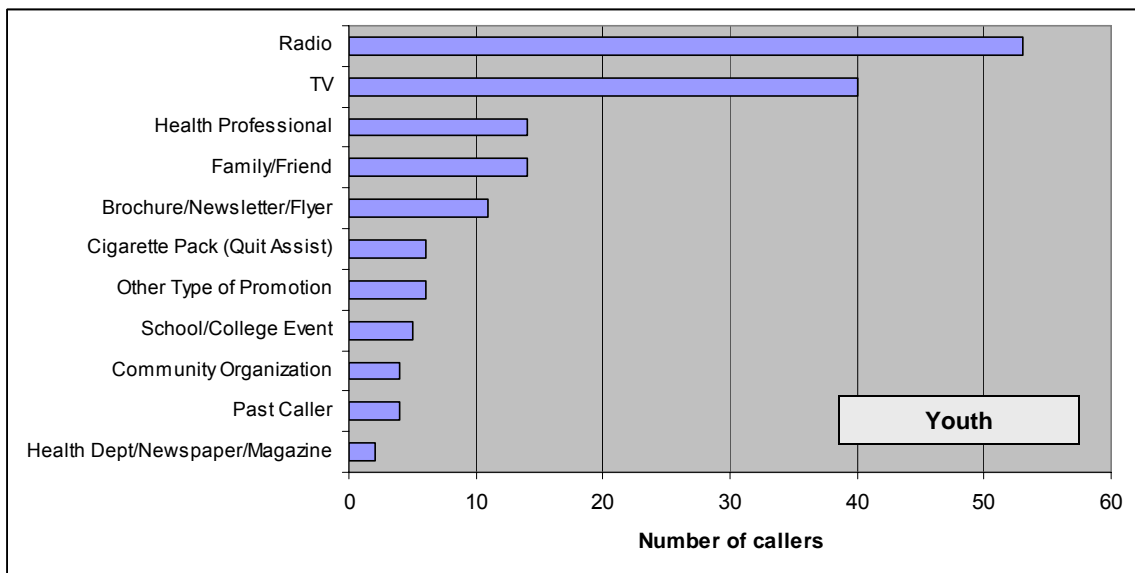
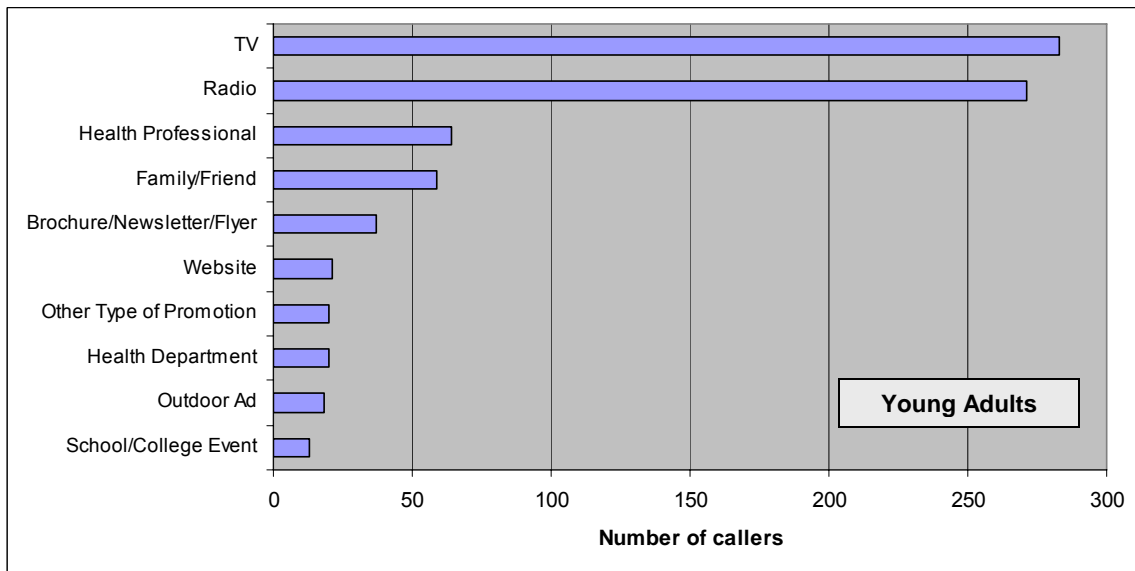
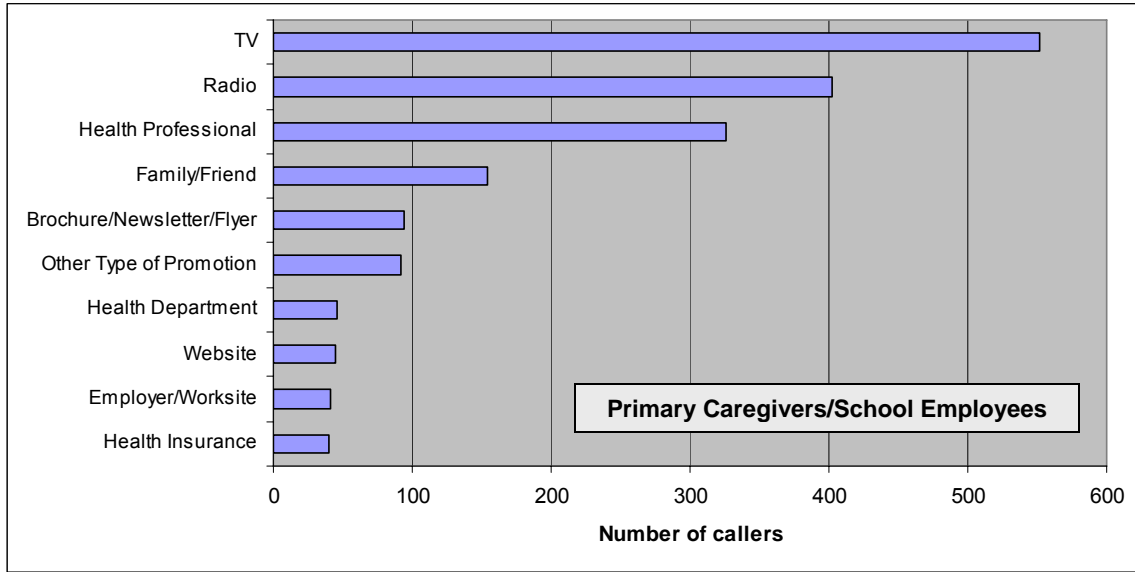


Figure 34. Top Ten “How Heard About” Responses for HWTF Callers



Figures 35-37 show trends in the number of HWTF callers who reported hearing about Quitline NC from one of the top three Quitline NC promotions (i.e., TV, radio, health professionals) over the first 20 months of the program.

Television: As expected, increases in HWTF callers who heard about the quitline via TV were significantly associated with months airing the BCBS/DHHS-funded “Quitting Takes Practice” TV ad campaign (June-July 2006) and Rick Stoddard TV ad campaign (December 2006-January 2007). While both of these campaigns were intended to target adult callers, calls by youth and young adults also increased significantly during these months. Several callers also heard about the quitline via TV in November 2005, when Quitline NC was first launched. A slight increase in callers was observed in March 2007 when the HWTF-funded, ACC/NCAA Tournament TV/radio campaign was aired. This campaign featured Coach O’Brien, Head Coach of the NC State University football team.

Radio: The number of HWTF callers who reported hearing about Quitline NC via radio significantly peaked in January 2007. The HWTF-funded “Happy Callers” Radio Campaign was aired in several NC media markets during this month. Some 1-800-QUIT-NOW radio ads, funded by the National Cancer Institute, were also aired in NC during this time. Smaller peaks in radio associated call volume also occurred in February 2006 and February 2007. These may be associated with CIAA Tournament radio ads aired during these months.

