Evaluation of the Oklahoma Tobacco Helpline

FY19 Annual Report July 1, 2018 – June 30, 2019



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Evaluation data from FY19 demonstrate that the Oklahoma Tobacco Helpline continues to provide a valuable, effective service to Oklahomans who use tobacco. The Helpline, administered by Optum, Inc. and evaluated by the Hudson College of Public Health at the OU Health Sciences Center, has operated since 2003, helping tens of thousands of Oklahoma tobacco users quit. Key findings from the FY19 evaluation include:

Key Findings:

- During FY19, 30,046 tobacco users registered for services from the Oklahoma Tobacco Helpline. This is very similar to what was observed in FY18 (n=29,885 tobacco users).
- The FY19 Helpline treatment reach was **3.3%** of all tobacco users in the state.
- Across all Helpline registrants, 94.9% reported overall satisfaction ratings of 'very,' 'mostly,' or 'somewhat' satisfied with Helpline services, with only 4.4% 'not at all' satisfied.
- At the 7-month follow-up survey, 31.5% of all participants reported not smoking for one month or longer, exceeding the NAQC benchmark for quit rates (30%).
- Tobacco users from all 77 Oklahoma counties contacted the Helpline for services in FY19. Of tobacco users registering for services, 17% came from Oklahoma County and another 15% came from Tulsa County.
- Almost half (46%) of tobacco users chose Individual Services, which could include one or more of the following: a 2-week starter kit of NRT, text messages, emails, web-based support and a quit guide. Of these, the percentage of participants who were abstinent 30 or more days at the 7-month follow-up was 28.2%.
- Another 9,236 (31%) tobacco users enrolled in the multiple call proactive telephone program. Tobacco users who enrolled in the multiple call program 8+ weeks of NRT (single or combination NRT) achieved very high 30-day abstinence rates of 38.1%.
- More than three-quarter (77%) received NRT from the Helpline.
- During FY19, health professionals and health systems across the state referred 3,312 tobacco users by fax, 7,135 by electronic referral, and **11,402** by online referral. However, only 13% of referrals resulted in a Helpline registration.

Introduction

The Department of Biostatistics and Epidemiology within the University of Oklahoma Health Sciences Center is the independent evaluator for the Oklahoma Tobacco Helpline. The evaluation team uses registration data from Optum, the Helpline service provider, to report registration and utilization patterns. Participant satisfaction with Helpline services and participant success in quitting tobacco are evaluated through a 7-month follow-up survey of a random sample of registrants. Professional Data Analysts (PDA) is contracted to conduct the follow-up survey. The FY19 evaluation demonstrates that the Oklahoma Tobacco Helpline continues to provide a valuable and necessary service to Oklahoma residents across the state and to reach tobacco users from groups with disparities in tobacco use and related health outcomes.

During FY19, the Oklahoma Tobacco Helpline continued to provide all of the services provided in the previous year, including phone, web, text messages, emails, and nicotine replacement therapy (NRT). Tobacco users could choose the traditional telephone counseling program (Helpline) with optional nicotine replacement therapy (NRT), web-based assistance, text messaging, emails, and a Quit Guide. Health insurance status determines who is eligible for the single call program versus the multiple call program. Tobacco users with private insurance are only eligible for the single call telephone intervention plus two weeks of nicotine replacement therapy (NRT). State employees with HealthChoice are eligible for the multiple call program (which includes up to 10 proactive calls from a Quit Coach) and up to 12 weeks of NRT. Uninsured and Medicare recipients are eligible for the multiple call program with up to 8 weeks of free NRT, and Medicaid beneficiaries receive the multiple call program plus a 2-week supply of NRT. Pregnant smokers, regardless of insurance status, receive a 10-call Helpline intervention specifically designed for the special needs of these women.

Tobacco users could also choose Individual Services, which do not include the telephone counseling. Any participant, regardless of health insurance status, could select one or more of the following: a starter kit (2-weeks) of NRT with a follow-up telephone call, text messages, emails, and a Quit Guide.

A final option for tobacco users is **WebCoach**, which includes web-based assistance with quitting, with optional NRT (2-week starter kit), text messages, emails, and a downloadable Quit Guide.

Utilization of the Oklahoma Tobacco Helpline, FY19

During FY19, from July 1, 2018 through June 30, 2019, a total of 30,046 tobacco users registered for services by calling the 1-800-QUITNOW telephone number, registering online or through the referral from a healthcare provider. This is very similar to what was observed in FY18 (n=29,885 tobacco users). In addition to tobacco users, the total Helpline registrants included 51 health care providers, 65 friends and family members of tobacco users (proxy callers), and 201 people from the general public who accessed the Helpline for tobacco cessation information (Figure 1).

