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2017 Texas Tobacco Quit Line (TTQL) Data Report

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Introduction

Tobacco use is the leading cause of preventable death and disease in Texas and in the U.S. In 2015, 23,519^a deaths in Texas were caused by diseases that are commonly attributed to smoking (See Appendix A.)¹ According to the 2017 Texas Behavioral Risk Factor Surveillance System (BRFSS), 15.7% of Texas adults reported current use of cigarettes and 4.3% reported current smokeless tobacco use. Among current smokers, 65.0% made a quit attempt in the past 12 months.²

The Tobacco Prevention and Control Branch (TPCB) within the Health Promotion and Chronic Disease Prevention Section (HPCDPS) at the Texas Department of State Health Services (DSHS) has partnered with Optum to provide tobacco cessation services to Texans through the Texas Tobacco Quit Line (TTQL).

What is the Texas Tobacco Quit Line?

The TTQL offers free and confidential tobacco cessation counseling services and support to Texas residents ages 12 years and older. The TTQL also provides cessation educational materials and information to healthcare providers, proxies, and the general public.³

Tobacco users have the option of enrolling in counselling services via phone or web. Callers enrolled via phone services receive tailored multiple call counseling sessions with an assigned Quit Coach. These callers are eligible for two weeks of free nicotine replacement therapy (NRT) if they are uninsured, pregnant (NRT given with physician permission), referred by a healthcare provider, reside in a DSHS funded Tobacco Prevention and Control Coalition (TPCC) county (Angelina, Brazos, Ellis, Galveston, Hidalgo, Lamar, Nacogdoches, Nueces, Red River, Rusk, Waller or Wichita county), a Texas Health and Human Services (HHS) employee, and/or report a tobacco-related chronic condition or mental health condition. They also gain access to self-help resources and information about support programs in their community. Callers enrolled in web-based services gain access to a Web Coach, self-help resources, and an online community of other tobacco users enrolled in the program.³

How are callers registered or enrolled in TTQL services?

Individuals become **registered callers** by calling a toll-free Quit Line phone number or being referred by a healthcare provider. Healthcare providers, proxies, and members of the general public who contact the TTQL for general information and materials are also considered registered callers.

Registered callers who report tobacco use and enroll in multiple call cessation counseling are considered **enrolled callers**.

^aSee appendix for ICD-10 codes included as underlying causes of tobacco-related deaths.