Health Professionals: The number of HWTF callers who reported hearing about Quitline NC from a health professional fluctuated over the first 20 months of the quitline. Health professionals appeared to tell more people about Quitline NC around the time of the fax referral promotional campaign (February-March 2006). Overall, the number of callers referred by health professionals is significantly less than the number of callers who hear about the quitline via TV and radio ads.

Figure 35. HWTF Callers That Heard About Quitline NC via TV, Nov 05-Jun 07 (n=875)

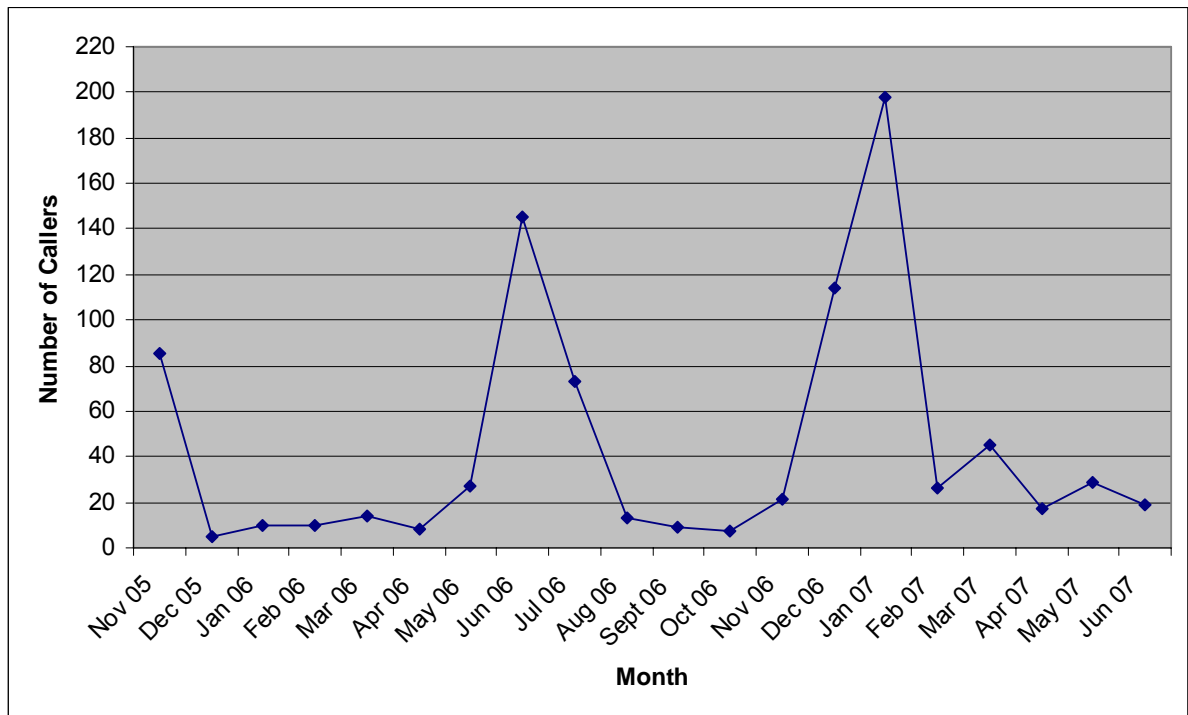


Figure 36. HWTF Callers That Heard About Quitline NC via Radio (n=726)

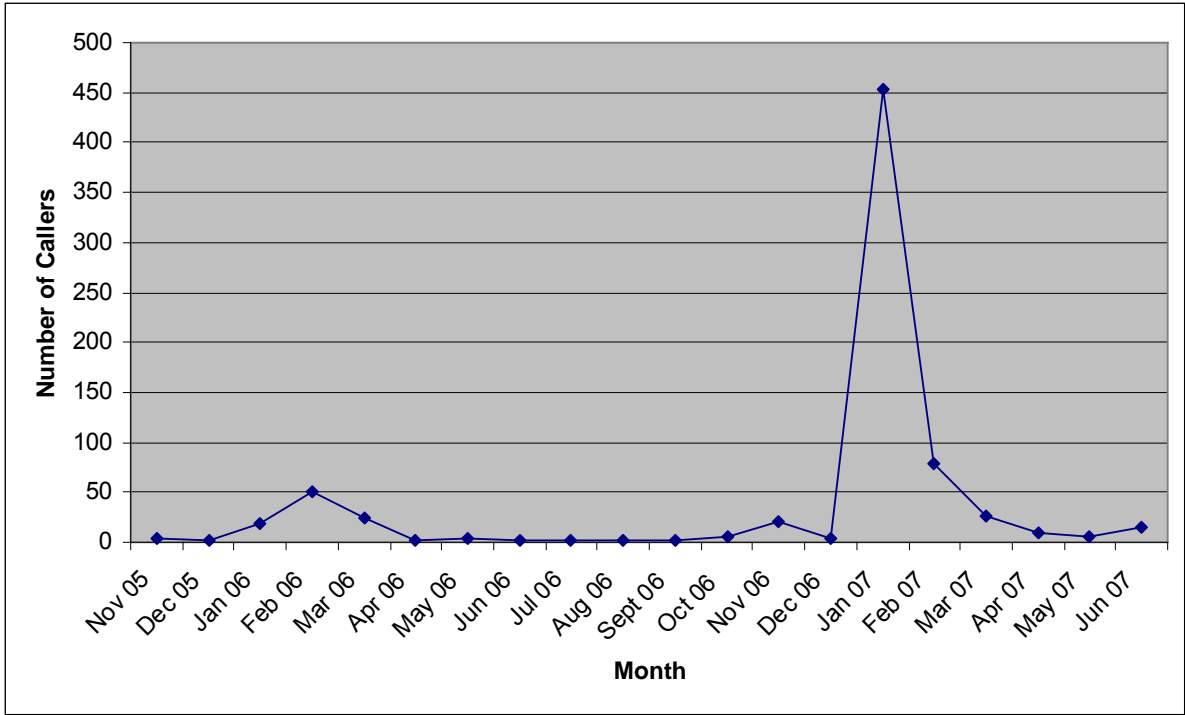
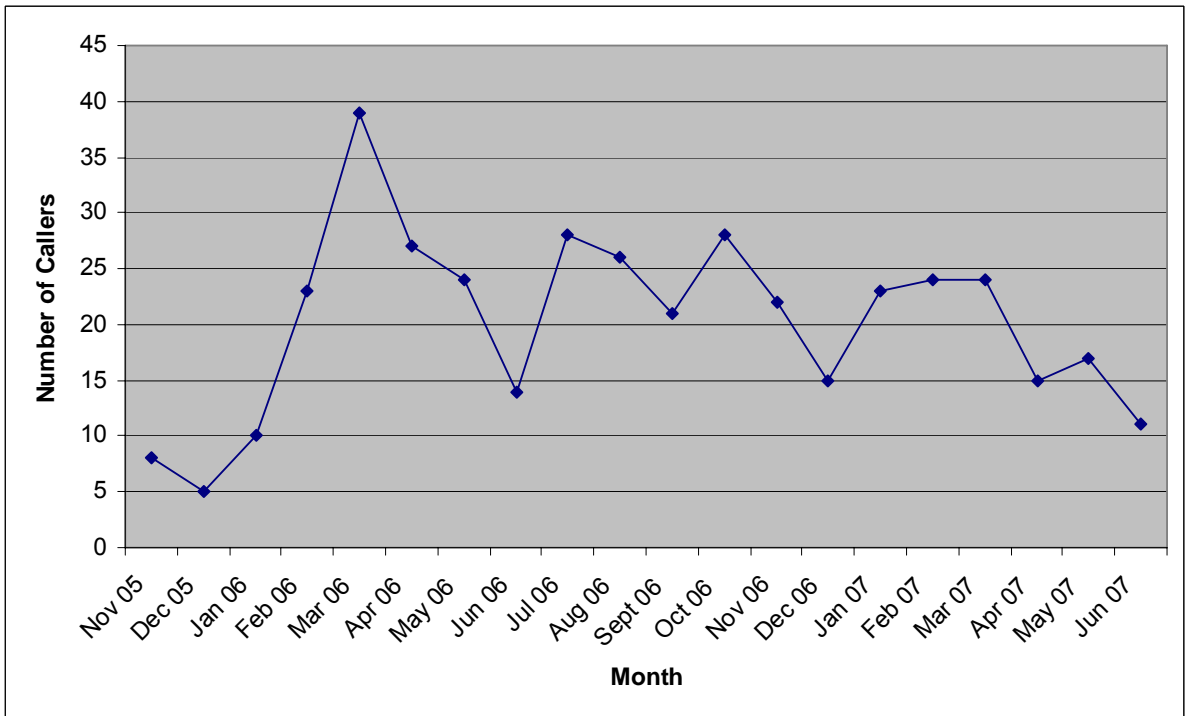