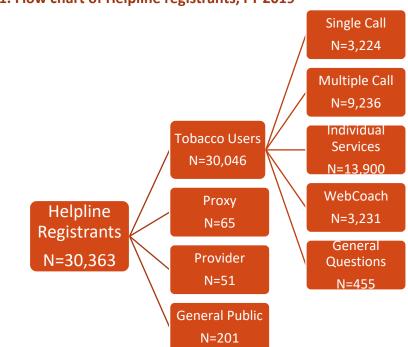


Figure 1. Flow chart of Helpline registrants, FY 2019

Some tobacco users registered for services more than once during FY19 (see page 18). For this report, tobacco users are only counted one time and they are classified according to the most intensive service received (Multiple Call > Single Call > WebCoach > Individual Services).

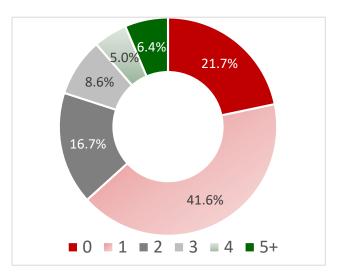
Of the 30,046 tobacco users, 46.3% (n=13,900) registered for Individual Services without the call program (Table 1). Another 9,236 (30.7%) enrolled in the multiple call proactive telephone cessation program, and 3,224 (10.7%) enrolled in the single call telephone cessation program. An additional 10.8% (n=3,231) registered for the WebCoach program. There were 455 (1.5%) tobacco users who requested tobacco cessation general information only.

Table 1. Helpline registrants (Tobacco Users) by service, FY19 (n=30,046)

	N	%
Single call	3,224	10.7%
Multiple call	9,236	30.7%
Individual Services	13,900	46.3%
WebCoach	3,231	10.8%
General questions	455	1.5%

Among multiple call participants, the average number of completed intervention calls in FY19 was 1.6 calls. Almost 22% registered but did not complete any Helpline calls. About 42% completed only one call (Figure 2).

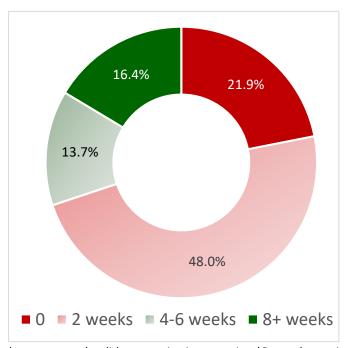
Figure 2. Number of intervention calls completed by tobacco users enrolling in the multiple call program, FY19 (n=9,236)



Tobacco users who want to quit may also receive NRT from the Helpline, and the vast majority (78.1%) did (Figure 3). About one out of five tobacco users received no NRT from the Helpline, which could be attributed to contraindications for its use, or participant preference to not use

NRT. Nearly 87% of tobacco users registering for Individual Services (n=12,023 of the 13,900) received NRT from the Helpline.

Figure 3. Weeks of NRT received from the Helpline among tobacco users registering for services, FY19 (n=29,591*)



^{*}excludes tobacco users who did not receive intervention (General questions, n=455)

The majority of tobacco users received only the patch (53.7%), while 15.0% received gum and 12.1% received the lozenge (Table 2). About 19% received some form of combo NRT.

Table 2. Type of NRT received from the Helpline among tobacco users receiving NRT, FY19 (n=23,106)

Type of NRT	N	%
Gum	3,459	15.0%
Lozenge	2,801	12.1%
Patch	12,406	53.7%
Gum and Lozenge	117	0.5%
Patch and Gum	1,926	8.3%
Patch and Lozenge	2,335	10.1%
Patch, Gum and Lozenge	62	0.3%

Across all programs available to tobacco users wanting to quit, about a third received text messages and/or email messages. Those enrolled in the Single call program had the highest percentage opting for text (44.0%) and WebCoach participants were more likely to receive emails messages (33.9%, Table 3).

Table 3. Percent of tobacco users receiving text and email messages, by program, FY19

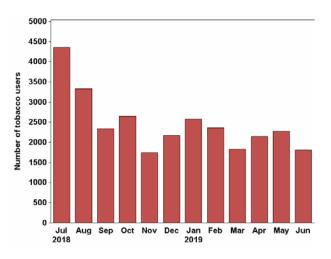
Program	Text messages	Email messages
Multiple Call Program	35.5%	27.4%
Single Call Program	44.0%	24.2%
Individual Services	26.2%	31.6%
WebCoach	36.0%	33.9%
All tobacco users*	32.1%	29.7%

^{*}excludes those receiving "General information"

In addition, 67% of single call participants and 45% of multiple call participants also registered for the integrated WebCoach program to support their telephone-based coaching.

