
A Framework for Effective Promotion of a Medicaid Tobacco Cessation Benefit

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Tobacco burden is significantly greater among those insured by Medicaid, with a smoking prevalence about twice as high as the national average (28% vs. 15%). Over the past decade, smoking prevalence among those insured by Medicaid has remained relatively unchanged while overall smoking prevalence in the United States and among other insurance groups decreased. This indicates need for targeting tobacco control strategies to those insured by Medicaid. In response, the Vermont Tobacco Control Program (VTCP) set out to implement best practice by making its Medicaid cessation benefit more comprehensive and raising awareness and use of the benefit to support members in quitting. The VTCP collaborated with its Medicaid and health department leadership to implement this initiative, learning and adapting processes along the way. The VTCP identified a framework and considerations for programs implementing best practice to expand access and utilization of cessation supports. Elements of success include collaboration, data sharing, and promotion. As a result, the VTCP created an infrastructure that increases access, awareness, and use of cessation supports among Medicaid members and providers. Between 2013 and 2017, the quit ratio among Vermont Medicaid members increased from 8% to 13% and the smoking rate decreased from 36% to 31%.

Keywords: tobacco prevention and control; cessation; social marketing/health communication

Health Promotion Practice

Month XXXX Vol. XX , No. (X) 1–9

DOI: 10.1177/1524839919829452

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► INTRODUCTION

Tobacco use remains the leading cause of preventable disease, disability, and death in the United States (Centers for Disease Control and Prevention [CDC], 2017). In 2015, 15% or 36.5 million adults in the United States were current cigarette smokers. Tobacco use and burden vary across populations, with disparity in smoking prevalence being consistently greater among those with lower socioeconomic status (U.S. Department of Health and Human Services, 2014). In 2015, smoking prevalence among adults insured by Medicaid was 28%, almost twice the national average (Jamal et al., 2016). Smoking prevalence among Medicaid members remains relatively unchanged over the past decade while progress has been made in reducing overall smoking prevalence in the United States and among other insured groups. This ongoing disparity indicates need for prioritizing tobacco prevention and control strategies to the Medicaid-insured population (Zhu, Anderson, Zhuang, Gamst, & Kohatsu, 2017).

Smoking-related diseases account for about 15% (\$39.6 billion) of annual Medicaid expenditures (Jamal et al., 2016). To address these costs and improve population health, the CDC recommends that state Medicaid programs and tobacco control programs collaborate on

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Authors' Note: The authors thank Ms. Fonda S. Ripley, MHS (JSI Research & Training Institute, Inc.) for editorial assistance and insights contributed in development of this article. This publication was supported by The Cooperative Agreement DP15-150903 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention. Address correspondence to Rhonda K. Williams, Vermont Department of Health, 108 Cherry Street, PO Box 70, Burlington, VT 05401, USA; e-mail: rhonda.williams@vermont.gov.

a comprehensive cessation benefit, remove access barriers to the cessation benefit, and conduct outreach to inform Medicaid providers and those insured by Medicaid of this coverage (CDC, 2014; McMenamin, Halpin, & Ganiats, 2012).

In 2012, the Vermont Tobacco Control Program (VTCP) began focusing its strategies to address significantly higher tobacco burden among Vermonters insured by Medicaid. Massachusetts's approach to offer comprehensive Medicaid cessation coverage and promote broadly to providers and patients served as a model (Land, Rigotti, et al., 2010; Land, Warner, et al., 2010; Richard, West, & Ku, 2012). VTCP created a Medicaid Tobacco Benefit Expansion and Promotion Initiative. The initiative involved close collaboration between the state's Medicaid agency and health department to expand and improve the Medicaid and quitline benefit and raise awareness and use of these benefits to support Medicaid members in quitting. Throughout this process, VTCP identified key components that may provide a useful framework for other states seeking to implement CDC's best practice cessation intervention to expand insurance coverage and utilization of proven cessation treatments (CDC, 2014). This article details VTCP's experience implementing the Tobacco Benefit Expansion and Promotion Initiative.

► BACKGROUND

Like other states and the nation, there is disparity in tobacco use and burden among Vermonters insured by Medicaid. To better understand this disparity, VTCP assessed patterns of tobacco use among Medicaid-eligible¹ and noneligible tobacco users, noting not only the disparity in tobacco use prevalence among Medicaid-eligible Vermonters but also a discrepancy in use of available cessation resources (Gammon & Mann, 2012; Mann, 2014; Mann & Gammon, 2013). In 2011, the Vermont Medicaid-eligible adult population smoked at nearly 3 times the rate of the non-Medicaid eligible population (27% vs. 9%), accounting for approximately 44% of the current adult smokers (Mann & Gammon, 2013). Quitline registrants insured by Medicaid were less likely to complete more than one counseling session compared to registrants not insured by Medicaid, which decreased the likelihood of a successful quit outcome. An estimated 50% of all quitline registrants not insured by Medicaid received two or more counseling sessions compared to 25% of registrants insured by Medicaid. Similarly, for quit-in-person group classes, more than 50% of registrants not insured by Medicaid received three or more coun-

seling sessions compared to 33% of registrants insured by Medicaid (Gammon & Mann, 2012). VTCP found that quitline registrants insured by Medicaid faced more obstacles accessing nicotine replacement therapy (NRT); Vermont's quitline did not ship NRT to Medicaid members due to the perspective that they had a comprehensive benefit through their doctor. This prevented Medicaid members from equitably accessing the same cessation benefit from the state's quitline, quit online, or quit in-person programs.