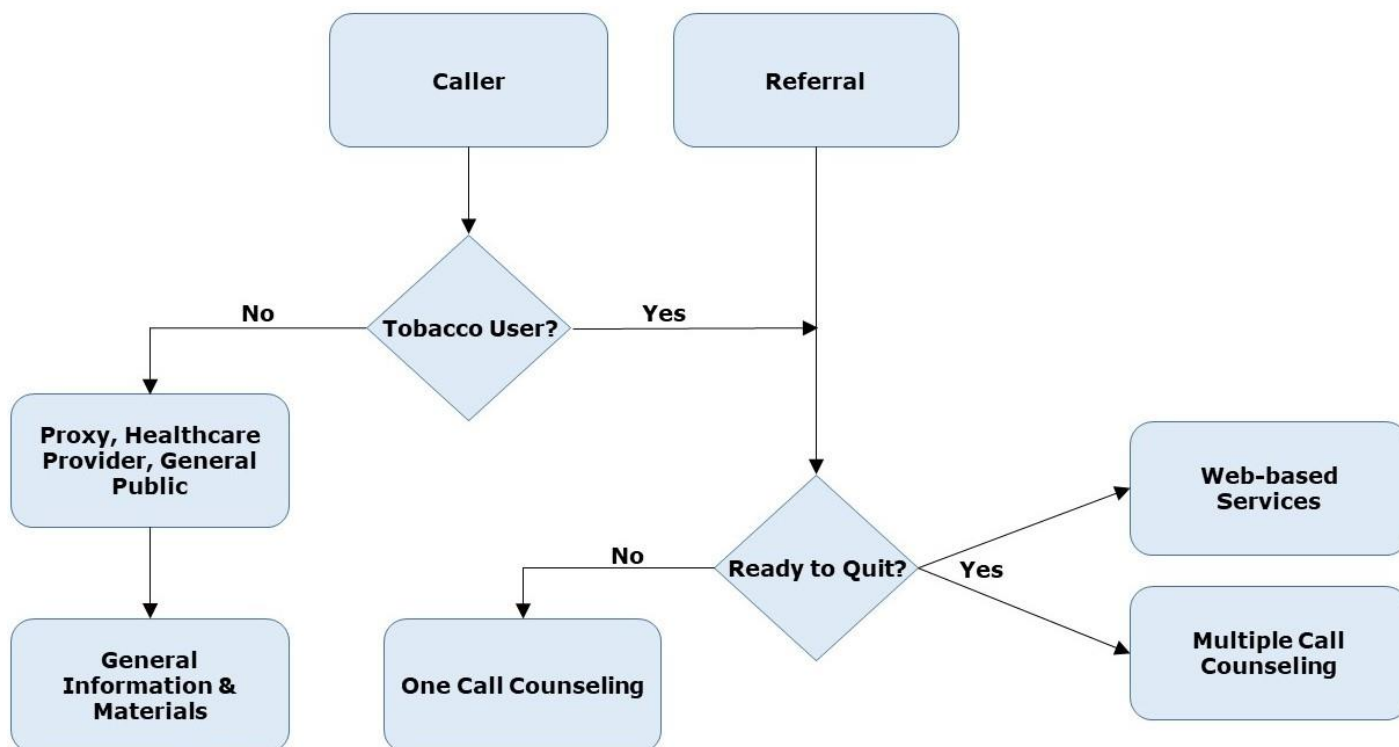


Figure 1. Flowchart explaining the flow of callers through the Texas Tobacco Quit Line (TTQL) services.

Definition of Terms

The following terms will be used throughout the report:

- **Pre-registration** – period when participants who are referred by healthcare providers are contacted to determine if they will accept or decline TTQL services.
- **Registered Caller** – every unique individual who has incoming and/or outgoing phone contact with the TTQL service provider, Optum. This includes tobacco users, proxies, healthcare providers, and members of the general public.
- **Enrolled Caller** – every unique caller who reports tobacco use and enrolls in multiple call tobacco cessation counseling. Proxies, healthcare providers, and the general public are not enrolled in counseling services, but are provided with tobacco cessation information and materials.
- **Call** – any incoming and/or outgoing phone contact between the TTQL service provider, Optum, and registered callers. Each unique call is identified by the call date, call number, and call type (ie. registration, assesment, etc.). Unique

callers may have multiple entries in the Quitline Experience Extract (QEE) and Quitline Experience Addendum (QEE Addendum) dataset based on the number of times they have contacted or been contacted by the TTQL. See methodology section below for more details.

- **Entry Method** – the method callers use to enter and receive TTQL services. Callers can enter TTQL through incoming/outgoing phone calls, web registration and healthcare provider referrals.
- **Referral Method** – the method used by healthcare providers to refer tobacco users to the TTQL.

Methodology

This report includes de-identified, aggregate data on incoming and outgoing calls to the TTQL. The data is collected by the Tobacco Prevention and Control Branch (TPCB) contractor, Optum. Optum provides the TPCB with the following datasets on a monthly basis:

- **Quit Line Experience Extract (QEE)⁴** – this dataset includes data from each incoming and outgoing call for all registered callers. Callers are able to make as many calls to the TTQL as needed. Each individual call is captured as a separate observation.
- **Quit Line Experience Extract (QEE) Addendum⁵** – this dataset is an addition to the QEE. It includes data on chronic, mental health, and substance abuse conditions for each caller identified in the QEE.
- **Referral Experience Extract (REE)⁶** – this dataset includes data on participants who were referred to the TTQL by a healthcare provider. It includes data on all referrals during the pre-registration period.

Monthly QEE, QEE Addendum, and REE datasets, from January 2017 through December 2017, were cleaned and combined to create annual datasets. The annual QEE Addendum was merged with the annual QEE dataset based on participant ID and call date. All data cleaning and analysis were performed using SAS 9.4.