The number of tobacco users registering with the Helpline in FY19 spiked in July of 2018 (Figure 4), most likely due to the tobacco tax increase that went into effect July 1. Consistent with past experience, registrations for quitline services spike around the time of a tax increase due to the increased cost of cigarettes and greater media attention. The slight increase in January corresponds to New Year's resolutions that many smokers make to quit smoking,

Figure 4. Tobacco users registering with the Helpline by month, FY19



Demographic Characteristics of Tobacco Users Registering with the Helpline during FY19

Demographic characteristics were collected and reported for **29,591 tobacco users** registering for services. This does not include those requesting "general information." In addition, a limited set of demographic questions were asked of tobacco users registering for Individual Services and via the website; thus, some variables in the table below have a high number of "missing" responses. Additionally, changes were implemented in the collection of participant race, allowing for multiple responses.

Almost two-thirds (61.7%) of tobacco users registering with the Helpline were female (Table 4). Registrants were also mostly white (72.4%) and non-Hispanic (92.2%). Five percent of registrants identified as multiracial. Although 9.7% of registrants identified as American Indian alone, when any identification of American Indian race was counted (alone and part of multiracial response) the proportion increased to 13.2%. During FY19, a majority of registrants was under the age of 55 (69.5%).

Tobacco users who register and who identify themselves as American Indian are asked if they are an enrolled member of a tribe, and if so, what tribe. Among registrants who identified themselves as "American Indian," 78% reported tribal affiliation, which is much lower than observed in past years (98% in FY18). This may be due to changes in the way race was asked, allowing for multiple races to be selected. In fact, about 30% of those identifying as American Indian also identified as another race. Among those reporting tribal affiliation, Cherokee Nation accounted for 42% of responses; while Choctaw Nation was reported by 17%.

Consistent with prior years, 55.3% of tobacco users registering for services had incomes of less than \$20,000 in FY19, and 16.6% had less than a high school degree. In addition, 15.2% of tobacco users registering were Medicaid recipients, and 39.8% were uninsured (Table 5).

Table 4. Gender, race/ethnicity and age of Helpline registrants, FY19 (n=29,591)

Demographics		N	%
Gender	Female	18268	61.7%
	Male	11323	38.3%
Race	White	20629	72.4%
	Black or African American	1958	6.9%
	American Indian/Alaskan Native	2766	9.7%
	Multiracial	1422	5.0%
	Other	878	3.1%
	Not Known, Refused	843	3.0%
	Missing	1095	
Ethnicity	Hispanic	1154	4.1%
	Non-Hispanic	26117	92.2%
	Not Known, Refused	1043	3.7%
	Missing	1277	
Age	18-24	2049	6.9%
	25-34	6269	21.2%
	35-44	6409	21.7%
	45-54	5834	19.7%
	55-64	5902	19.9%
	65-74	2534	8.6%
	75+	587	2.0%
	Missing	7	

Table 5. Education, income and health insurance status of tobacco users registering with the Helpline, FY19 (n=29,591)

Characteristic		N	%
Education	Less than grade 9	475	3.3%
	Grade 9-11, no degree	1939	13.3%
	High School Degree or GED	4896	33.7%
	Some College or University	4569	31.4%
	College or University Degree	2284	15.7%
	Not Known, Refused	385	2.6%
	Missing*	15043	
Income	<\$10,000	8523	29.9%
	\$10,000-14,999	4146	14.6%
	\$15,000-19,999	3074	10.8%
	\$20,000-24,999	2530	8.9%
	\$25,000-34,999	2631	9.2%
	\$35,000-49,999	2343	8.2%
	\$50,000-74,999	1498	5.3%
	\$75,000+	1085	3.8%
	Not Known, Refused	2639	9.3%
	Missing	1122	
Health insurance	Medicaid	4477	15.2%
status	Medicare	4581	15.6%
	Private	6881	23.4%
	Uninsured	11698	39.8%
	Veterans	271	0.9%
	Not known, Refused	1495	5.1%
	Missing	188	

^{*}Not asked of those registering by web

Tobacco Users Reporting Mental Health and Substance Abuse Disorders

More than half (52.5%) of tobacco users registering for services reported having at least one mental health or substance abuse disorder (Table 6). The most common MHSA disorders among those reporting at least one, are Depression (70%), Generalized Anxiety Disorder (54%), Post Traumatic Stress Disorder (32%), and Bi-polar Disorder (28%). Of the Helpline registrants who reported at least one MHSA disorder, 28.1% believed their condition would interfere with their ability to quit tobacco, while 19.3% did not know if their condition would interfere with the ability to quit tobacco.

