Tobacco Free Florida Cessation Programs:

Utilization and effectiveness within priority populations

2020 Ad Hoc Report

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Introduction

About this report

The purpose of this report is to describe the extent to which the current BTFF tobacco cessation programs are effective for demographic subgroups of participants, specifically those who have historically experienced a higher burden from tobacco use. This will include reporting quit rates for demographic groups and reporting the extent to which each group currently participates in BTFF cessation programs.

The primary audience for this report is the BTFF. Additional audiences for information in this report may include the Tobacco Education and Use Prevention Advisory Council (TAC), other state agencies, and potential program partners. The BTFF continues to concentrate its efforts on promoting health equity and reducing health disparities related to tobacco use. The information in this report can be used in alignment with this work to inform promotion of the cessation programs to groups with historically low enrollment in the program and determine where new or more tailored approaches may be needed to provide more appealing and effective services for specific groups. Finally, this report may be used to establish baselines or benchmarks from which BTFF could develop goals for increased outreach, enrollment, and cessation for specific groups.

BTFF cessation programs

The BTFF within the Florida Department of Health administers a menu of tobacco cessation programs as part of a comprehensive tobacco prevention and control initiative. The following programs are available to all residents of Florida who meet minimum eligibility requirements and are organized here under two branches: those offered through Optum and those offered through the Area Health Education Centers (AHECs). Each program offers a free supply of nicotine replacement therapy (NRT) to eligible participants.

Optum Services

- Individual services (NRT, text support, email support, quit guide)
- Quitline telephone counseling
- Quitline Behavioral Health program
- Web Coach self-directed online resources

AHEC Services

- Single-session in-person cessation courses
- Multi-session in-person cessation courses
- Behavioral health (Journeys) in-person cessation courses

Introduction

Reducing tobacco-related disparities

In the U.S., the substantial decrease in tobacco use since 1965 is widely considered a major public health success. However, pronounced disparities remain. Certain subgroups of the U.S. population have higher smoking prevalence, while other subgroups experience disparities in key indicators of smoking cessation - quit attempts, receiving advice to quit from a health professional, and using cessation therapies, or experience disparate health outcomes related to tobacco use.[1] Several factors contribute to and maintain tobacco-related disparities, including social determinants of health, tobacco industry influence and targeted marketing, and a lack of comprehensive tobacco control policies including access to evidence-based cessation treatment.[2]

The Centers for Disease Control and Prevention (CDC) recommends a multipronged approach to reducing these disparities. Tobacco control policies, including smoke-free laws, price increases for tobacco products, and regulations to reduce the influence of tobacco company marketing, take a population-based approach to improving health and have the potential to reach the greatest number of people. Policy efforts should be paired with accessible, evidence-based cessation services as key components of any state effort to reduce tobacco-related disparities.[2]

Focus of this report

A key component to reducing cessation disparities is to first assess whether current interventions are effective for priority populations. This report examines the effectiveness of the current BTFF cessation programs for tobacco users within five demographic groups for which sufficient data were available, presenting quit rates achieved by each group and describing the extent to which each group participates in BTFF cessation programs.

The population groups included in this report are:

- Participants who report enrollment in **Medicaid**
- Participants who identify as **Black or African American**
- Participants who identify as **Hispanic or Latino/a**
- Participants who identify as **LGBTQ+**
- Participants who reside in **Rural** areas

BTFF services for tobacco users with behavioral health conditions

In response to the high burden of tobacco use experienced by Floridians with behavioral health (substance use and/or mental health) conditions, BTFF has invested in tailored support for tobacco users with behavioral health conditions. **Evaluation results for these programs have been previously reported.**[3,4]

- The Quitline offers a tailored behavioral health cessation program with seven coaching calls and a free eight-week supply of NRT, compared to three calls and a two-week supply provided by the standard program. Evaluation has found the majority of eligible callers choose to enroll in this more intensive program and report high levels of satisfaction with services. Participants in the behavioral health program achieve quit rates that are similar to quit rates achieved by the the standard program.
- AHEC offers cessation groups within behavioral health treatment facilities, using the curriculum *The Journey Starts Here*. The program is provided onsite and offers flexible drop-in scheduling; facility clients may attend weekly cessation groups (up to 24 sessions in a fiscal year) and may receive up to 24 weeks of free NRT. To date, evaluation has found that participants like the drop-in scheduling and receive more intensive cessation support than participants enrolled prior to the *Journeys* program. An outcome evaluation study which will report on quit rates and other outcomes is currently in progress.

Calculating Quit Rates

To obtain a sufficient sample size for subgroups of participants, we combined data from multiple years. This report is based on a sample of BTFF cessation program participants who enrolled between January 2017 and October 2019, and who were selected for and responded to a 7-month follow-up survey.

Two quit rates

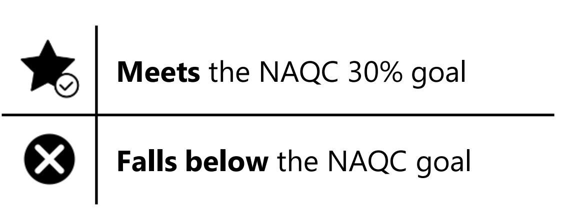
The follow-up survey assesses whether respondents have used any tobacco or electronic nicotine delivery systems (ENDS) within the past 30 days. Those who respond "no" are considered abstinent. The North American Quitline Consortium (NAQC) recommends reporting two quit rates: the first measures abstinence from conventional tobacco only (smoked or smokeless), and the second measures abstinence from both conventional tobacco and ENDS.[5]

$$\text{Conventional tobacco quit rate} = \frac{\text{\# abstinent from conventional tobacco}}{\text{\# of survey respondents}}$$

$$\text{Conventional tobacco + ENDS quit rate} = \frac{\text{\# abstinent from both tobacco and ENDS}}{\text{\# of survey respondents}}$$

Interpreting quit rates

NAQC recommends that quitlines which provide proactive counseling and cessation medications strive to achieve quit rates of **30%** or higher. NAQC set this goal in relation to the **conventional tobacco** quit rate.