Key Findings

In 2017:

- The TTQL reached its highest number of calls in May (16,688);
- 95.1% of registered callers were tobacco users;
- The number of callers enrolled in multiple call counseling peaked in the month of March (2,035);
- 84.1% of registered tobacco users enrolled in multiple call cessation counseling;
- Nearly half of enrolled callers reported having a chronic or mental health/substance abuse condition (47.7% and 48.7%, respectively);
- 79.2% of enrolled callers entered TTQL through phone calls in English;
- Just over half of enrolled callers heard about TTQL services from television commercials (51.3%);
- 74.7% of enrolled callers received a recommendation to use patch nicotine replacement therapy (NRT) to aid in tobacco cessation;
 - Of these, 86.4% received at least one shipment of NRT.
 - A total of 5,601 shipments of patch NRT were sent to enrolled callers, with each shipment containing a two week supply.
- There were 14,095 referrals to TTQL made by healthcare professionals. Of these referrals, the TTQL was able to reach 5,341 individuals. Among those reached, 3,215 accepted services and 2,126 declined services.
- Among pre-registrants who were reached, 59.8% of those referred via an electronic referral system accepted services, and 60.2% of those referred via fax accepted services.

Quit Line Experience Extract (QEE)

There were 126,381 TTQL calls in 2017, excluding those identified as hang-up, prank, or wrong number.

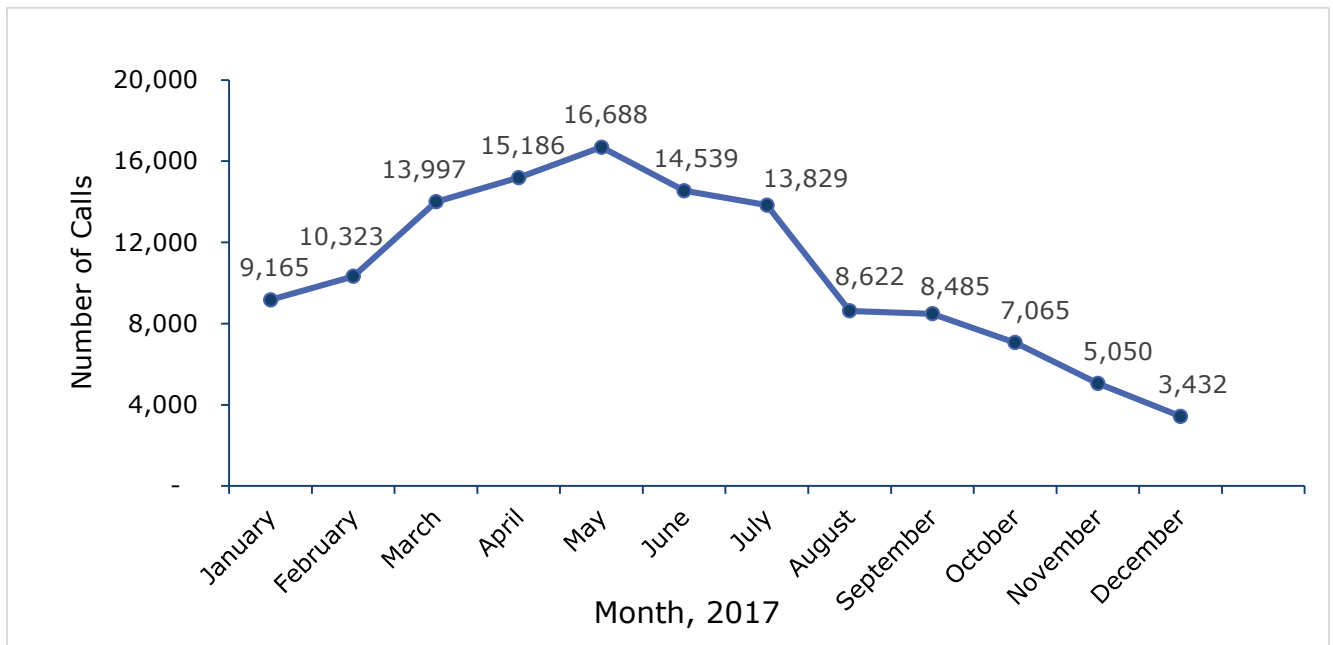


Figure 2. Number of calls, by month, 2017.

Figure 2 Interpretation: Calls to TTQL rose gradually from 9,165 in January, to a peak of 16,688 in May. Calls then gradually declined through the rest of the year.