Table 6. Prevalence of mental health or substance abuse disorders among tobacco users who registered for services, FY19 (n=29,591)

MHSA condition*	N	%
At least one	14017	52.5%
None	11666	43.7%
Not known, refused	1002	3.8%
Missing	2906	

^{*}Possible mental health and substance abuse conditions: Bi-Polar Disorder, Depression, Drug or Alcohol Abuse, Generalized Anxiety Disorder, Post-Traumatic Stress Disorder, Schizophrenia, Attention-Deficit Hyperactivity Disorder, Gambling Addiction

Geographic Distribution of Tobacco Users Registering for Services

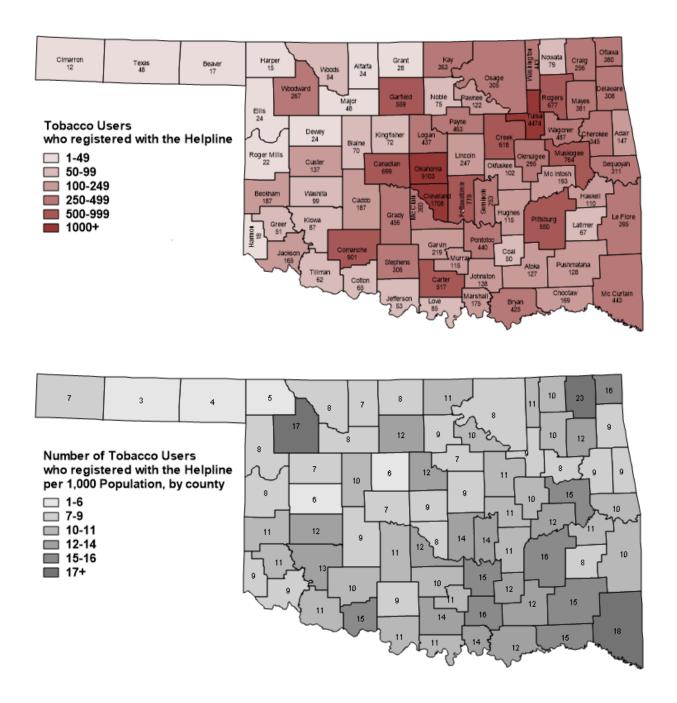
The Oklahoma Tobacco Helpline is reaching tobacco users in all parts of Oklahoma (Table 7 and Maps). Tobacco users from all 77 Oklahoma counties contacted the Helpline for services in FY19. Of tobacco users registering for services, 17.3% came from Oklahoma County (n=5,103) and another 15.1% came from Tulsa county (n=4,474). Other counties with 500 or more tobacco users registering for services during FY19 included Cleveland (n=1,708), Comanche (n=901), Pottawatomie (n=779), Muskogee (n=764), Canadian (n=699), Rogers (n=677), Creek (n=618), Garfield (n=559), Pittsburg (n=550), and Carter (n=517).

Table 7. Number of tobacco users who registered for services by county, FY19 (n=29,591)

County	Count
Adair	147
Alfalfa	34
Atoka	127
Beaver	17
Beckham	187
Blaine	70
Bryan	425
Caddo	187
Canadian	699
Carter	517
Cherokee	345
Choctaw	169
Cimarron	12
Cleveland	1708
Coal	50
Comanche	901
Cotton	65
Craig	256
Creek	618
Custer	137
Delaware	308
Dewey	24
Ellis	24
Garfield	559
Garvin	219
Grady	456

County	Count	
Grant	28	
Greer	51	
Harmon	18	
Harper	15	
Haskell	110	
Hughes	115	
Jackson	165	
Jefferson	53	
Johnston	138	
Kay	363	
Kingfisher	72	
Kiowa	87	
Latimer	67	
Le Flore	395	
Lincoln	247	
Logan	437	
Love	85	
Major	48	
Marshall	175	
Mayes	381	
McClain	360	
McCurtain	443	
McIntosh	193	
Murray	115	
Muskogee	764	
Noble	75	

County	Count
Nowata	79
Okfuskee	102
Oklahoma	5103
Okmulgee	295
Osage	305
Ottawa	380
Pawnee	122
Payne	463
Pittsburg	550
Pontotoc	440
Pottawatomie	779
Pushmataha	128
Roger Mills	22
Rogers	677
Seminole	253
Sequoyah	311
Stephens	306
Texas	48
Tillman	62
Tulsa	4474
Wagoner	487
Washington	443
Washita	99
Woods	54
Woodward	267
Unknown	81
Total	29,591



The maps display the number of registrations by county and the number of registrations per county population over the age of 18. As expected, the counties with the greatest population density had the largest number of registrants to the Helpline. However, as seen in the second map, when the number of Helpline registrants per adult population is considered, some of the less densely populated counties had the greatest number of tobacco users registering for services per 1000 adults. For example, Craig, McCurtain, and Woodward counties had some of the highest rates of registration, with 17 or more registrants per 1000 adult population.