Figure 37. HWTF Callers That Heard About Quitline NC via Health Professionals (n=404)



D.5. Satisfaction and Quit Rates

Seven months post-registration, a sample of Quitline NC callers are asked by the Quitline NC vendor, Free & Clear, to complete an End-Of-Program (EOP) survey to assess their success at quitting and satisfaction with Quitline NC services. The survey is administered by telephone to a randomly selected group of Quitline NC callers. The EOP survey was first initiated with Quitline NC callers in June 2006 (i.e., seven months since the first callers were registered in November 2005).

Quit rate and satisfaction results for Year 1 callers were summarized in the *NC Tobacco Use Quit Line Evaluation Report Year 02* published by Free & Clear in August 2007. UNC TPEP did not complete any additional analysis on EOP survey data. The following section summarizes results for HWTF callers documented in Free & Clear's Report.

For this evaluation, Free & Clear attempted to survey 1073 individuals who called Quitline NC between November 1, 2005 and October 31, 2006. Five hundred (46.6%) participants completed the survey, 35.8%(179) of which were from HWTF-funded populations. In total, 29 youth callers were sampled with 9 (31%) completing the survey and 151 young adult callers were sampled with 50 (33.1%) completing the survey.

Table 6 summarizes satisfaction and quit rate data for HWTF-funded callers who registered with Quitline NC in Year 1. When calculating quit rates, *respondent quit rates* only include sampled callers who respond to the EOP survey. *Intent-to-treat quit rates* are more conservative than respondent quit rates as they include both sampled respondents and non-respondents in the calculation. According to intent-to-treat analysis, all non-respondents are considered to be current smokers.

Table 6. Summary of Satisfaction and Quit Rates for HWTF Callers from Free & Clear Report

| | All HWTF Callers | | Young Adults | | Youth | |
|--|------------------|------|--------------|------|-------|------|
| | N | % | N | % | N | % |
| Satisfaction Rate | | | | | | |
| Satisfied | 157 | 92.4 | 48 | 98.0 | 8 | 88.9 |
| Not Satisfied | 13 | 7.6 | 1 | 2.0 | 1 | 11.1 |
| Number of Serious Quit Attempts Lasting > 24 hours | | | | | | |
| 0 time | 12 | 9.8 | 1 | 3.2 | 0 | 0.0 |
| 1 time | 39 | 31.7 | 10 | 32.3 | 2 | 28.6 |
| 2 times | 29 | 23.6 | 6 | 19.4 | 4 | 57.1 |
| 3 times | 18 | 14.6 | 4 | 12.9 | 0 | 0.0 |
| 4 or more | 25 | 20.3 | 10 | 32.3 | 1 | 14.3 |
| 7-Day Point Prevalence Tobacco Abstinence Rates | | | | | | |
| Respondent 7-Day Quit Rate | 58 | 33.0 | 21 | 42.9 | 3 | 33.3 |
| Intent-to-treat 7-Day Quit Rate | 58 | 12.1 | 21 | 13.9 | 3 | 10.3 |
| 30-Day Point Prevalence Tobacco Abstinence Rates | | | | | | |
| Respondent 30-Day Quit Rate | 53 | 30.1 | 20 | 40.8 | 3 | 33.3 |
| Intent-to-treat 30-Day Quit Rate | 53 | 11.1 | 20 | 13.2 | 3 | 10.3 |

* See Free & Clear Report for information on missing caller data.

Appendix A
Data Tables for Characteristics of Callers

Table A-1. Callers by Age (Tobacco Users Only, n=6164)*

| Age | Funding Source | | | | Total | |
|--------------------|----------------|-------|------|-------|-------|-------|
| | HWTF | | DHHS | | | |
| | # | % | # | % | # | % |
| 0 to 17 years old | 165 | 5.5 | 0 | .0 | 165 | 2.7 |
| 18 to 24 years old | 869 | 29.1 | 0 | .0 | 869 | 14.1 |
| 25 to 34 years old | 739 | 24.7 | 471 | 14.8 | 1210 | 19.6 |
| 35 to 44 years old | 707 | 23.7 | 618 | 19.5 | 1325 | 21.5 |
| 45 to 54 years old | 362 | 12.1 | 1053 | 33.1 | 1415 | 23.0 |
| 55 to 64 years old | 121 | 4.1 | 735 | 23.1 | 856 | 13.9 |
| 65 years and older | 24 | 0.8 | 300 | 9.4 | 324 | 5.3 |
| Total | 2987 | 100.0 | 3177 | 100.0 | 6164 | 100.0 |

* 390 callers missing age (1 HWTF, 389 DHHS)

Table A-2. Callers by Gender (Tobacco Users Only, n=6554)

| Gender | HWTF Status | | | | | | | | DHHS | | Total | |
|--------|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| Female | 85 | 51.5 | 439 | 50.6 | 1224 | 66.1 | 73 | 71.6 | 1976 | 55.4 | 3797 | 57.9 |
| Male | 80 | 48.5 | 429 | 49.4 | 629 | 33.9 | 29 | 2834 | 1409 | 39.5 | 2576 | 39.3 |
| Other* | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 181 | 5.1 | 181 | 2.8 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 100.0 | 3566 | 100.0 | 6554 | 100.0 |

* Refused or not collected.

Table A-3. Callers by Pregnancy Status (Female Tobacco Users Only, n=3797)

| Pregnancy Group | HWTF Status | | | | | | | | DHHS | | Total | |
|--------------------|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| None | 76 | 89.4 | 354 | 80.6 | 1177 | 96.2 | 70 | 95.9 | 1937 | 98.0 | 3614 | 95.2 |
| Planning Pregnancy | 3 | 3.5 | 23 | 5.2 | 12 | 1.0 | 3 | 4.1 | 21 | 1.1 | 62 | 1.6 |
| Pregnant | 5 | 5.9 | 55 | 12.5 | 30 | 2.5 | 0 | 0.0 | 18 | 0.9 | 108 | 2.8 |
| Breast Feeding | 1 | 1.2 | 7 | 1.6 | 5 | 0.4 | 0 | 0.0 | 0 | 0.0 | 13 | 0.3 |
| Total | 85 | 100.0 | 439 | 100.0 | 1224 | 100.0 | 73 | 100.0 | 1976 | 100.0 | 3797 | 100.0 |

Table A-4. Callers by Ethnicity (Tobacco Users Only, n=6554)

| Ethnicity | HWTF Status | | | | | | | | DHHS | | Total | |
|--------------|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| Hispanic | 12 | 7.3 | 38 | 4.4 | 56 | 3.0 | 4 | 3.9 | 69 | 1.9 | 179 | 2.7 |
| Non-Hispanic | 143 | 86.7 | 791 | 91.1 | 1743 | 94.1 | 96 | 94.1 | 3016 | 84.6 | 5789 | 88.3 |
| Other* | 10 | 6.0 | 39 | 4.5 | 54 | 2.9 | 2 | 2.0 | 481 | 13.5 | 586 | 9.0 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 100.0 | 3566 | 100.0 | 6554 | 100.0 |

* Refused, does not know, or not collected.