The population subgroups included in this report are **not independent samples;** a survey respondent may be included in more than one group. For example, an individual who reports they are a Medicaid recipient who lives in a rural area would be included in both the Medicaid and Rural population quit rates. For this reason, it is important that we **do not compare the quit rate from one group to the quit rate of another**. Instead, we compare each group's conventional tobacco quit rate to the NAQC goal and will report whether a population meets or falls short of that benchmark.

Calculating Quit Rates

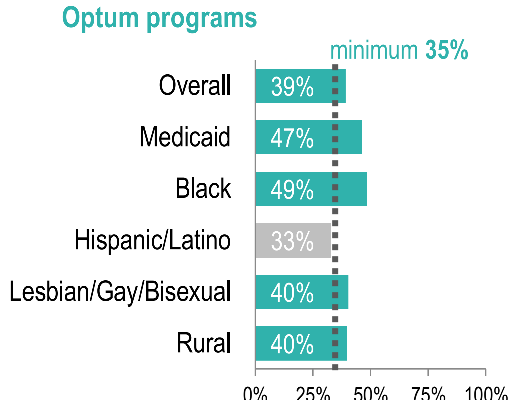
Limitations due to low survey consent and response rates

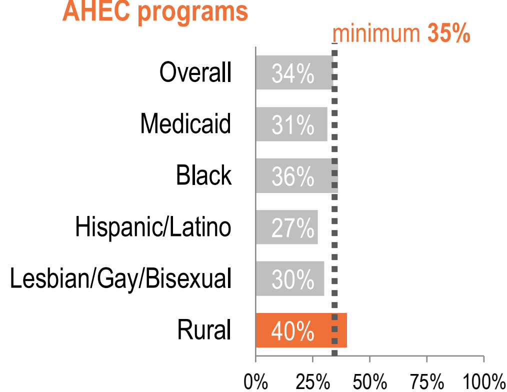
Quit rates are an estimate of the success of program participants as a whole; the follow-up surveys are done with a sample of participants and the results are applied to the entire group. For this reason, we care about the generalizability of the survey data and the extent to which the survey respondents accurately represent all participants. People who are highly motivated to quit are more likely to **consent** to the survey, and people who are abstinent from tobacco are more likely to **respond** to the survey, so strong levels of participation in the survey help to improve the representativeness of the resulting data.

We are using the **survey cooperation rate** (consent rate multiplied by response rate) to describe the level of survey participation and have set a minimum threshold of a 35% cooperation rate. Respondent groups with cooperation rates below 35% are marked with the caution icon shown above to indicate we are not confident that the survey respondents accurately represent all participants.

- Within the Optum programs, **all groups** meet the threshold with the exception of Hispanic and Latino/a respondents.
- Within the AHEC programs, only the **Rural** respondents meet the minimum cooperation requirement. **We recommend caution in interpreting the findings for groups with lower cooperation as their quit rates are likely inflated.**

Survey cooperation rates



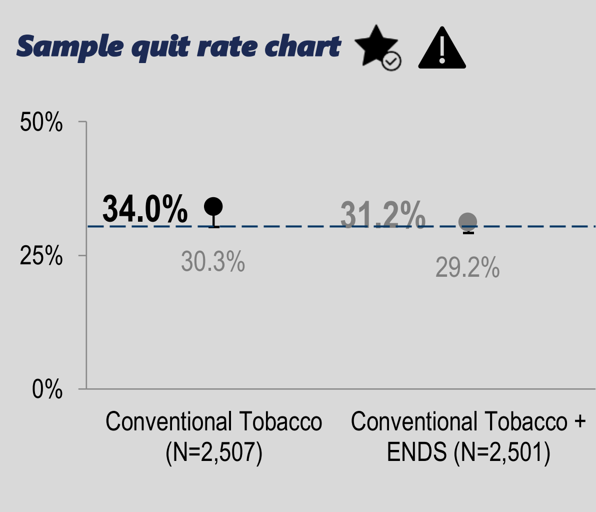


Reading the quit rate charts

For each population, two quit rates are displayed along with error bars showing the 95% confidence interval. The NAQC 30% goal is shown as a dotted line, and a symbol is added to explain whether the quit rate meets (★) or falls below (⊗) that goal.

For any populations which had low levels of survey cooperation, the caution symbol (⚠) is displayed and the upper bound of the confidence interval is suppressed. This is done because we expect that with low survey cooperation the quit rate is likely to be inflated, and the true quit rate most likely does not fall above the point prevalence quit rate.

The labels below the chart include the number of survey respondents included in the quit rate denominator.



Results: Program-level quit rates

Overall Quit Rates achieved by BTFF cessation programs

For the purpose of this report quit rates were calculated for the Optum and AHEC programs overall, using data from Jan 2017 – October 2019. These rates are provided as context to show the effectiveness of the cessation programs for all participants. The headline for each chart describes how the conventional tobacco quit rate compares to the NAQC goal. In each chart the conventional tobacco quit rate is shown in a darker color, and the quit rate for conventional tobacco plus ENDS is shown in a lighter color.