Helpline Utilization by Pregnant Women

During FY19, 303 tobacco users who were also pregnant accessed the Helpline for assistance quitting smoking. This represents a 6% increase from FY18 (n=285). An additional 266 women who were planning pregnancy and 85 breastfeeding moms utilized the Helpline.

Tobacco Use Patterns among Registrants

Among tobacco users registering for services, 40.0% reported smoking <1 pack of cigarettes a day (Table 8). About half of those responding stated that the time after waking to first tobacco use was five minutes or less (49.1%).

Table 8. Tobacco use patterns among registrants, FY19 (n=29,591)

Category		N	%
Time to first cigarette	5 minutes	14316	49.1%
after waking	6-30 minutes	9721	33.3%
	31-60 minutes	2863	9.8%
	>60 minutes	1915	6.6%
	Not known, refused	337	1.2%
	Missing	439	
Number of cigarettes	<1 pack	11178	40.0%
per day	1 pack	9528	34.1%
	>1 pack but < 2	4192	15.0%
	2 packs +	2781	10.0%
	None (OTP user)	248	0.9%
	Missing	1664	

E-Cigarette Use among Tobacco Users Registering for Helpline Services

During FY19, 19.2% of registrants (n=5,677) reported they had used e-cigarette or vaping products in the past 30 days. This represents a 30% increase since FY17 when the registration question was changed to reflect any use in the 30-days prior to Helpline registration (Figure 5). Among those using an e-cigarette in FY19, 93% were also currently smoking combustible cigarettes at the time of registration.



Figure 5. E-cigarette/vaping product use in past 30 days among Helpline registrants, FY14-FY19

How do registrants hear about the Helpline?

When tobacco users register for services with the Helpline, they are asked how they heard about the service. This question provides one indicator of the Helpline promotion within the community. During FY19, hearing about the Helpline from TV was the most frequent response (34%, Table 9). The next most frequent response was Health Professional/Health Department (22.3%) followed by Family/Friend (13.4%). Six percent of registrants reported hearing about the Helpline through online sources such as Facebook and Twitter, up from 2.7% in FY18.

^{*}In FY17 the e-cigarette questions asked at registration changed to capture use during the past 30 days. Previously registrants were asked about current use at the time of Helpline registration.

Table 9. How registrants heard about the Helpline, FY19 (n=29,591)

How heard about	%
TV	34.0%
Health Professional/Department	22.3%
Family/Friend	13.4%
Website/Facebook/Twitter	6.0%
Outdoor ad	3.7%
Brochure/Mailing	3.5%
Radio	3.2%
2-1-1	2.5%
Employer/worksite	1.3%
Other	8.4%
Does Not Remember/ Refused/Not Collected	1.7%

Fax, Electronic and Online Referrals

Referrals offer the opportunity for health care providers and other agencies to proactively request that the Helpline contact their patients or clients who want help quitting tobacco. Overall number of referrals in FY19 was greater than FY18 (21,849 vs 18,214) but the percent and number of tobacco users actually registering for services as a result of a referral was lower in FY19 compared to FY18 (2814, 12.6% in FY19 compared to 3661, 20.1% in FY18). Perhaps even more alarming is the increase in the number of referred tobacco users who decline Helpline services following the referral and outreach from the helpline. Nearly 20% declined Helpline services when contacted in FY19, up from 12.9% in FY18. This is a rather significant decline in the "connection" rate for referrals and should be discussed further with referring partners. Table 10 provides detailed data related to the three different referral options with outcome data overall and by referral type.

	Type of Referral							
	Electronic Referral				Online Referral			ferrals bined
Referral Status	N	%	N	%	N	%	N	%
Accepted & enrolled in services	623	8.7%	625	18.9%	1566	13.7%	2814	12.9%
Accepted but didn't enroll	25	0.4%	26	0.8%	63	0.6%	114	0.5%
Declined services when contacted	1177	16.5%	811	24.5%	2298	20.2%	4286	19.6%
Unreachable	3161	44.3%	1780	53.7%	6495	57.0%	11436	52.3%
Duplicate referral	1252	17.5%	16	0.5%	36	0.3%	1304	6.0%

3.1%

8.3%

1.1%

100.0%

47

6

3312

1.4%

0.0%

0.2%

840

5

99

100.0% | 11402 | 100.0% | 21849 |

7.4%

0.0%

0.9%

1110

599

186

5.1%

2.7%

0.9%

100.0%

Table 10. Electronic, fax, and online referrals to the Helpline, FY19 (n=21,849)

223

593

81

7135

About 33% of accepted referrals were for the multiple call Helpline program, and about another 41% chose Individual Services. Seven percent selected the single call Helpline program and 6% chose web only. The remaining referrals received self-help materials or answers to general questions.