Table A-5. Callers by Race (Tobacco Users Only, n=6554)

| Race | HWTF Status | | | | | | | | DHHS | | Total | |
|--|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| White | 101 | 61.2 | 484 | 55.8 | 981 | 52.9 | 52 | 51.0 | 2051 | 57.5 | 3669 | 56.0 |
| Black or African American | 39 | 23.6 | 271 | 31.2 | 712 | 38.4 | 45 | 44.0 | 880 | 24.7 | 1947 | 29.7 |
| Other Race | 12 | 7.3 | 48 | 5.5 | 61 | 3.3 | 2 | 2.0 | 84 | 2.4 | 207 | 3.2 |
| American Indian or Alaskan Native | 2 | 1.2 | 13 | 1.5 | 39 | 2.1 | 1 | 1.0 | 53 | 1.5 | 108 | 1.6 |
| Asian | 1 | 0.6 | 12 | 1.4 | 8 | 0.4 | 0 | 0.0 | 12 | 0.3 | 33 | 0.5 |
| Native Hawaiian/Other Pacific Islander | 0 | 0.0 | 1 | 0.1 | 1 | 0.1 | 0 | 0.0 | 1 | 0.0 | 3 | 0.0 |
| Other* | 10 | 6.1 | 39 | 4.5 | 51 | 2.8 | 2 | 2.0 | 485 | 13.6 | 587 | 9.0 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 100.0 | 3566 | 100.0 | 6554 | 100.0 |

* Refused, does not know, or not collected.

Table A-6. Callers by Language (Tobacco Users Only, n=6554)

| Language | HWTF Status | | | | | | | | DHHS | | Total | |
|----------|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| English | 165 | 100.0 | 862 | 99.3 | 1839 | 99.2 | 102 | 100.0 | 3549 | 99.5 | 6517 | 99.4 |
| Spanish | 0 | 0.0 | 6 | 0.7 | 14 | 0.8 | 0 | 0.0 | 17 | 0.5 | 37 | 0.6 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 0.0 | 3566 | 100.0 | 6554 | 100.0 |

Table A-7. Callers by Highest Level of Education Attained (Tobacco Users Only, n=6554)

| Highest Level of Education | HWTF Status | | | | | | | | DHHS | | Total | |
|----------------------------|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| Less than grade 9 | 0 | 0.0 | 22 | 2.5 | 57 | 3.1 | 2 | 2.0 | 131 | 3.7 | 212 | 3.2 |
| Grade 9-11, no degree | 0 | 0.0 | 137 | 15.8 | 252 | 13.6 | 4 | 3.9 | 443 | 12.4 | 836 | 12.8 |
| High School degree | 0 | 0.0 | 237 | 27.3 | 541 | 29.2 | 12 | 11.8 | 865 | 24.3 | 1655 | 25.3 |
| GED | 0 | 0.0 | 45 | 5.2 | 95 | 5.1 | 2 | 2.0 | 152 | 4.3 | 294 | 4.5 |
| Some College or Univ. | 0 | 0.0 | 221 | 25.5 | 551 | 29.7 | 39 | 38.2 | 929 | 26.1 | 1740 | 26.5 |
| College or Univ degree | 0 | 0.0 | 58 | 6.7 | 308 | 16.6 | 41 | 40.2 | 557 | 15.6 | 964 | 14.7 |
| Other* | 165 | 100.0 | 148 | 17.0 | 49 | 2.7 | 2 | 2.0 | 489 | 13.7 | 853 | 13.0 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 100.0 | 3566 | 100.0 | 6554 | 100.0 |

* Refused or not collected.

Table A-8. Callers Responding Yes to Having a Chronic Condition* (Tobacco Users Only, n=3534)

| Chronic Condition | HWTF Status | | | | | | | | DHHS | | Total | |
|---------------------------------------|-------------|------|--------------|------|--------------------|------|------------------|------|------|------|-------|------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| Asthma | 11 | 11.8 | 90 | 16.3 | 93 | 9.1 | 3 | 6.1 | 97 | 5.3 | 294 | 8.3 |
| Chronic Obstructive Pulmonary Disease | 0 | 0.0 | 0 | 0.0 | 37 | 3.6 | 0 | 0.0 | 117 | 6.4 | 154 | 4.4 |
| Coronary Artery Disease | 0 | 0.0 | 0 | 0.0 | 14 | 1.4 | 1 | 2.0 | 54 | 3.0 | 69 | 2.0 |
| Diabetes | 0 | 0.0 | 5 | 0.9 | 39 | 3.8 | 7 | 14.3 | 120 | 6.6 | 171 | 4.8 |
| Multiple Diseases | 1 | 1.1 | 3 | 0.5 | 62 | 6.1 | 5 | 10.2 | 214 | 11.8 | 285 | 8.1 |
| None | 81 | 87.1 | 455 | 82.3 | 773 | 75.9 | 33 | 67.3 | 1219 | 66.9 | 2561 | 72.5 |

Table A-9. Callers by Type of Health Insurance (Tobacco Users Only, n=6554)

| NC Health Plan | HWTF Status | | | | | | | | DHHS | | Total | |
|------------------------|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| Uninsured | 9 | 5.5 | 364 | 41.9 | 549 | 29.6 | 15 | 14.7 | 831 | 23.3 | 1768 | 27.0 |
| Medicaid | 3 | 1.8 | 158 | 18.2 | 346 | 18.7 | 2 | 2.0 | 431 | 12.1 | 940 | 14.3 |
| Blue Cross/Blue Shield | 0 | 0.0 | 122 | 14.1 | 318 | 17.2 | 22 | 21.6 | 472 | 13.2 | 934 | 14.3 |
| Other Health Plan | 5 | 3.0 | 105 | 12.1 | 249 | 13.4 | 15 | 14.7 | 444 | 12.5 | 818 | 12.5 |
| Medicare | 0 | 0.0 | 5 | 0.6 | 83 | 4.5 | 2 | 2.0 | 536 | 15.0 | 626 | 9.6 |
| United Health Care | 0 | 0.0 | 18 | 2.1 | 90 | 4.9 | 7 | 6.9 | 112 | 3.1 | 227 | 3.5 |
| Cigna | 0 | 0.0 | 20 | 2.3 | 65 | 3.5 | 0 | 0.0 | 79 | 2.2 | 164 | 2.5 |
| State Employees Plan | 0 | 0.0 | 3 | 0.3 | 34 | 1.8 | 18 | 17.6 | 57 | 1.6 | 112 | 1.7 |
| Aetna | 0 | 0.0 | 10 | 1.2 | 24 | 1.3 | 2 | 2.0 | 43 | 1.2 | 79 | 1.2 |
| Well Path | 0 | 0.0 | 5 | 0.6 | 12 | 0.6 | 3 | 2.9 | 21 | 0.6 | 41 | 0.6 |
| First Carolina Care | 0 | 0.0 | 1 | 0.1 | 2 | 0.1 | 0 | 0.0 | 2 | 0.1 | 5 | 0.1 |
| Other* | 148 | 89.7 | 54 | 6.2 | 50 | 2.7 | 32 | 2.9 | 477 | 13.4 | 732 | 11.2 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 100.0 | 3566 | 100.0 | 6554 | 100.0 |

* Refused, does not know, or not collected.