The CDC “Tips from Former Smokers” media campaign launched nationally in January 2017 and ran through July 2017.

Table 1. Number and percentage of registered callers, by caller type, 2017.

Caller Type	Number (N)	%
Total	18,311	100.0
Tobacco User	17,416	95.1
Proxy	135	0.7
Provider	75	0.4
General Public	685	3.7

Table 1 Interpretation: Of 18,311 registered callers to the TTQL in 2017, 95 out of 100 were tobacco users, and 4 out of 100 were the general public. Less than 1 out of 100 callers were proxies or healthcare providers.

Table 2. Number and percentage of registered callers, by month, 2017.

Month	Number (N)	%
Total	18,311	100.0
January	1,872	10.2
February	1,798	9.8
March	2,483	13.6
April	2,471	13.5
May	2,422	13.2
June	1,525	8.3
July	1,808	9.9
August	1,152	6.3
September	821	4.5
October	754	4.1
November	742	4.1
December	463	2.5

Table 2 Interpretation: The number of registered callers differed by month in 2017. Registration peaked in March, with 2,483 callers. The number of registered callers was also elevated for April and May (2,471 and 2,422 callers, respectively).

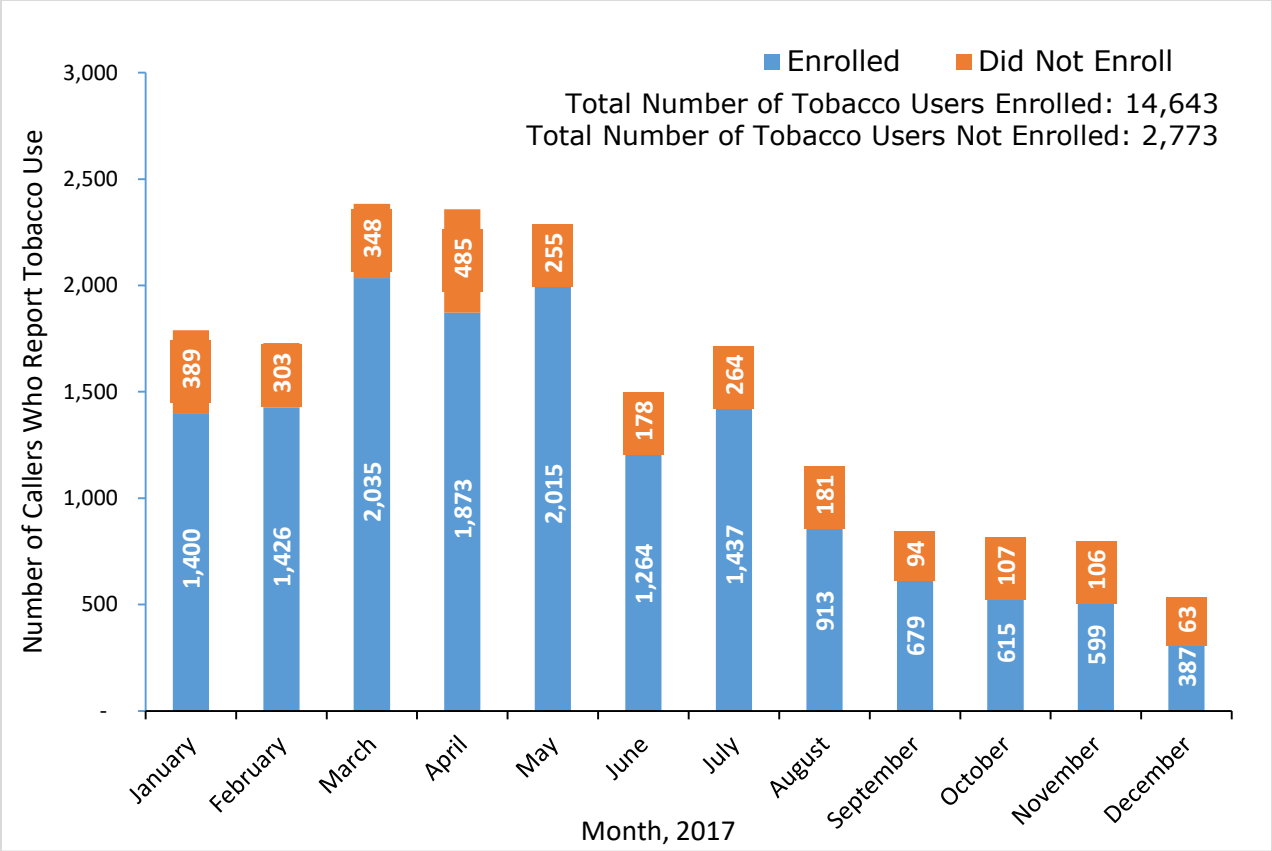


Figure 3. Number of registered callers who report tobacco use, by enrollment status, 2017.

Figure 3 Interpretation: Over 14,000 registered callers who reported tobacco use enrolled in multiple call counseling. The number of tobacco users who enrolled in counseling greatly exceeded the number of those who did not enroll. This pattern was seen every month from January 2017 through December 2017.

Table 3. Number and percentage of registered callers, by demographic characteristics and enrollment status, 2017.

Demographic Characteristics	Enrolled		Did Not Enroll	
	N	%	N	%
Total*	14,643	84.1	2,773	15.9
Gender				
Male	5,473	85.8	903	14.2
Female	9,158	86.8	1,394	13.2
Age (years)				
Less than 29	1,365	86.4	215	13.6
30 to 44	3,555	87.3	517	12.7
45 to 64	7,950	86.8	1,206	13.2
65 and older	1,747	88.0	239	12.0
Race				
White	8,631	91.9	766	8.2
Black	3,456	90.1	382	10.0
Other	1,971	92.6	157	7.4
Ethnicity				
Hispanic	2,763	93.4	195	6.6
Not Hispanic	11,371	91.1	1,115	8.9
Education				