Re-enrollments and Upgrades During FY19

Already enrolled at time of referral

Referral rejected (not enough info)

Pending referral

Total

Across all Helpline services, 8.3% (2,452) of registrants re-enrolled or upgraded to a more intensive service during FY19. About 1 out of 10 tobacco users registering for Individual Services re-enrolled or upgraded, with nearly all (98.4%) upgrading to a call program. Nearly 6% of Multiple Call program participants re-enrolled in the Multiple Call program during the FY.

Treatment Reach of the Oklahoma Tobacco Helpline

Treatment reach measures the proportion of tobacco users across the state that received evidence-based services from the Oklahoma Tobacco Helpline. The population of tobacco users is estimated based on the Behavioral Risk Factor Surveillance Survey (BRFSS). Because the 2018 BRFSS asked about both cigarette and smokeless tobacco use, the Helpline treatment

reach is also examined separately for cigarette smokers and smokeless tobacco users. Only Helpline callers who completed an intervention call or who received NRT from the Helpline are counted as having received treatment.

In FY19, 22,867 registrants completed an intervention call, received NRT from the Helpline, or both, resulting in a treatment reach of 3.3% of Oklahoma tobacco users (Table 11). Treatment reach among cigarette smokers (3.9%) was higher than treatment reach among smokeless tobacco users (1.0%). Treatment reach among females was two times higher than treatment reach among males (5.3% vs. 2.0%). African Americans and American Indians had equivalent treatment reach in FY19 at 3.2%.

Table 11. Treatment reach of the Oklahoma Tobacco Helpline, FY19

Population Subset	Number Completed Intervention	Population of Tobacco Users*	Treatment Reach
All tobacco users	22867	702839	3.3%
Cigarette smokers	21905	561772	3.9%
Smokeless tobacco users	2012	194712	1.0%
Females	13869	259712	5.3%
Males	8998	443127	2.0%
African Americans**	1506	47105	3.2%
American Indians**	2103	65116	3.2%

^{*}Fiscal year 2019 enrollment is compared to the population of cigarette smokers and smokeless tobacco users (18+ years old) from BRFSS 2018

Helpline Utilization by Youth under 18 years old

During FY19, 29 youth under the age of 18 accessed the Helpline for assistance quitting smoking. This is less than half the number registering in FY18 (n=66). Although the number is small, these youth reported using multiple tobacco products including e-cigarettes and other vapor devices (n=13), cigars (n=8) and smokeless tobacco (n=3). The majority of youth (n=20) enrolled in the multiple call telephone cessation program, and 6 signed up for Individual Services. The remaining youth received web only (n=2) and the single call program (n=1).

^{**}American Indian and African American Helpline and BRFSS participants selected only one racial group

Follow-Up of Helpline Registrants for Evaluation

The North American Quitline Consortium (NAQC) recommends a standardized approach for assessing program outcomes for quitline services across the US and Canada. At a minimum, NAQC recommends that state quitlines conduct a follow-up survey of a random sample of quitline callers 7-months following quitline enrollment. Thirty-day point prevalence abstinence is the preferred measure of "success." Furthermore, NAQC has established a 50% response rate to the follow-up survey as the benchmark for reporting valid guit rates. The follow-up of Oklahoma Tobacco Helpline participants in this FY19 report includes tobacco users registering for services between December 1, 2017 and November 30, 2018. The 7-month follow-up survey was conducted from July 6, 2018 through July 3, 2019.

To conduct the follow-up evaluation, a random sample of participants in the different service programs was selected. Despite significant attention and resources, the response rate to the 7month follow-up was just below the ideal benchmark, 49.2%. Only 3.7% of participants contacted refused to participate in the follow-up study, similar to prior years. The remainder of non-respondents included those who could not be contacted during follow-up. A total of 1,591 participants completed the 7-month follow-up survey.

Satisfaction with Services

Across all Helpline registrants, 94.9% reported being "very," "mostly," or "somewhat" satisfied with Helpline services, with 4.4% being "not at all" satisfied and another 0.7% refusing or responding "don't know" (Table 12). Satisfaction rates varied somewhat by the program as well as NRT received. Both the multiple call and Individual Services programs had the highest levels of satisfaction. Nearly three-quarters (73.1%) of the group receiving 8 or more weeks of NRT reported being "very" satisfied.

Table 12. Overall satisfaction with the Helpline program by service type, FY19

Type of Call Program	% Satisfied*
Single call	93.2%
Multiple call	95.5%
Individual Services	95.0%
Web Coach	93.2%
Total	94.9%
Amount of NRT received	% Very Satisfied
2 weeks of NRT	54.4%
4-6 weeks of NRT	56.5%
8+ weeks of NRT	73.1%

^{*}Denotes very satisfied, mostly satisfied, or somewhat satisfied.

Quit Experiences Reported at the 7- month Follow-up

Quit rates, defined as 30-day abstinence from tobacco, are calculated among survey respondents at the 7-month follow-up interval.