Quit rate for Optum respondents meets the NAQC goal

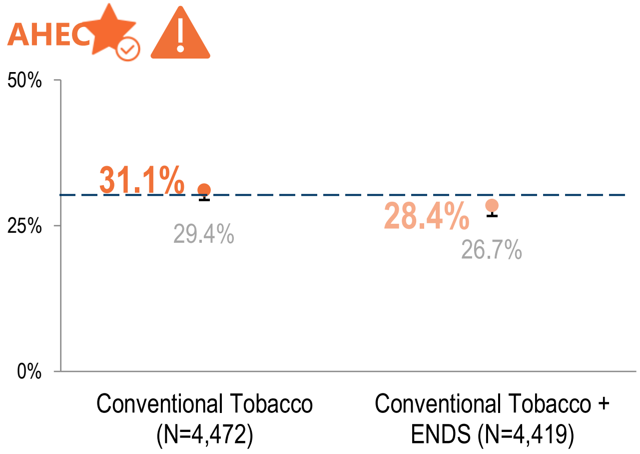
The quit rate for Optum respondents overall is 32.8%, which meets the NAQC target. However, when assessing how many respondents are abstinent from both conventional tobacco and ENDS, the quit rate drops to 29.2%.

The quit rate for AHEC respondents meets goal, but may be inflated

The quit rate for AHEC respondents overall is 31.1%, meeting the NAQC goal. There were low levels of survey cooperation, indicating the survey results are less reliable. It is likely that the quit rate does not accurately represent all program participants and may be inflated. When considering both tobacco and ENDS the quit rate is nearly 3 points lower.

OPTUM

50%
34.3%
32.8%
31.3%
30.6%
29.2%
27.7%
25%
0%
Conventional Tobacco (N=3,708)
Conventional Tobacco + ENDS (N=3,705)



Results: Priority population quit rates and program utilization

Organization of this section:

Results are provided for the five priority populations which are the focus of this report. Each page provides results for a single population, organized into three sections.

Context

The top of each page provides some background describing tobacco-related disparities specific to one population. Tobacco use prevalence rates for each population were obtained from the 2018 National Health Interview Survey.[6] These rates include any use of cigarettes, smokeless, cigars, pipes, or e-cigarettes. This source was chosen because standard tobacco use rates were available for all populations of interest, with one exception: the tobacco use rate for rural residents was obtained using 2017 SAMHSA data.[7] Additional tobacco-related disparity data were obtained from a variety of sources.

Quit Rates

Next, charts display quit rates achieved by BTFF cessation program respondents for each selected population or demographic group. BTFF cessation program demographic data are self-reported by tobacco users during registration; we used these data to select respondents within the existing follow-up survey dataset who are members of one or more of the five priority populations. Home address was used to categorize participants as residents of rural or non-rural counties.

Assessing representative levels of cessation program reach within priority populations

Finally, we report whether members of priority populations enroll in BTFF cessation programs at representative levels. To make this determination PDA used FY19 participant demographics, 2019 Florida Behavioral Risk Factor Surveillance System data[8] and 2019 Florida Adult Tobacco Survey data. We calculated the proportion of program participants and the proportion of all Florida tobacco users who identify with each priority population. We calculated the difference between these two proportions and set the following cut points: if the difference between the programs and Florida tobacco users is 0 to 1.9 percentage points, we consider the population to be adequately represented within the programs; a difference of 2.0 to 3.9 points indicates the population is over- or under-represented to a modest degree; a difference of 4.0 points or greater indicates the population is greatly over- or under-represented within the programs.

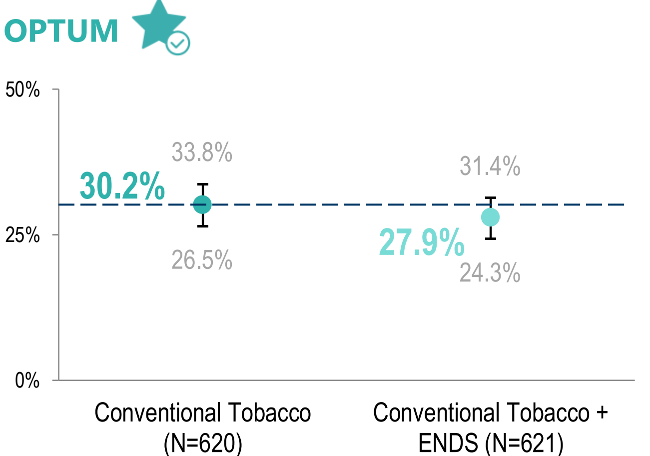
In some cases there are differences in population definitions across data sources (Optum, AHEC, BRFSS, FL-ATS). Please see the Appendix for limitations associated with these differences.

Medicaid

Tobacco users enrolled in Medicaid are identified as a priority population due to both a high rate of tobacco use and potential barriers to accessing cessation services. Nationally, the tobacco use rate for the Medicaid population is 28%, notably higher than the rate of 20% among all adults.[6] Medicaid enrollees are less successful at quitting (as compared to those with private insurance) despite having similar levels of interest in quitting.[9] In Florida, Medicaid coverage for cessation counseling and medications is not comprehensive; coverage varies under both fee-for-service and managed care plans, and some barriers to accessing treatments (such as copays) exist,[10] although BTFF cessation programs are free to state residents. Due to lower income levels, Medicaid enrollees may be unable to afford out-of-pocket treatments and may experience transportation and other barriers while trying to access cessation services.