Less than Grade 9	852	93.6	58	6.4
Some High School	2,272	91.4	213	8.6
GED	1,238	91.8	110	8.2
High School Graduate	3,639	91.6	334	8.4
Some College	3,333	91.6	304	8.4
College Graduate	2,095	92.0	182	8.0
Some Technical/Trade School	192	94.1	12	5.9
Technical/Trade School Graduate	421	91.5	39	8.5
Insurance				
Commercial Insurance	2,789	88.2	373	11.8
Medicaid	2,788	85.9	459	14.1
Medicare	2,845	90.0	318	10.1
Uninsured	5,692	89.9	641	10.1
Veteran's Administration	104	85.3	18	14.8
Language				
English	13,360	84.0	2,600	16.0
Spanish	959	88.7	122	11.3
Other	54	67.5	26	32.5
Pregnancy Status^				
Pregnant	140	90.9	14	9.1
Planning to Become Pregnant	98	87.5	14	12.5
Currently Breastfeeding	41	93.2	3	6.8
Not Pregnant	3,600	85.5	611	14.5

Chronic Condition				
Yes	6,594	90.2	715	9.8
No	7,834	80.2	1,935	19.8
Mental Health or Substance Abuse Disorder				
Yes	7,133	91.7	642	8.3
No	7,510	78.1	2,106	21.9
*Total includes participants who may have some demographic data missing. Each category may not add up to the total for that group. Missing values were excluded for calculating percentages.				
^Data collected for female callers under age 50 years.				

Table 3 Interpretations: In 2017, eight in 10 registered callers who reported tobacco use enrolled in multiple call tobacco cessation counseling. There were no large differences in enrollment status for multiple call counseling by gender, age, race/ethnicity, education, or insurance status. Just over nine in 10 female callers who were pregnant or who were currently breastfeeding enrolled in multiple call counseling, while just under nine in 10 female callers who were planning to become pregnant, or who were not pregnant, enrolled in multiple call counseling. Nine in 10 callers who reported having a chronic condition enrolled, versus eight in 10 who did not report having a chronic condition. Similarly, just over nine in 10 callers who reported having a mental health/substance abuse condition enrolled, versus less than eight in 10 who did not report having a mental health/substance abuse condition.

Table 4. Number and percentage of enrolled callers, by entry method, 2017.