For each calculated guit rate, a 95% confidence interval (CI) was calculated and reported. This CI provides a range of values within which we are 95% confident that the "true" quit rate lies. Because our calculated guit rates are based on a sample of the population, some uncertainty will exist about the accuracy of the estimate. The CI is interpreted as the "plausible" range of values for the true quit rate.

At the 7-month follow-up survey, 31.5% of all participants reported not smoking for one month or longer (Table 13). The 30-day abstinent rate varied by intensiveness of Helpline services received. The combination of a multiple call program with 8 weeks of either single NRT or combination NRT proved very effective with a 38.1% quit rate. The lowest abstinence rates occurred in those receiving no telephone coaching, Individual Services and WebCoach (28.2%).

Table 13. Percentage of Helpline participants abstinent 30 or more days at 7-month follow-up by program, FY19 (responder quit rates)

Program	Total N	Percent Abstinent	95% CI
Overall	1,586	31.5%	(29.2, 33.7)
All Single Call	191	34.0%	(27.3, 40.8)
All Multiple Call	512	36.1%	(32.0, 40.3)
Multiple Call + 2 weeks NRT	89	32.6%	(22.8, 42.3)
Multiple Call + 4-6 weeks NRT	168	35.1%	(27.9, 42.3)
Multiple Call + 8+ weeks NRT	244	38.1%	(32.0, 44.2)
Individual Services	766	28.2%	(25.0, 31.4)
Web Coach	117	28.2%	(20.1, 36.4)

^{*}Not mutually exclusive groups

When e-cigarette use at the 7-month follow-up is considered (secondary quit measure as recommended by NAQC), the overall guit rate is 27.4% (95% CI 25.2-29.6).

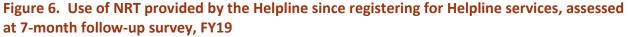
Use of NRT after Registering with the Helpline

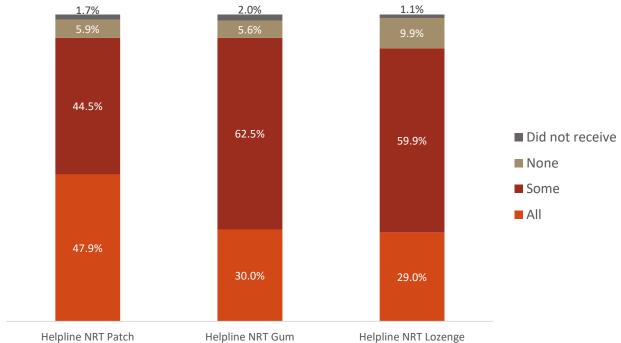
During FY19, participants were asked questions on the follow-up survey to assess their use of NRT and other medications since registering with the Helpline. This included both the NRT sent by the Helpline as well as pharmacotherapy used outside of the Helpline program (Table 14).

Table 14. Use of any NRT or cessation prescription medication since registering for Helpline services, assessed at 7-month follow-up survey, FY19 (n=1,591)

	N	%
NRT Patches	1285	70.6%
NRT Gum	542	30.8%
NRT Lozenge	464	26.0%
NRT Inhaler or Spray	7	0.4%
Rx Zyban	87	3.9%
Rx Chantix	81	5.1%

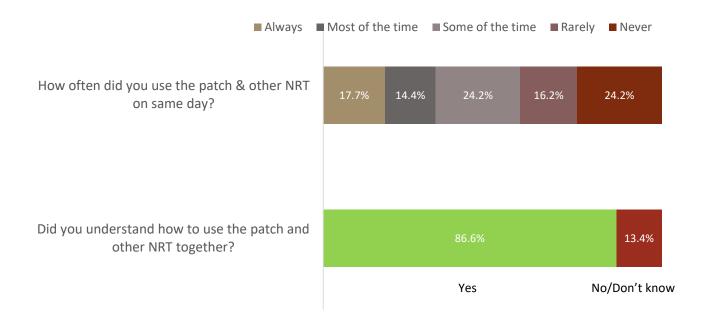
During the follow-up survey, participants were also asked about the NRT sent by the Helpline (Figure 6). Among those who requested the patch, less than half reported using all of the product (47.9%), and another 44.5% reported using some. Less than a third of those requesting the NRT gum used all of the product (30%) and 62.5% reported some of them. Free lozenges sent by the Helpline were least likely to be used.





Among participants receiving combination NRT from the Helpline, only 17.7% reported always using both products on the same day (Figure 7). Almost a quarter (24.2%) reported never using the products on the same day and 13.4% indicated they did not understand how to use the patch and other NRT together.