Table A-10. Callers by NC County (Tobacco Users Only, n=6554)

| County | HWTF Status | | | | DHHS | Total | |
|------------|-------------|--------------|--------------------|------------------|------|-------|-----|
| | Youth | Young Adults | Primary Caregivers | School Employees | | # | % |
| ALAMANCE | 2 | 17 | 38 | 2 | 75 | 134 | 2.0 |
| ALEXANDER | 4 | 2 | 3 | 0 | 9 | 18 | 0.3 |
| ALLEGHANY | 0 | 1 | 4 | 0 | 11 | 16 | 0.2 |
| ANSON | 0 | 6 | 10 | 0 | 11 | 27 | 0.4 |
| ASHE | 0 | 2 | 5 | 0 | 11 | 18 | 0.3 |
| AVERY | 0 | 1 | 3 | 0 | 6 | 10 | 0.2 |
| BEAUFORT | 0 | 2 | 9 | 1 | 12 | 24 | 0.4 |
| BERTIE | 1 | 0 | 3 | 1 | 8 | 13 | 0.2 |
| BLADEN | 0 | 1 | 4 | 0 | 10 | 15 | 0.2 |
| BRUNSWICK | 3 | 5 | 13 | 0 | 27 | 48 | 0.7 |
| BUNCOMBE | 3 | 20 | 48 | 3 | 108 | 182 | 2.8 |
| BURKE | 0 | 3 | 14 | 1 | 36 | 54 | 0.8 |
| CABARRUS | 4 | 16 | 24 | 0 | 36 | 80 | 1.2 |
| CALDWELL | 2 | 4 | 5 | 0 | 24 | 35 | 0.5 |
| CAMDEN | 0 | 0 | 2 | 0 | 1 | 3 | 0.0 |
| CARTERET | 3 | 2 | 8 | 0 | 28 | 41 | 0.6 |
| CASWELL | 0 | 1 | 7 | 0 | 15 | 23 | 0.4 |
| CATAWBA | 1 | 14 | 30 | 2 | 50 | 97 | 1.5 |
| CHATHAM | 1 | 4 | 18 | 4 | 25 | 52 | 0.8 |
| CHEROKEE | 0 | 2 | 3 | 0 | 12 | 17 | 0.3 |
| CHOWAN | 0 | 2 | 4 | 0 | 19 | 25 | 0.4 |
| CLAY | 1 | 0 | 2 | 0 | 3 | 6 | 0.1 |
| CLEVELAND | 2 | 7 | 21 | 2 | 36 | 68 | 1.0 |
| COLUMBUS | 0 | 2 | 13 | 0 | 20 | 35 | 0.5 |
| CRAVEN | 0 | 5 | 12 | 1 | 35 | 53 | 0.8 |
| CUMBERLAND | 3 | 28 | 72 | 1 | 97 | 201 | 3.1 |
| CURRITUCK | 0 | 0 | 2 | 0 | 4 | 6 | 0.1 |
| DARE | 1 | 1 | 3 | 1 | 12 | 18 | 0.3 |
| DAVIDSON | 5 | 13 | 31 | 1 | 41 | 91 | 1.4 |
| DAVIE | 2 | 1 | 8 | 0 | 7 | 18 | 0.3 |
| DUPLIN | 1 | 2 | 9 | 0 | 16 | 28 | 0.4 |
| DURHAM | 9 | 33 | 81 | 8 | 134 | 265 | 4.0 |
| EDGECOMBE | 0 | 3 | 18 | 0 | 16 | 37 | 0.6 |
| FORSYTH | 13 | 32 | 81 | 7 | 125 | 258 | 3.9 |
| FRANKLIN | 2 | 4 | 13 | 0 | 27 | 46 | 0.7 |
| GASTON | 5 | 17 | 62 | 2 | 59 | 145 | 2.2 |
| GATES | 0 | 0 | 1 | 0 | 3 | 4 | 0.1 |
| GRAHAM | 0 | 1 | 3 | 0 | 3 | 7 | 0.1 |
| GRANVILLE | 0 | 6 | 13 | 0 | 41 | 60 | 0.9 |
| GREENE | 0 | 0 | 1 | 0 | 5 | 6 | 0.1 |
| GUILFORD | 16 | 66 | 137 | 12 | 197 | 428 | 6.5 |
| HALIFAX | 3 | 6 | 11 | 0 | 18 | 38 | 0.6 |

| Table A-10 contd. County | HWTF Status | | | | DHHS | Total | |
|------------------------------------|-------------|--------------|--------------------|------------------|------|-------|-----|
| | Youth | Young Adults | Primary Caregivers | School Employees | | # | % |
| HARNETT | 2 | 7 | 19 | 3 | 30 | 61 | 0.9 |
| HAYWOOD | 3 | 7 | 4 | 0 | 23 | 37 | 0.6 |
| HENDERSON | 1 | 10 | 21 | 1 | 48 | 81 | 1.2 |
| HERTFORD | 0 | 0 | 4 | 0 | 10 | 14 | 0.2 |
| HOKE | 0 | 2 | 7 | 0 | 7 | 16 | 0.2 |
| HYDE | 0 | 1 | 0 | 0 | 3 | 4 | 0.1 |
| IREDELL | 1 | 8 | 25 | 0 | 39 | 73 | 1.1 |
| JACKSON | 0 | 2 | 6 | 0 | 13 | 21 | 0.3 |
| JOHNSTON | 2 | 9 | 29 | 4 | 45 | 89 | 1.4 |
| JONES | 0 | 0 | 4 | 1 | 3 | 8 | 0.1 |
| LEE | 0 | 8 | 20 | 1 | 25 | 54 | 0.8 |
| LENOIR | 0 | 6 | 17 | 1 | 21 | 45 | 0.7 |
| LINCOLN | 0 | 4 | 4 | 0 | 18 | 26 | 0.4 |
| MACON | 1 | 0 | 7 | 0 | 23 | 31 | 0.5 |
| MADISON | 0 | 0 | 3 | 0 | 7 | 10 | 0.2 |
| MARTIN | 0 | 1 | 7 | 1 | 11 | 20 | 0.3 |
| MCDOWELL | 1 | 6 | 10 | 0 | 23 | 40 | 0.6 |
| MECKLENBURG | 14 | 110 | 167 | 15 | 297 | 603 | 9.2 |
| MITCHELL | 0 | 1 | 4 | 0 | 4 | 9 | 0.1 |
| MONTGOMERY | 0 | 2 | 8 | 0 | 8 | 18 | 0.3 |
| MOORE | 1 | 6 | 15 | 3 | 13 | 38 | 0.6 |
| NASH | 2 | 3 | 18 | 2 | 38 | 63 | 1.0 |
| NEW HANOVER | 1 | 12 | 30 | 0 | 51 | 94 | 1.4 |
| NORTHAMPTON | 0 | 2 | 1 | 0 | 8 | 11 | 0.2 |
| ONSLOW | 2 | 16 | 21 | 1 | 30 | 70 | 1.1 |
| ORANGE | 3 | 9 | 17 | 0 | 48 | 77 | 1.2 |
| PAMLICO | 0 | 2 | 1 | 0 | 0 | 3 | 0.0 |
| PASQUOTANK | 0 | 0 | 6 | 0 | 11 | 17 | 0.3 |
| PENDER | 1 | 1 | 5 | 0 | 8 | 15 | 0.2 |
| PERQUIMANS | 1 | 0 | 1 | 0 | 10 | 12 | 0.2 |
| PERSON | 0 | 4 | 10 | 0 | 20 | 34 | 0.5 |
| PITT | 1 | 12 | 20 | 0 | 30 | 63 | 1.0 |
| POLK | 0 | 1 | 6 | 1 | 6 | 14 | 0.2 |
| RANDOLPH | 1 | 15 | 25 | 0 | 45 | 86 | 1.3 |
| RICHMOND | 2 | 4 | 17 | 1 | 23 | 47 | 0.7 |
| ROBESON | 1 | 9 | 29 | 3 | 30 | 72 | 1.1 |
| ROCKINGHAM | 4 | 13 | 30 | 2 | 53 | 102 | 1.6 |
| ROWAN | 3 | 9 | 27 | 1 | 17 | 57 | 0.9 |
| RUTHERFORD | 0 | 2 | 12 | 0 | 28 | 42 | 0.6 |
| SAMPSON | 0 | 5 | 12 | 0 | 18 | 35 | 0.5 |
| SCOTLAND | 0 | 4 | 9 | 0 | 15 | 28 | 0.4 |
| STANLY | 0 | 8 | 10 | 0 | 19 | 37 | 0.6 |
| STOKES | 0 | 5 | 8 | 1 | 20 | 34 | 0.5 |
| SURRY | 0 | 3 | 14 | 0 | 25 | 42 | 0.6 |