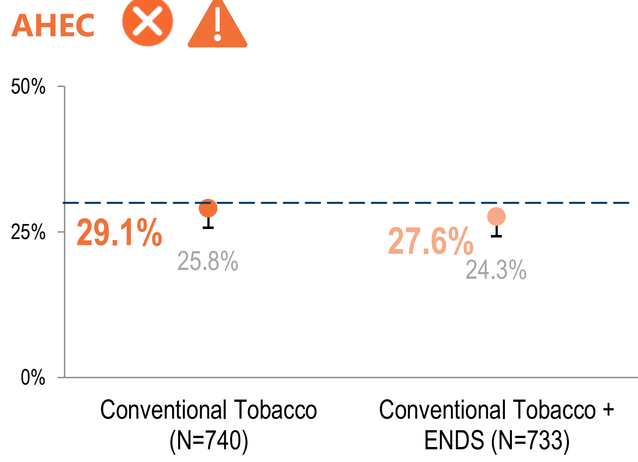
The quit rate for Optum respondents in Medicaid meets the goal

When considering both conventional tobacco plus ENDS, the quit rate is more than 2 points lower.



The quit rate for AHEC respondents in Medicaid falls just below the goal

When ENDS use is considered, the quit rate is 1.5 points lower. The AHEC Medicaid rates may be inflated due to low survey cooperation.



How well are BTFF programs reaching Medicaid enrollees in Florida?

BTFF programs do not have a strong reach into the Medicaid population. About **17% of all BTFF program participants** are enrolled in Medicaid, as compared to **27% of all Florida tobacco users**.

Medicaid enrollees achieve quit rates that meet or approach the target, although the programs do not have a strong penetration into the Medicaid population in Florida.

Black or African American

African Americans use tobacco at a lower rate than whites, but have a harder time quitting and are disproportionately impacted by tobacco-related illness and death.

Nationwide, tobacco use prevalence among African Americans is 19.3%, as compared to nearly 22% among whites.[6] While African Americans use tobacco at lower rates than whites, smoke fewer cigarettes per day and start smoking at an older age, they are still more likely to die from smoking-related diseases as compared to whites.[11] For years, African American communities have been systematically targeted by tobacco industry marketing efforts, particularly marketing of menthol tobacco products.[12,13] The majority of African American smokers use menthol tobacco products[14] which have been found to be harder to quit than non-menthol tobacco products.[15] African American have less success quitting even though most want to quit and have made multiple attempts to do so.[11] More tailored programming and policy efforts, informed by best-practice and community insights, are needed to support African American communities to quit tobacco successfully.

The quit rate for Optum respondents who identify as African American meets the goal

The conventional tobacco and the +ENDS quit rates achieved by African American respondents are both strong.

OPTUM

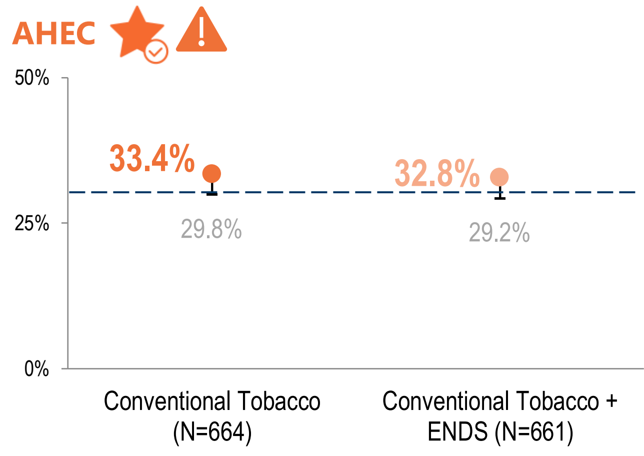
50%
25%
0%

38.8%
34.3%
29.7%
Conventional Tobacco (N=426)

37.0%
32.6%
28.1%
Conventional Tobacco + ENDS (N=427)

The quit rate for AHEC respondents who identify as African American meets the goal

While the AHEC quit rates meet the goal, rates may be inflated due to low survey cooperation.



How well are BTFF programs reaching African American tobacco users in Florida?

Approximately **12% of all BTFF participants** are African American. Among all Florida tobacco users, **13%** are African American. African Americans are **adequately represented within BTFF programs**.

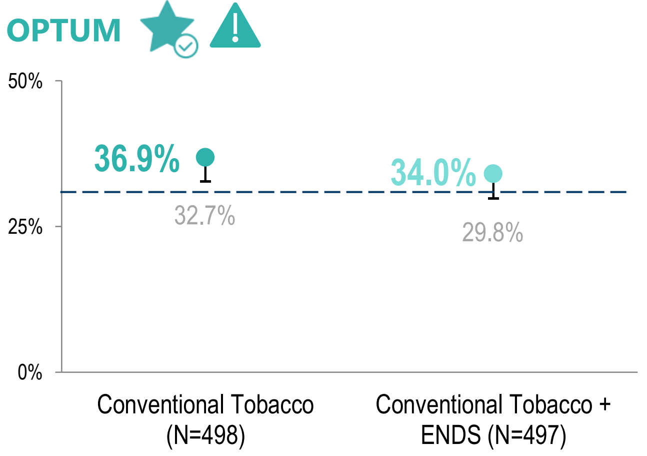
African American tobacco users who enroll in BTFF cessation programs achieve strong quit rates, and this group enrolls in BTFF programs at representative levels.