Seeking to tackle discrepancies in access to services and the disparity in tobacco use among Vermonters insured by Medicaid, VTCP considered strategies to support cessation among the state's Medicaid members. Evidence demonstrates that quit rates are higher when health insurers cover comprehensive tobacco cessation treatments (CDC, 2014), which includes in-person or telehealth individual, group, and telephone counseling and all Food and Drug Administration-approved medications.

Medicaid is in a prime position to support tobacco users in cessation, considering it is the nation's largest health insurance program and 28% of its members smoke (Jamal et al., 2016). Several state examples demonstrate successful Medicaid cessation benefit expansion and promotion efforts resulting in use of cessation treatments, reduced smoking prevalence, and positive impact on smoking-related health outcomes and health care costs. Wisconsin's *Medicaid Covers It Campaign* increased utilization of pharmacotherapy and counseling among Medicaid members, indicating improvements in awareness and use of the benefit (Keller et al., 2011). California's *Medi-Cal Incentives to Quit Smoking* campaign increased use of its quitline by Medicaid members from 50% of registrants being insured by Medicaid to 70% of registrants being insured by Medicaid (American Lung Association, 2016). Massachusetts's expansion and promotion of a comprehensive tobacco benefit reduced smoking prevalence and smoking-related health care use among those insured by Medicaid. Massachusetts found that offering the comprehensive cessation benefit and promoting it to providers through multiple communication and media channels reduced hospitalizations for acute myocardial infarction and acute coronary heart disease among users of the cessation benefit. This yielded a \$2.12 return on investment to the Medicaid program during the period of 2007 to 2009 (Land, Rigotti, et al., 2010; Land, Warner, et al., 2010; Richard et al., 2012).

Guided by CDC best practice and other states' cessation benefit initiatives, in particular Massachusetts's example as a neighboring state and leader in health care reform, VTCP pursued a multiyear collaboration