Entry Method	N	%
Total	14,643	100.0
Phone, English	11,591	79.2
Phone, Spanish	517	3.5
Fax Referral	1,790	12.2
Electronic Referral	621	4.2
Re-enrollment*	26	0.2
Phone Re-enrollment^	16	0.1
Other	24	0.2
Voicemail	23	0.2
Web Enrollment	35	0.2
* Participants who complete all calls in the multiple call counseling program, but re-enroll for additional support.		
^ Participants who opt to re-enroll in services after completing the seven-month follow-up survey.		

Table 4 Interpretations: Of the 14,643 callers enrolling in TTQL services in 2017, 12,108 enrolled via phone call; of these, 79 in 100 callers used English, and four in 100 callers used Spanish. Twelve in 100 were referred by a healthcare provider using a fax referral system, and four in 100 were electronically referred.

Table 5. Number and percentage of enrolled callers, by means of hearing about TTQL, 2017.

Means of Hearing About TTQL	N	%
Total	14,643	100.0
TV/Commercial	7,508	51.3
Health Professional	3,233	22.1
Family/Friend	1,336	9.1
Website	520	3.6
Health Department	277	1.9
Community Organization	229	1.6
Brochure/Newsletter/Flyer	177	1.2
Health Insurance	133	0.9
Radio	105	0.7
Employer/Worksite	94	0.6
TV/News	80	0.6
Not Collected	64	0.4
Outdoor Ad	29	0.2
Re-enrollment Offer	26	0.2
Outbound Re-Enrollment Offer	16	0.1
Newspaper/Magazine	15	0.1
CVS/pharmacy	12	0.1
Cigarette Pack	4	0.0
QUITNOW Mobile App	2	0.0
Other	660	4.5
Does Not Remember	113	0.8
Refused	10	0.1

Table 5 Interpretations:

Just over half of enrolled callers (51.3%) heard about the program from television ads and commercials. About two in 10 enrolled callers (22.1%) were introduced to the program by a health professional, while one in 10 heard about the program through a family member or friend. Fewer than five in 100 heard about the program through any other methods.

Table 6. Number and percentage of enrolled callers who received NRT recommendation, by type of NRT recommended, 2017.

NRT Type	N	%
Total	8,685	100.0
Patch	6,485	74.7
Gum	1,115	12.8
Lozenge	1,085	12.5

Note: Participants enrolled in multiple call counseling are asked a series of questions during their assessment call. Based on their responses to these questions, participants are recommended a type of NRT to be used. Enrolled callers who are not eligible for receiving NRT by the TTQL are not given a recommendation.

Denominator: Total number of callers enrolled in multiple call counseling who received an NRT recommendation during a completed intervention/assessment call.

Table 6 Interpretations: Out of the total 14,643 enrolled callers in 2017 (see Table 3), 8,685 callers received an NRT recommendation during their assessment call. Almost three quarters of these (74.7%) were recommended nicotine patches to aid in tobacco cessation, with 13 in 100 being recommended either gum or lozenges. No callers were recommended combination therapy (use of two or more types of NRT) in this reporting year.

Table 7. Number and percentage of NRT shipments to enrolled callers, by NRT type, 2017.

NRT Type	Number of Shipments (N)	%
Total	7,601	100.0
Patch	5,601	73.7
Gum	1,000	13.2
Lozenge	1,000	13.2
<i>Note:</i> Data presented in this table does not count the unique number of enrolled callers who received NRT. Some enrolled callers may have received more than one shipment.		

Note: This table displays the number of shipments made to enrolled callers. Some participants may have received more than one shipment.

Denominator: Total number of NRT shipments made to enrolled callers (7,601).

Table 7 Interpretations: There were 7,601 shipments of NRT made to enrolled callers in 2017. Of the NRT types, 74 in 100 were nicotine patches, while 13 in 100 were either gum or lozenges.

Table 8. Number and percentage of enrolled callers receiving NRT, by NRT type, 2017.

NRT Type	Number of Callers (N)	%
Total	7,561	100.0
Patch	5,568	73.6
Gum	998	13.2
Lozenge	995	13.2

Denominator: Total number of enrolled callers who were sent NRT (n=7,561).