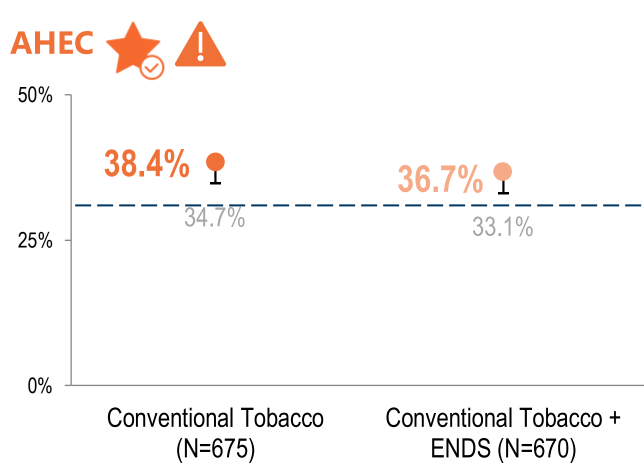
Hispanic and Latino/a

The Hispanic and Latino/a population has a low rate of tobacco use but faces significant barriers in accessing and utilizing cessation services. The tobacco use rate for Hispanics in the U.S. is much lower than that of non-Hispanic whites (14% vs. 22%).[6] However, there are variations in tobacco use among different Hispanic and Latino/a communities and cigarette smoking rates are higher for those born in the U.S. Due to systemic inequities, Hispanic and Latino/a individuals are less likely to have health insurance coverage and access to healthcare, which is a barrier to accessing cessation treatments.[11] Additionally, a study looking at cessation behaviors between Hispanic and non-Hispanic smokers in the United States found that Hispanic smokers were consistently less likely to receive professional advice to quit and to use proven cessation treatments than non-Hispanic white smokers, suggesting a need for culturally competent initiatives directed to both healthcare providers and tobacco users.[16]

The quit rates for both Optum and AHEC respondents who identify as Hispanic or Latino/a meet the goal; the +ENDS rates are also strong.

Quit rates for both programs may be inflated due to low levels of survey cooperation.





How well are BTFF programs reaching Hispanic and Latino/a tobacco users in Florida?

Among all **BTFF participants, 16%** identified as Hispanic or Latino/a, compared to **20% of all Florida tobacco users.** This indicates that Hispanic and Latino/a tobacco users are **underrepresented within BTFF programs.**

Hispanic and Latino/a tobacco users who participate in BTFF programs achieve strong quit rates, but the BTFF programs do not have adequate reach into this community.

LGBT+

The lesbian, gay, bisexual and transgender community is identified as a priority population due to a very high rate of tobacco use. The national tobacco use rate for lesbian, gay, and bisexual adults is 29.2%, notably higher than the 19.5% rate among heterosexual adults.[6] National tobacco use rates were not available for adults who identify as transgender. The tobacco industry targets LGBT persons through direct and indirect advertising, community outreach, and sponsorships.[17] Studies have also found that LGB individuals are much less likely to call a smoking cessation quitline and are less likely to have health insurance, which presents barriers to using some cessation services.[18]

Due to limitations in data collection the available quit rate data represent only a subset of the LGBTQ+ community which BTFF has selected as a priority population. In addition, Optum and AHEC programs identify sexual orientation and gender identity differently so these quit rates are not comparable across programs.

The quit rate for Optum respondents who identify as LGBT meets the goal

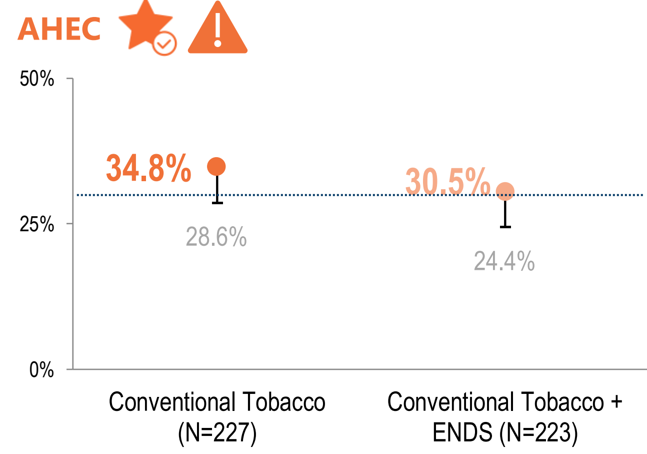
The conventional tobacco quit rate meets the NAQC target, while the +ENDS quit rate is substantially lower.

OPTUM

50%
25%
0%
40.3%
32.7%
25.0%
34.0%
26.7%
19.5%
Conventional Tobacco (N=147)
Conventional Tobacco + ENDS (N=146)

The quit rate for AHEC respondents who identify as LGBT meets the goal

While the conventional tobacco quit rate meets the NAQC goal, results may be inflated due to low survey cooperation.



How well are BTFF programs reaching the LGBT population in Florida?

Approximately **7% of all BTFF participants** identified as lesbian, gay, or bisexual and 1% identified as transgender. Similarly, **8% of all Florida tobacco users** identify as lesbian, gay, or bisexual and 0.5% identify as transgender, indicating that the LGBT community is **adequately represented within BTFF programs.**

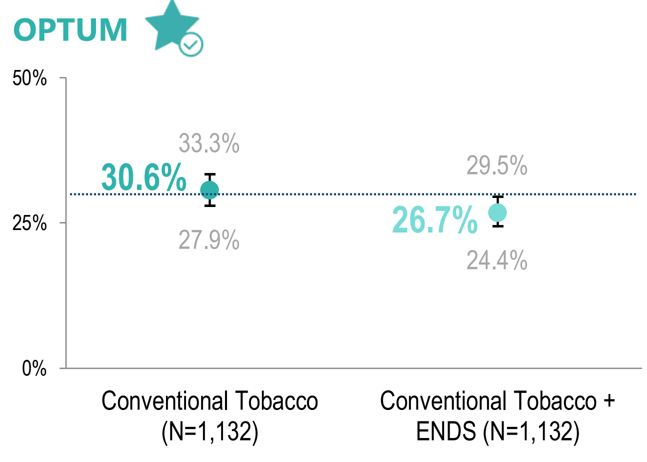
Tobacco users who identify as LGBT enroll in the BTFF programs at representative levels and achieve strong quit rates.