| Table A-10 contd. | HWTF Status | | | | DHHS | Total | |
|----------------------|-------------|--------------|--------------------|------------------|------|-------|-------|
| | Youth | Young Adults | Primary Caregivers | School Employees | | # | % |
| County | | | | | | | |
| SWAIN | 0 | 3 | 1 | 0 | 4 | 8 | 0.1 |
| TRANSYLVANIA | 0 | 0 | 4 | 0 | 12 | 16 | 0.2 |
| TYRRELL | 0 | 0 | 2 | 0 | 4 | 6 | 0.1 |
| UNION | 3 | 13 | 24 | 0 | 33 | 73 | 1.1 |
| VANCE | 0 | 7 | 12 | 0 | 26 | 45 | 0.7 |
| WAKE | 7 | 97 | 144 | 5 | 250 | 503 | 7.7 |
| WARREN | 0 | 3 | 6 | 0 | 6 | 15 | 0.2 |
| WASHINGTON | 0 | 1 | 1 | 1 | 8 | 11 | 0.2 |
| WATAUGA | 1 | 7 | 3 | 0 | 24 | 35 | 0.5 |
| WAYNE | 1 | 12 | 23 | 1 | 48 | 85 | 1.3 |
| WILKES | 2 | 3 | 15 | 0 | 30 | 50 | 0.8 |
| WILSON | 0 | 12 | 20 | 1 | 30 | 63 | 1.0 |
| YADKIN | 0 | 2 | 2 | 0 | 8 | 12 | 0.2 |
| YANCEY | 0 | 1 | 1 | 0 | 4 | 6 | 0.1 |
| Unknown | 16 | 46 | 35 | 4 | 422 | 522 | 7.9 |
| Total | 165 | 868 | 1853 | 102 | 3566 | 6554 | 100.0 |

Table A-11. Callers by Age Started Using Tobacco (Tobacco Users Only, n=6554)

| Start Age | HWTF Status | | | | | | | | DHHS | | Total | |
|-----------------------|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| 0-11 years old | 47 | 28.5 | 90 | 10.4 | 140 | 7.6 | 6 | 5.9 | 615 | 17.2 | 898 | 13.7 |
| 12-17 years old | 116 | 70.3 | 595 | 68.5 | 1077 | 58.1 | 50 | 49.0 | 1725 | 48.4 | 3563 | 54.4 |
| 18-24 years old | 0 | 0.0 | 175 | 20.2 | 493 | 26.6 | 37 | 36.3 | 901 | 25.3 | 1606 | 24.5 |
| 25 years old or older | 0 | 0.0 | 0 | 7.6 | 140 | 7.6 | 9 | 8.8 | 290 | 8.1 | 439 | 6.7 |
| Other* | 2 | 1.2 | 8 | 0.9 | 3 | 0.2 | 0 | 0.0 | 35 | 1.0 | 48 | 0.8 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 100.0 | 3655 | 100.0 | 6554 | 100.0 |

* Refused or not collected.

Table A-12. Callers by Type of Tobacco Use (Tobacco Users Only, n=6462)*

| Type of Tobacco Use | HWTF Status | | | | | | | | DHHS | | Total | |
|-----------------------|-------------|-------|--------------|-------|--------------------|------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| Cigarette | 139 | 88.0 | 757 | 90.8 | 1734 | 94.3 | 94 | 92.2 | 3025 | 85.7 | 5749 | 89.0 |
| Multiple** | 5 | 3.2 | 27 | 3.2 | 20 | 1.1 | 2 | 2.0 | 32 | 0.9 | 86 | 1.3 |
| Smokeless | 3 | 1.9 | 10 | 1.2 | 24 | 1.3 | 0 | 0.0 | 24 | 0.7 | 61 | 0.9 |
| Cigar | 3 | 1.9 | 13 | 1.6 | 20 | 1.1 | 4 | 3.9 | 24 | 0.7 | 64 | 1.0 |
| Other type of tobacco | 0 | 0.0 | 1 | 0.1 | 2 | 0.1 | 0 | 0.0 | 3 | 0.1 | 6 | 0.1 |
| Unknown | 8 | 5.1 | 26 | 3.1 | 37 | 2.0 | 2 | 2.0 | 422 | 12.0 | 495 | 7.7 |
| Total | 158 | 100.0 | 834 | 100.0 | 1838 | 10.0 | 102 | 100.0 | 3530 | 100.0 | 6462 | 100.0 |

*92 callers were missing data

** Callers who reported using cigarettes and some other form of tobacco were categorized as multiple tobacco users only.

Table A-13. Callers by Cigarette Frequency (Cigarette Users Only, n=5749)

| Cigarette Use Frequency | HWTF Status | | | | | | | | DHHS | | Total | |
|-------------------------|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| Every day | 125 | 89.9 | 701 | 92.6 | 1588 | 91.6 | 87 | 92.6 | 2726 | 90.1 | 5227 | 90.9 |
| Some days | 11 | 7.9 | 21 | 2.8 | 62 | 3.6 | 5 | 5.3 | 109 | 3.6 | 208 | 3.6 |
| Other** | 3 | 2.2 | 35 | 4.6 | 84 | 4.8 | 2 | 2.1 | 190 | 6.3 | 314 | 5.5 |
| Total | 139 | 100.0 | 757 | 100.0 | 1734 | 100.0 | 94 | 100.0 | 3025 | 100.0 | 5749 | 100.0 |

*Refused, not collected, and not at all responses.