Table 8 Interpretations: Of the 8,685 enrolled callers who received an NRT recommendation in 2017 (see Table 6), 7,561 received a shipment of NRT from the TTQL (86.1%). NRT sent was in the form of nicotine patches to 74 in 100 callers (73.6%), while either gum or lozenges were sent to 13 in 100 callers.

QEE Dataset Limitations

- The QEE dataset provides a snapshot in time. Some information for callers may be collected in future calls, after data is extracted from the database managed by Optum and sent to the TPCB.
- QEE data tables are not to be compared to REE data tables displayed in the next section. REE data contains referral information during pre-registration. QEE data contains information on callers who are registered. There may be a time-lag in the period where pre-registered referrals become registered callers.
- There is no limit to the number of incoming and outgoing calls made to/from registered callers. Each individual call is captured as a separate observation. De-duplicated registration calls were used to conduct aggregate analysis.
- Callers enrolled in multiple call counseling at registration may not have actively used TTQL services.
- Callers who enrolled in web-based services only are not included in the analysis.

Referral Experience Extract (REE)

Over 13,000 tobacco users were referred to the TTQL by healthcare providers.

Table 9. Number and percentage of TTQL referrals made by healthcare providers, by referral method, 2017.

Referral Method	N	%
Total	14,095	100.0
Electronic Referral	4,079	28.9
Fax	9,987	70.9
Manual Electronic Referral	6	0.0
Web	23	0.2

Note: Table only includes referral methods used by healthcare providers. Phone referrals included in REE dataset were excluded from analysis.

Denominator: Total number of electronic, fax, and web referrals (14,095).

Table 9 Interpretations: Of the 14,095 referrals made in 2017, almost three in 10 (28.9%) were made using an electronic referral system, while seven in 10 (70.9%) referrals were made using a fax referral system.

Table 10. Number and percentage of TTQL referrals, by referral method and enrollment status, 2017.

Referral Method	Total Number Reached	Accepted Services		Declined Services	
		N	%	N	%
Total	5,341	3,215	60.2	2,126	39.8
Electronic	1,371	820	59.8	551	40.2
Fax	3,951	2,379	60.2	1,572	39.8
Manual Electronic	1	1	100.0	0	--
Web	18	15	83.3	3	16.7

Note: Table excludes referrals to participants who have not yet been reached (i.e., enrollment status: active, needs call back, unreachable).

Denominator: Total number of electronic, fax, and web referrals who accepted or declined services (5,341).

Table 10 Interpretations: Table 10 shows the 2017 referrals made to callers who had been reached and either accepted or declined services (n=5,341). Among the total 4,079 electronic referrals (see Table 9), three in 10 (n=1,371, 33.6%) were reached. Among the total 9,987 fax referrals (see Table 9), four in ten (n=3,951, 39.6%) were reached. Almost two-thirds of referrals accepted TTQL services (60.2%) Acceptance rates were similar for fax and electronic-referrals (59.8% and 60.2%, respectively).