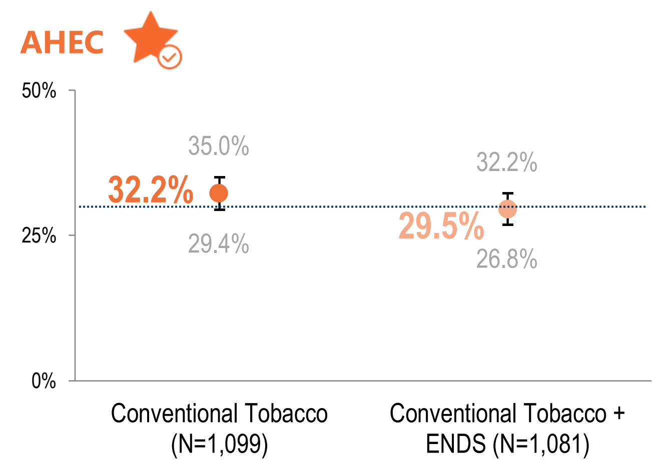
Rural Residents

Individuals who live in rural areas have higher tobacco use rates and face geographic barriers to accessing healthcare and cessation services. When comparing tobacco use by county population types, rural counties have the highest cigarette (28.5%) and smokeless tobacco (8.6%) use rates.[7] Smokers living in rural areas are more likely to smoke 15 or more cigarettes per day compared to smokers living in urban areas. In terms of cessation behaviors, views about tobacco cessation vary within rural populations with some groups more or less likely to use cessation services, but in general those living in rural areas typically have less access to cessation services.[19]

The quit rates for both Optum and AHEC respondents living in rural counties meet the goal

The +ENDS quit rates are several points lower, particularly within the Optum programs.





How well are BTFF programs reaching rural tobacco users in Florida?

Among all BTFF, **6% of participants** reside in a rural county. We consider this population to be **adequately represented within BTFF programs,** since **5.5% of all Florida tobacco** users reside in a rural county.

BTFF cessation programs are an effective resource for rural Floridians. The quit rates achieved by respondents who live in rural counties meet the goal.

Conclusions

With one exception (AHEC-Medicaid) each priority population achieves quit rates which meet the NAQC target, which is set for a general population of tobacco users participating in an evidence-based quitline program. **We conclude that the BTFF programs successfully support tobacco users from diverse backgrounds to quit tobacco.**

For all priority populations, we suggest that the goal should be to serve these groups at or above representative levels. **The programs meet this outreach goal for three populations in this study** (Black/African American, LGBT, Rural). The programs are somewhat less successful at reaching two populations in this study. **Medicaid enrollees and Hispanic or Latino/a tobacco users are underrepresented** within BTFF programs. Additional promotion and program improvements may increase reach within all five groups, thereby connecting more tobacco users to treatment and contributing to reductions in tobacco-related disparities. Should BTFF undertake such efforts, the findings in this report (quit rates and reach into priority populations) may be used as baseline levels to monitor any changes in program use and effectiveness.

Population	Effectiveness		Utilization Population enrolls at representative levels
	Optum	AHEC	
Medicaid	★	✖ ⚠	✖
African American	★	★ ⚠	✔
Hispanic or Latino/a	★ ⚠	★ ⚠	✖
LGBT	★	★ ⚠	✔
Rural Residents	★	★	✔

Key

★ Meets quit rate goal

⚠ Quit rates may be inflated due to low survey cooperation levels; interpret with caution

✔ Population enrolls in cessation programs at representative levels

Recommendations

Partner with community agencies and health systems

As one strategy to increase participation, we recommend BTFF form additional **partnerships** with health systems and community agencies which serve priority populations of interest to the BTFF. Potential partners include Federally Qualified Health Centers, public housing facilities, social service agencies, and shelters. These partnerships could be formed with local AHECs, or on a statewide level, with BTFF, to assist with **recruitment, referral systems**, and **tailored programming**. We recommend disseminating the findings from this report to potential partners to demonstrate that the BTFF programs are effectively assisting Floridians from diverse backgrounds to quit tobacco.

Recruitment

Partnering agencies can assist with recruitment. Faith leaders, elders, community health workers, and health navigators are often trusted messengers within a community and can educate community members about the benefits of quitting tobacco as well as about the free services that are available through BTFF. Partners can distribute promotional materials through their existing communication channels and encourage clients or group members to seek out help with quitting.

"Members of priority populations and the organizations who serve them are vital to planning efforts. They can provide information about how priority groups use cessation services and what barriers they face to getting help. Including them in planning also ensures that cessation interventions take into account the needs and culture of the population. Programs can ensure that these groups are active participants in discussions and decision making."