Table A-14. Callers by Stage of Readiness to Change (Tobacco Users Only, n=6554)

| Stage | HWTF Status | | | | | | | | DHHS | | Total | |
|------------------|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| Precontemplation | 2 | 1.2 | 2 | 0.2 | 2 | 0.1 | 0 | 0.0 | 17 | 0.5 | 23 | 0.4 |
| Contemplation | 13 | 7.9 | 27 | 3.1 | 87 | 4.7 | 3 | 2.9 | 207 | 5.8 | 337 | 5.1 |
| Preparation | 136 | 82.4 | 745 | 85.8 | 1528 | 82.5 | 80 | 78.4 | 2603 | 73.0 | 5092 | 77.7 |
| Action | 7 | 4.2 | 63 | 7.3 | 178 | 9.6 | 16 | 15.7 | 269 | 7.5 | 533 | 8.1 |
| Maintenance | 0 | 0.0 | 6 | 0.7 | 17 | 0.9 | 1 | 1.0 | 46 | 1.3 | 70 | 1.1 |
| Unknown | 7 | 4.2 | 25 | 2.9 | 41 | 2.2 | 2 | 2.0 | 424 | 11.9 | 499 | 7.6 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 100.0 | 3566 | 100.0 | 6554 | 100.0 |

Table A-15. Callers by Type of Service Requested (Tobacco Users Only, n=6554)

| Call Program | HWTF Status | | | | | | | | DHHS | | Total | |
|---------------------|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| One-Call Program | 60 | 36.4 | 280 | 32.3 | 577 | 31.1 | 25 | 24.5 | 1084 | 30.4 | 2026 | 30.9 |
| Multi- Call Program | 87 | 52.7 | 510 | 58.8 | 1183 | 63.8 | 73 | 71.6 | 1913 | 53.6 | 3766 | 57.5 |
| General Questions | 7 | 4.2 | 28 | 3.2 | 38 | 2.1 | 2 | 2.0 | 415 | 11.6 | 490 | 7.5 |
| Materials Only | 5 | 3.0 | 23 | 2.6 | 11 | 0.6 | 2 | 2.0 | 94 | 2.6 | 135 | 2.1 |
| All Transfer Types | 0 | 0.0 | 0 | 0.0 | 3 | 0.2 | 0 | 0.0 | 4 | 0.1 | 7 | 0.1 |
| Not Completed | 6 | 3.6 | 27 | 3.1 | 41 | 2.2 | 0 | 0.0 | 56 | 1.6 | 130 | 2.0 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 100.0 | 3566 | 100.0 | 6554 | 100.0 |

Table A-16. Callers by First Call to Quitline NC in 12 Months (Tobacco Users Only, n=6554)

| First Call in 12 months | HWTF Status | | | | | | | | DHHS | | Total | |
|-------------------------|-------------|-------|--------------|-------|--------------------|-------|------------------|-------|------|-------|-------|-------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| Yes | 155 | 93.9 | 831 | 95.7 | 1748 | 94.3 | 95 | 93.1 | 3192 | 89.5 | 6021 | 91.9 |
| No | 10 | 6.1 | 36 | 4.1 | 104 | 5.6 | 7 | 6.9 | 367 | 10.3 | 524 | 8.0 |
| Not Collected | 0 | 0.0 | 1 | 0.1 | 1 | 0.1 | 0 | 0.0 | 7 | 0.2 | 9 | 0.1 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 100.0 | 3566 | 100.0 | 6554 | 100.0 |

Table A-17. Youth and Young Adult Callers Who Currently Attend School (Tobacco Users Only, n=1033)

| Currently Attending School? | HWTF Status | | | | | |
|-----------------------------|-------------|-------|--------------|-------|-------|-------|
| | Youth | | Young Adults | | Total | |
| | # | % | # | % | # | % |
| Yes | 116 | 70.3 | 290 | 33.4 | 406 | 39.3 |
| No | 37 | 22.4 | 519 | 59.8 | 556 | 53.8 |
| Other* | 12 | 7.2 | 59 | 6.9 | 71 | 6.9 |
| Total | 165 | 100.0 | 868 | 100.0 | 1033 | 100.0 |

* Refused and not collected.

Table A-18. Current School Attended by Youth and Young Adult Callers (Tobacco Users Only, n=406)*

| Current School Level | HWTF Status | | | | | |
|----------------------|-------------|-------|--------------|-------|-------|-------|
| | Youth | | Young Adults | | Total | |
| | # | % | # | % | # | % |
| College | 2 | 1.7 | 225 | 77.6 | 227 | 55.9 |
| High School | 104 | 98.7 | 61 | 21.0 | 165 | 40.6 |
| Middle School | 9 | 7.8 | 2 | 0.7 | 11 | 2.7 |
| Grade School | 1 | 0.9 | 0 | 0.0 | 1 | 0.2 |
| Refused | 0 | 0.0 | 2 | 0.6 | 2 | 0.4 |
| Total | 116 | 100.0 | 290 | 100.0 | 406 | 100.0 |

* Includes callers under 24 years old responding "Yes" to "Are you Currently Attending School?"

Table A-19. Youth Attending Schools with 100% TFS Policy (Tobacco Users Only, n=116)*

| Does your school have a 100% TFS policy? | # Youth | % |
|--|---------|-------|
| Yes | 81 | 69.8 |
| No | 23 | 19.8 |
| Not Collected/Asked/Refused | 12 | 10.4 |
| Total | 116 | 100.0 |

* Includes youth callers who responded "Yes" to "Are you Currently Attending School?"

Table A-20. Youth Motivated to Quit by 100% TFS Policy (Tobacco Users Only, n=81)*

| Did your school policy motivate you to quit? | # Youth | % |
|--|---------|-------|
| Yes | 33 | 40.8 |
| No | 44 | 54.3 |
| Not Collected | 4 | 4.9 |
| Total | 81 | 100.0 |

* Includes youth callers who responded "Yes" to "Does your school have a 100% TFS Policy?"

A-21. Youth and Young Adult Callers Who Are Currently Working (Tobacco Users Only, n=1033)

| Currently Working? | HWTF Status | | | | Total | |
|--------------------|-------------|-------|--------------|-------|-------|-------|
| | Youth | | Young Adults | | | |
| | # | % | # | % | # | % |
| Yes | 61 | 37.0 | 525 | 60.5 | 586 | 56.7 |
| No | 92 | 55.8 | 281 | 32.4 | 373 | 36.1 |
| Other* | 12 | 7.2 | 62 | 7.2 | 74 | 7.2 |
| Total | 165 | 100.0 | 868 | 100.0 | 1033 | 100.0 |

* Unknown, does not know, refused, and not collected.

Table A-22. Type of Employment for Youth and Young Adult Callers (Tobacco Users Only, n=586)*

| Current Type of Employment | HWTF Status | | | | Total | |
|----------------------------|-------------|-------|--------------|-------|-------|-------|
| | Youth | | Young Adults | | | |
| | # | % | # | % | # | % |
| Part Time | 41 | 67.2 | 158 | 30.1 | 199 | 33.9 |
| Full Time | 18 | 29.5 | 346 | 65.9 | 364 | 62.1 |
| Other** | 2 | 3.3 | 21 | 4.0 | 23 | 3.9 |
| Total | 61 | 100.0 | 525 | 100.0 | 586 | 100.0 |

* Includes callers under 24 years old responding "Yes" to "Are you Currently Working?"