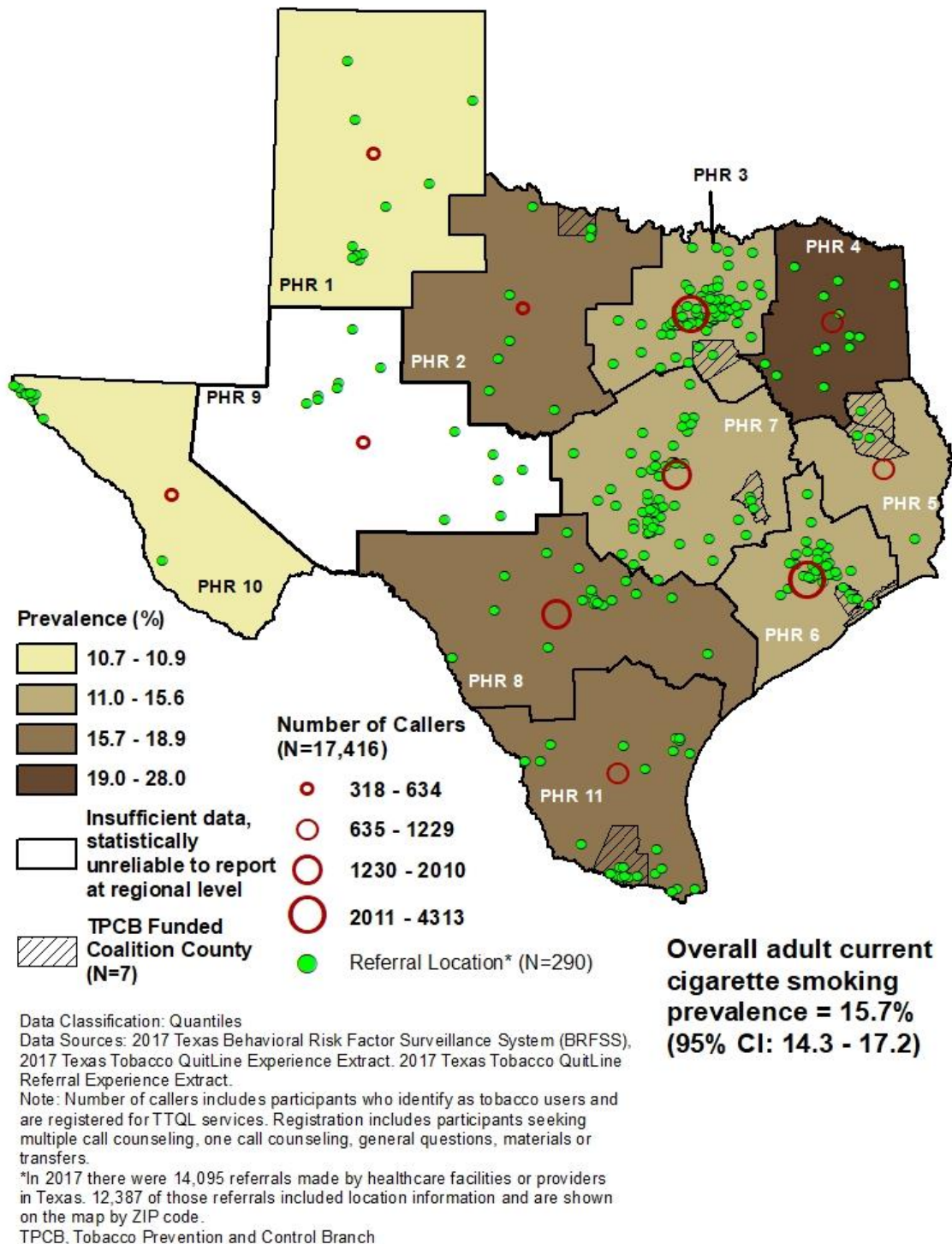


Figure 4. Referring clinic locations and smoking prevalence estimates, by Public Health Region (PHR), Texas, 2017.

REE Dataset Limitations

- Frequencies presented in Tables 8 and 9 represent the number of TTQL referrals, not the number of patients referred. There is no limit to the number of times a patient can be referred to the TTQL, therefore data included in the tables are not de-duplicated.
- Data is dependent on information provided by healthcare providers at the time of referral.
- Clinic location information was not provided for many referrals. Referral clinic locations in Figure 4 are under-estimated.
- Clinic referral locations in Figure 4 are geocoded using zip codes. Several referring clinics could possibly be present in the same zip code.
- Referrals who accept services may not have actively used TTQL services.
- REE data tables are not to be compared to QEE data tables. REE data contains referral information during pre-registration. QEE data contains information about callers who are registered. There may be a time-lag in the period where pre-registered referrals become registered callers.

TTQL Annual Evaluation

The TPCB contracts Optum to conduct a 7-month follow-up survey of the enrolled callers. Data from this survey is used to evaluate participants' progress in tobacco cessation. A report with findings from fiscal year 2017 survey is forthcoming.

Appendix A. Supplementary Information

Table 11. List of underlying causes of death and their corresponding ICD-10 codes, Texas, 2015.

Underlying Cause of Death	ICD-10 Codes
Malignant neoplasms of lip, oral cavity, and pharynx	C00 – C14
Malignant neoplasms of esophagus	C15
Malignant neoplasms of pancreas	C25
Malignant neoplasms of larynx	C32
Malignant neoplasms of trachea	C33
Malignant neoplasms of bronchus and lung	C34
Emphysema	J43
Chronic obstructive pulmonary disease (COPD)	J44

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