- CDC Best Practices User Guides, Cessation in Tobacco Control[20]

Referral systems

BTFF has set up eReferral systems with health systems and county health departments. They have also set up an innovative fax referral system with Florida Workforce Development's CareerSource offices, and are currently working to establish a referral connection with military recruitment offices. We recommend that BTFF continue this work by seeking fax referral partners within community and social service agencies that could connect their agency clients to BTFF cessation programs. Partners with the capacity to refer large numbers of tobacco users may merit the Bureau's investment in developing eReferral connections.

Tailored programming

This study did not examine the cultural competency of the BTFF cessation programs. More investigation would be needed to understand how each population perceives the current programming, whether specific barriers interfere with accessing BTFF programs, and what kinds of tailoring would make the programs a better fit for each group. It is a positive finding that several of the populations studied here enroll in the BTFF programs at or near representative levels, and that all but one of the quit rates meets the 30% quit rate goal. However, it is possible that the rates of enrollment and cessation might both increase if the programs developed tailored services and materials. Community partners can advise on this work.

Recommendations

Continue successful cessation strategies

The CDC recommends that tobacco **cessation programs** employ several strategies designed to address tobacco-related disparities.[19] BTFF has such strategies in place and we recommend these practices be continued or expanded.

- **Remove barriers to accessing cessation support.** BTFF offers free services including nicotine replacement therapy. BTFF cessation supports are accessible through a variety of modalities that can be accessed remotely or in-person.
- **Incorporate cessation into behavioral health treatment.** BTFF supports the AHEC programs to deliver a tailored cessation program within behavioral health treatment facilities and supports Optum to provide a tailored quitline behavioral health program.
- **Train healthcare staff** on delivering culturally competent cessation treatment. AHECs provide training to healthcare staff within their service areas and should work to expand these efforts to focus specifically on health systems which serve priority populations. In some settings, community partners may advise or assist on culturally competent training.
- **Provide cessation information in tobacco users' native languages.** Both Quitline and AHEC offer cessation services and program materials in Spanish; the Quitline has translation services available in several additional languages. Ongoing monitoring is important to ensure that resources in multiple languages are developed and maintained.
- **Monitor how priority populations use cessation services.** The evaluation monitors and reports on this topic annually. However, some gaps exist in available demographic data, limiting the ability to monitor program use by all populations. In addition, the evaluation should disaggregate demographic data where possible to better understand tobacco use and cessation within smaller, specific subgroups.
- **Support eReferrals to cessation programs**, particularly with referral providers who serve priority populations. BTFF currently supports eReferrals with all 87 Florida county health departments and with Florida Workforce Development Board CareerSource initiative, as well as with two major health systems in Florida.
- **Continue collaborations to reach tobacco users in Medicaid.** BTFF is partnering with the with Agency for Healthcare Administration (ACHA) to facilitate improved identification of tobacco users among Medicaid enrollees, and to generate referrals to BTFF cessation programs. As part of this collaboration, BTFF has provided training and materials to Medicaid provider staff to routinely identify tobacco users and provide cessation support.

  The CDC recommends states review Medicaid coverage for cessation supports and improve coverage where possible, including removal of cost barriers such as copays to improve access to treatments.[2] While these strategies fall outside the scope of BTFF cessation programs, they are designed to improve access to treatment for Medicaid enrollees and have a greater potential to help reduce tobacco use statewide by promoting cessation among Medicaid enrollees, above and beyond the contributions of BTFF-funded cessation programs.

Recommendations

Pair these strong cessation interventions with effective population-based policy initiatives

Strong cessation interventions are one part of a comprehensive approach to achieving health equity. The BTFF has several effective cessation strategies in place to serve priority populations. The additional strategies recommended in this report can help to improve reach into priority populations as well as improve the programs' cultural competency. These cessation efforts should be paired with effective population-based policy initiatives, such as efforts to enact smoke-free laws, pass tobacco price increases, and regulate tobacco advertising. Because tobacco control policies take a population-based approach to improving health, they have the potential to reach more people and can be particularly effective at reducing tobacco-related disparities.[21]
Tobacco policies, combined with effective and accessible cessation services, provide a comprehensive path to achieving health equity.

References

1. U.S. Department of Health and Human Services. *Smoking Cessation. A Report of the Surgeon General.* Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020.

2. Centers for Disease Control and Prevention. *Best Practices User Guide: Health Equity in Tobacco Prevention and Control.* Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2015.

3. Professional Data Analysts. (2019). *Evaluation of Quitline Tobacco Cessation Behavioral Health Program.* Minneapolis, MN.

4. Professional Data Analysts. (2019). *Florida AHEC Behavioral Health Course Evaluation Report: Year 1.* Minneapolis, MN.

5. Betzner, A., Lien, B., Rainey, J. et.al., 2015. *Calculating Quit Rates, 2015 Update*. North American Quitline Consortium, Phoenix, AZ.

6. Creamer MR, Wang TW, Babb S, et al. *Tobacco Product Use and Cessation Indicators Among Adults — United States, 2018*. MMWR Morb Mortal Wkly Rep 2019;68:1013–1019. DOI: http://dx.doi.org/10.15585/mmwr.mm6845a2.

7. Substance Abuse and Mental Health Services Administration. Results from the 2016 National Survey on Drug Use and Health: Detailed Tables. Rockville, MD: Substance Abuse and Mental health Services Administration, Center for Behavioral Health Statistics and Quality, 2017 [accessed 2018 Jun 18].

8. The 2019 Florida Behavioral Risk Factor Surveillance System data used in this report were collected by the Florida Department of Health (FDOH). The views expressed herein are solely those of the author(s) and do not necessarily reflect those of the FDOH.