** Unknown and refused.

Appendix B
Data Tables for Fax Referral Service

Table B-1. How Callers Entered the Quitline (Tobacco Users Only, n=6554)

| | HWTF Status | | | | | | | | DHHS | | Total | |
|----------------------------|-------------|--------------|--------------|--------------|--------------------|--------------|------------------|--------------|-------------|--------------|-------------|--------------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| Fax Referral | 7 | 4.2 | 31 | 3.6 | 123 | 6.6 | 5 | 4.9 | 233 | 6.5 | 399 | 6.1 |
| Inbound English Phone Call | 155 | 93.9 | 826 | 95.2 | 1708 | 92.2 | 97 | 95.1 | 3293 | 92.3 | 6078 | 92.8 |
| Inbound Spanish Phone Call | 0 | 0.0 | 3 | 0.3 | 6 | 0.3 | 0 | 0.0 | 8 | 0.2 | 17 | 0.3 |
| Registration Short Form | 0 | 0.0 | 6 | 0.7 | 5 | 0.3 | 0 | 0.0 | 13 | 0.4 | 24 | 0.4 |
| Client Services | 1 | 0.6 | 1 | 0.1 | 10 | 0.5 | 0 | 0.0 | 8 | 0.0 | 20 | 0.3 |
| Evaluation Call Transfer | 0 | 0.0 | 0 | 0.0 | 1 | 0.1 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Re-enrollment | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 13 | 0.4 | 24 | 0.4 |
| Warm Transfer from Partner | 0 | 0.0 | 1 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 |
| Voicemail | 2 | 1.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.1 | 4 | 0.1 |
| Not Asked | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 1 | 0.0 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 100.0 | 3566 | 100.0 | 6554 | 100.0 |

Table B-2. Number of Fax Referrals by Month and Funding Source (Tobacco Users Only, n=399)

| Month | Funding Source | | | | Total | |
|--------------|----------------|--------------|------------|------------|------------|--------------|
| | HWTF | | DHHS | | | |
| | # | % | # | % | # | % |
| NOV 05 | 0 | 0.0 | 2 | 0.9 | 2 | 0.5 |
| DEC 05 | 3 | 1.8 | 5 | 2.1 | 8 | 2.0 |
| JAN 06 | 8 | 4.8 | 10 | 4.3 | 18 | 4.5 |
| FEB 06 | 11 | 6.6 | 37 | 15.9 | 48 | 12.0 |
| MAR 06 | 20 | 12.0 | 36 | 15.5 | 56 | 14.0 |
| APR 06 | 7 | 4.2 | 15 | 6.4 | 22 | 5.5 |
| MAY 06 | 9 | 5.4 | 12 | 5.2 | 21 | 5.3 |
| JUN 06 | 8 | 4.8 | 15 | 6.4 | 23 | 5.8 |
| JULY 06 | 15 | 9.0 | 16 | 6.9 | 31 | 7.8 |
| AUG 06 | 9 | 5.4 | 10 | 4.3 | 19 | 4.8 |
| SEP06 | 7 | 4.2 | 5 | 2.1 | 12 | 3.0 |
| OCT 06 | 7 | 4.2 | 13 | 5.6 | 20 | 5.0 |
| NOV 06 | 10 | 6.0 | 6 | 2.6 | 16 | 4.0 |
| DEC 06 | 5 | 3.0 | 12 | 5.2 | 17 | 4.3 |
| JAN 07 | 9 | 5.4 | 10 | 4.3 | 19 | 4.8 |
| FEB 07 | 5 | 3.0 | 8 | 3.4 | 13 | 3.3 |
| MAR 07 | 10 | 6.0 | 6 | 2.6 | 16 | 4.0 |
| APR 07 | 10 | 6.0 | 4 | 1.7 | 14 | 3.5 |
| MAY 07 | 7 | 4.2 | 6 | 2.6 | 13 | 3.3 |
| JUN 07 | 6 | 3.6 | 5 | 2.1 | 11 | 2.8 |
| Total | 166 | 100.0 | 233 | 233 | 399 | 100.0 |

Appendix C Data Tables for Promotion

Table C-1. How Year 1 Callers Heard About Quitline NC (Tobacco Users Only, n=6554)

| How Heard About Quitline | HWTF Status | | | | | | | | DHHS | | Total | |
|------------------------------|-------------|--------------|--------------|--------------|--------------------|--------------|------------------|--------------|-------------|--------------|-------------|--------------|
| | Youth | | Young Adults | | Primary Caregivers | | School Employees | | | | | |
| | # | % | # | % | # | % | # | % | # | % | # | % |
| Basketball/sporting event | 0 | 0.0 | 1 | 0.1 | 0 | 0.0 | 0 | 0.0 | 4 | 0.1 | 5 | 0.1 |
| Brochure/Newsletter/Flyer | 11 | 6.7 | 37 | 4.3 | 86 | 4.6 | 8 | 7.8 | 216 | 6.1 | 358 | 5.5 |
| Cigarette Pack (Quit Assist) | 6 | 3.6 | 12 | 1.4 | 24 | 1.3 | 0 | 0.0 | 65 | 1.8 | 107 | 1.6 |
| College Newspaper | 0 | 0.0 | 0 | 0.0 | 1 | 0.1 | 0 | 0.0 | 2 | 0.1 | 3 | 0.0 |
| College Website | 0 | 0.0 | 1 | 0.1 | 2 | 0.1 | 1 | 1.0 | 1 | 0.0 | 5 | 0.1 |
| Community Organization | 4 | 2.4 | 8 | 0.9 | 29 | 1.6 | 2 | 2.0 | 102 | 2.9 | 145 | 2.2 |
| Employer/Worksite | 0 | 0.0 | 7 | 0.8 | 36 | 1.9 | 5 | 4.9 | 74 | 2.1 | 122 | 1.9 |
| Family/Friend | 14 | 8.5 | 59 | 6.8 | 146 | 7.9 | 8 | 7.8 | 251 | 7.0 | 478 | 7.3 |
| Health Department | 2 | 1.2 | 20 | 2.3 | 43 | 2.3 | 3 | 2.9 | 106 | 3.0 | 174 | 2.7 |
| Health Insurance | 0 | 0.0 | 4 | 0.5 | 33 | 1.8 | 7 | 6.9 | 85 | 2.4 | 129 | 2.0 |
| Health Professional | 14 | 8.5 | 64 | 7.4 | 312 | 16.8 | 14 | 13.7 | 667 | 18.7 | 1071 | 16.3 |
| Newspaper/Magazine | 2 | 1.2 | 7 | 0.8 | 34 | 1.8 | 4 | 3.9 | 86 | 2.4 | 133 | 2.0 |
| Other Type of Promotion | 6 | 3.6 | 20 | 2.3 | 85 | 4.6 | 7 | 6.9 | 183 | 5.1 | 301 | 4.6 |
| Outdoor Ad | 0 | 0.0 | 18 | 2.1 | 20 | 1.1 | 1 | 1.0 | 29 | 0.8 | 68 | 1.0 |
| Past Caller | 4 | 2.4 | 12 | 1.4 | 21 | 1.1 | 0 | 0.0 | 81 | 2.3 | 118 | 1.8 |
| Phone Directory | 1 | 0.6 | 1 | 0.1 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 3 | 0.0 |
| Radio | 53 | 32.1 | 271 | 31.2 | 385 | 20.8 | 17 | 16.7 | 340 | 9.5 | 1066 | 16.3 |
| Re-enrollment | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.2 | 6 | 0.1 |
| School/College Event | 5 | 3.0 | 13 | 1.5 | 10 | 0.5 | 2 | 2.0 | 15 | 0.4 | 45 | 0.7 |
| Student Health Services | 0 | 0.0 | 2 | 0.2 | 1 | 0.1 | 0 | 0.0 | 4 | 0.1 | 7 | 0.1 |
| TV/Commercial | 36 | 21.8 | 268 | 30.9 | 458 | 24.7 | 16 | 15.7 | 747 | 20.9 | 1525 | 23.3 |
| TV/News | 4 | 2.4 | 15 | 1.7 | 75 | 4.0 | 3 | 2.9 | 198 | 5.6 | 295 | 4.5 |
| Website | 1 | 0.6 | 21 | 2.4 | 41 | 2.2 | 4 | 3.9 | 96 | 2.7 | 163 | 2.5 |
| Other* | 2 | 1.2 | 7 | 0.8 | 11 | 0.6 | 0 | 0.0 | 206 | 5.8 | 225 | 3.4 |
| Total | 165 | 100.0 | 868 | 100.0 | 1853 | 100.0 | 102 | 100.0 | 3566 | 100.0 | 6554 | 100.0 |

* Refused, does not remember, and not collected.

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