Figure 7. Use of combination NRT provided by the Helpline since registering for Helpline services, assessed at 7-month follow-up survey, FY19 (n=277)



Health Status, Home Smoking Policy and Reasons for Calling the Helpline

During FY19, participants were asked questions on the follow-up survey to assess their general health and wellbeing as well as rules about smoking in the home. These are likely to be important covariates related to successful smoking cessation.

Approximately one-third (34.6%) of participants reported that their general health was good, 24.9% reported that their general health was fair, and 11.6% reported that their general health was poor (Table 15). The mean number of days participants reported their physical health was not good was 7.9 days, and the mean number of days their mental health was not good was 10.6 days.

Table 15. General health for Helpline participants at the 7-month follow-up survey, FY19 (n=1,591)

	N	%
Excellent	105	6.6%
Very good	353	22.2%
Good	549	34.6%
Fair	396	24.9%
Poor	184	11.6%
Not Known, Refused	2	0.1%
Missing	2	
Total	1591	100.0%

At the 7-month follow-up, about two-thirds (65.6%) of participants reported they do not allow smoking inside their homes. Almost 1 in 5 (19.0%) reported smoking was permitted anywhere in their homes (Table 16).

Table 16. Rules about smoking in the home among Helpline participants at the 7-month follow-up survey, FY19 (n=1,591)

Rules about smoking inside the home	Number	Percent
No one is allowed to smoke anywhere inside the home	1042	65.6%
Smoking is allowed in some places or at some times	242	15.2%
Smoking is permitted anywhere inside the home	302	19.0%
Not known/refused	2	0.1%
Missing	3	

Follow-up survey participants were also asked about reasons for calling the Helpline (Table 17). Only 16.8% reported being motivated to call the Helpline to save money on health insurance, or because their health insurance plan encouraged quitting (15.8%).

Table 17. Reasons for calling the Helpline among Helpline participants at the 7-month followup survey, FY19 (n=1,591)

Agree or strongly agree with the following reasons	Percent
To save money on health insurance	16.8%
Health insurance plan encouraged quitting	15.8%

Conclusions

This evaluation report demonstrates stable registration patterns as compared to FY18. While the transition to a new service delivery platform impacted the format and timeliness of Helpline registration data significantly, consistency and quality of the data were maintained. One notable change in registration data is that participants can now report multiple race groups, and in fact, 5% of registrants identified as more than one race.

While the number of referrals received by health care providers and health systems was 20% higher in FY19 as compared to FY18, the referral "connection rate" was lower than what has been observed in the past. Only 12.9% of referrals actually resulted in a Helpline registration. Thus, although the number of referrals across fax, online and electronic mechanisms continues to increase, the proportion being reached by the Helpline and registering for services is on the decline. Most alarming was the 4,286 tobacco users who were referred to the Helpline, successfully contacted by the Helpline, but then declined services. This represents nearly 20% of all referrals. An additional area of concern is that over half of referrals were unreachable, 52%.

Almost half (46%) of tobacco users chose Individual Services, which could include one or more of the following: a 2-week starter kit of NRT, text messages, emails, web-based support and a quit guide. Another 31% enrolled in the multiple call proactive telephone program, and 11% enrolled in the single call telephone program. Although the multiple call program includes up to five proactive calls with a Quit Coach, the average number of completed intervention calls in

FY19 was only 1.6 calls. Twenty-two percent registered but did not complete any Helpline calls, and 42% completed only one call.

More than three-quarters (78%) of all tobacco users registering for services received NRT from the Helpline; however, data from the sample of participants responding to the 7-month followup survey indicate relatively low compliance rates with the use of NRT sent by the Helpline, especially among those receiving combination NRT. Free lozenges sent by the Helpline were the least likely to be used, with only 29% reporting they had used all of the lozenges sent by the Helpline. Among participants receiving combination NRT from the Helpline, 24% reported never using the products on the same day and 13% indicated they did not understand how to use the patch and other NRT together.

The satisfaction and quit rates included in this report are collected 7-months after registration for services and remain high. Across all Helpline registrants, 94.9% reported being "very," "mostly," or "somewhat" satisfied with Helpline services, and only 4.4% were "not at all" satisfied.

Most importantly, overall guit rates continue to meet the NAQC benchmark of 30% abstinence for 30-days at the 7-month follow-up. At the 7-month follow-up survey, 31.5% of all Helpline participants in Oklahoma reported not smoking for one month or longer. However, quit rates varied by intensiveness of Helpline services received.

The combination of a multiple call program with either single NRT or combination NRT proved very effective but only when participants stayed engaged and received the full 8 weeks of NRT (quit rates >38%). Helpline participants on the individual services plan and WebCoach demonstrated somewhat lower quit rates in FY19 (28.2%).

Future evaluation will continue to monitor the impact of the different Helpline programs, and factors associated with levels of engagement and quit success.