9. Babb S, Malarcher A, Schauer G, Asman K, Jamal A. Quitting Smoking Among Adults — United States, 2000–2015. MMWR Morb Mortal Wkly Rep 2017;65:1457–1464. DOI:http://dx.doi.org/10.15585/mmwr.mm6552a1 Accessed July 15, 2020.

10. STATE System Medicaid Coverage of Tobacco Cessation Treatments Fact Sheet. CDC: State Tobacco Activities Tracking and Evaluation System 18 March 2020. Retrieved from https://www.cdc.gov/statesystem/factsheets/medicaid/Cessation.html. [Accessed 15 July 2020]

11. U.S. Department of Health and Human Services. *Tobacco Use Among U.S. Racial/Ethnic Minority Groups—African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanics: A Report of the Surgeon General.* Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1998.

12. Lee, J. G., Henriksen, L., Rose, S. W., Moreland-Russell, S., & Ribisl, K. M. (2015). A Systematic Review of Neighborhood Disparities in Point-of-Sale Tobacco Marketing. *American journal of public health*, *105*(9), e8–e18. https://doi.org/10.2105/AJPH.2015.302777

13. National Cancer Institute. *The Role of the Media in Promoting and Reducing Tobacco Use.* Tobacco Control Monograph No. 19. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute. NIH Pub. No. 07-6242, June 2008.

References

14. Lawrence D, Rose A, Fagan P, Moolchan ET, Gibson JT, Backinger CL. National patterns and correlates of mentholated cigarette use in the United States. Addiction. 2010;105:13-31.

15. Food and Drug Administration Tobacco Products Scientific Advisory Committee. Preliminary Scientific Evaluation of the Possible Public Health Effects of Menthol Versus Nonmenthol Cigarettes. 2013. Retrieved from: https://www.fda.gov/media/86497/download [accessed July 2020]

16. Babb S, Malarcher A, Asman K, Johns M, Caraballo R, VanFrank B, et al. Disparities in Cessation Behaviors Between Hispanic and Non-Hispanic White Adult Cigarette Smokers in the United States, 2000–2015. *Prev Chronic Dis* 2020;17:190279. DOI: http://dx.doi.org/10.5888/pcd17.190279

17. Stevens P, Carlson LM, Hinman JM. An analysis of tobacco industry marketing to lesbian, gay, bisexual, and transgender (LGBT) populations: strategies for mainstream tobacco control and prevention. *Health Promotion Practice*. 2004; 5(3 Suppl): 129S-134S.

18. Fallin A, Lee YO, Bennett K, Goodin A. Smoking Cessation Awareness and Utilization Among Lesbian, Gay, Bisexual, and Transgender Adults: An Analysis of the 2009-2010 National Adult Tobacco Survey. *Nicotine and Tobacco Research*, 2015:1-5 [cited 2018 Jun 1].

19. Talbot J, Williamson ME, Pearson KB et al. *Advancing Tobacco Prevention and Control in Rural America*. Washington DC: National Network of Public Health Institutes; 2019.

20. Centers for Disease Control and Prevention. *Best Practices User Guide: Cessation in Tobacco Prevention and Control*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020.

21. Thomas S, Fayter D, et. al. Population tobacco control interventions and their effects on social inequalities in smoking: systematic review. *Tob Control*. 2008 Aug;17(4):230-7. doi: 10.1136/tc.2007.023911. Epub 2008 Apr 21. PMID: 18426867; PMCID: PMC2565568.

Appendix

This appendix describes several differences in population definitions and demographic data across the data sources used in this report. These differences limit the ability to make direct comparisons between Optum and AHEC participants, or between cessation program participants and all Florida tobacco users. *Additional details are available on request.*

Medicaid enrollment

The Optum cessation program registration data allows participants to select only one response option for health insurance (to be categorized into: Uninsured/Private insurance/Medicaid/Medicare). The AHEC program includes an "Other" category and allows respondents to select more than one type of health insurance. Beginning in 2019, and the Florida Adult Tobacco Survey (FLATS) switched from collecting health insurance type using a single-select question to a multi-select question. The differences in the data collection may affect the way health insurance is reported; FLATS results are not comparable to results reported in prior years. *Due to the differences in data collection, Medicaid enrollment may be under-reported by Optum participants, limiting comparability to other data sources.*

Race

The Optum programs collect race using a single-select question and includes the option "Arab or Arab-American (which is not an option for AHEC or BRFSS). AHEC also uses a single-select format, but the question includes the response "more than one race." BRFSS uses a multi-select format. T*he differences in data collection may affect the extent to which individuals report Black/African American racial identity.*

Sexual orientation and gender identity

The Optum programs use a single question to collect sexual orientation and gender identity, and participants may select only one response option (heterosexual, lesbian, gay, bisexual, transgender). The Florida 2019 BRFSS collects gender identity using a separate question from the sexual orientation (heterosexual, lesbian, gay, bisexual). The AHEC programs also use a separate questions to collect gender identity, but the sexual orientation question includes an additional category (heterosexual, gay, lesbian, or some other identity). *Due to differences in the collection of participants' sexual orientation and gender identity, the ability to compare program data to BRFSS data is limited. The quit rates for LGBTQ+ participants in the Optum and AHEC programs are not directly comparable.*

Classification of participants as Rural residents:

Within the AHEC programs, county is assigned based on participant address (zip code); counties are then classified as urban or rural using census tract rural designations from the Health Resources and Services Administration (HRSA). At registration, some AHEC participants listed a temporary facility (residential treatment center, shelter, etc.) as their home address. *As a result we caution that the categorization of AHEC participants as rural/non-rural may be inaccurate, although the extent of error is unknown.*