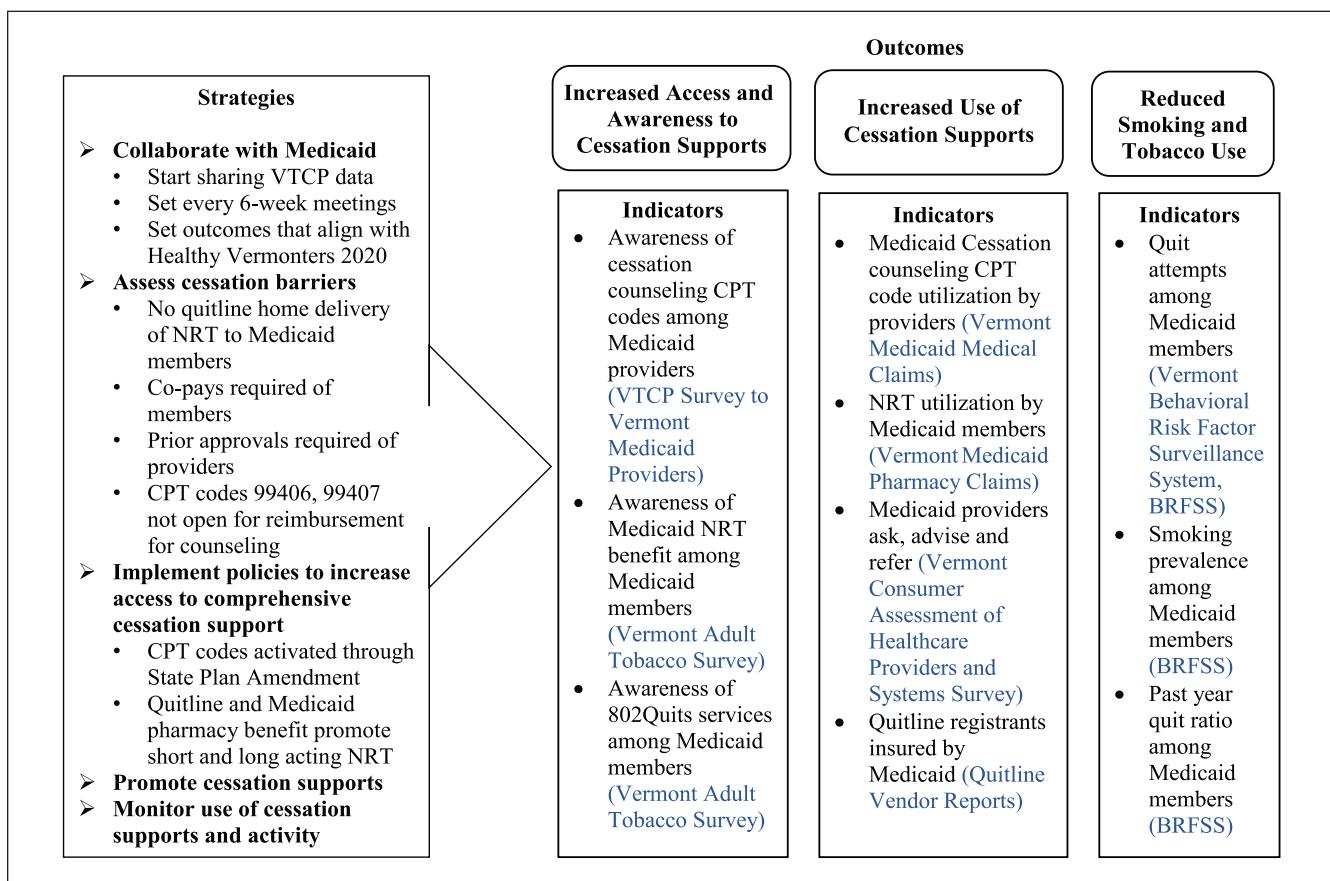


FIGURE 1 VTCP Medicaid Tobacco Benefit Expansion and Promotion Initiative Strategies, Outcomes, and Indicators

NOTE: VTCP = Vermont Tobacco Control Program; NRT = nicotine replacement therapy; CPT = current procedural terminology.

with Medicaid. Once approved, a team formed to prioritize cessation activity among Medicaid members. Implementation strategies of the Tobacco Benefit Expansion and Promotion Initiative involved establishing a collaboration, sharing data, assessing policies, and promoting the benefits to Medicaid providers and members.

► STRATEGIES

VTCP's Medicaid Tobacco Benefit Expansion and Promotion Initiative, in collaboration with the state's Medicaid agency, aimed to make its tobacco benefit more comprehensive and to promote it to providers and members with the intention of reducing smoking, smoking-related disease, and Medicaid health care costs. To achieve these outcomes, access to and awareness of cessation supports, and high utilization are necessary. Figure 1 provides an overview of the strategies, outcomes, and indicators defined for this initia-

tive, and the data sources used for assessing progress and success.

Frequent Collaboration

To ensure Medicaid members were well-supported in their cessation efforts, it was strategic to collaborate with the state Medicaid agency, Department of Vermont Health Access (DVHA). VTCP and DVHA focused on expanding the tobacco benefit, removing barriers to accessing cessation treatments, and promoting available treatment to Medicaid members and their provider base.

Leadership involvement was key to collaboration. VTCP and DVHA met regularly every 6 weeks to identify opportunities to better reach and support Medicaid members with cessation supports. These meetings involved Medicaid director-level staff (operations, medical, and pharmacy), benefit experts and data analysts, and the VTCP chief, program administrator, information

director, evaluator, and analyst. Deputy Commissioners of both departments were kept informed of the meetings and notes. These meetings identified and addressed Medicaid member barriers to accessing cessation benefits and implementing improvements.

VTCP found that success of the collaboration with DVHA relied on staff in each department prioritizing personnel time and analytic resources to assess data, review the literature, and work together to identify barriers and solutions to accessing cessation support. By creating an environment of trust and a shared agenda, interdepartmental staff collaborated to establish and accomplish a mutual goal of expanding access to and use of cessation supports among Medicaid members. Monitoring progress on this mutual goal has been instrumental to creating and sustaining the initiative.

Data Sharing

In 2013, VTCP and DVHA began sharing data to describe cessation support utilization among Medicaid members. Data informed the team on what Medicaid members were using to help quit smoking and shed light on what benefits may be lacking for successful cessation.

VTCP and DVHA established data-sharing protocols to provide ongoing monitoring of utilization of the benefit and impact on cessation resources and outcomes among Medicaid members. This included regular monitoring and reporting on use of NRT and cessation counseling current procedural terminology (CPT) codes, quitline and quit online data, and surveillance data from the Consumer Assessment of Healthcare Providers and Systems survey and Behavioral Risk Factor Surveillance System. Data sources from both departments made it easier to set meaningful targets because the data came from both teams. VTCP documented and archived the data shared quarterly in a spreadsheet. This data collection system also documented policy changes to the tobacco benefit in addition to outreach and communication activities conducted to promote tobacco cessation and/or the Medicaid cessation benefit. This allowed for monitoring utilization of the comprehensive cessation benefit and other cessation resources, including how promotion activities influence utilization. VTCP reported on these data at regular meetings with DVHA to inform discussions on barriers that may affect member and provider use of the benefit. These discussions also guided strategic outreach and communication of the benefit.

Promoting the Benefit

Strategic outreach and communication were instrumental in increasing awareness and utilization of the expanded cessation benefit and all cessation resources

available to Medicaid members who use tobacco. VTCP conducted research to better understand how to reach Medicaid members to increase awareness of the available supports and use of the comprehensive cessation benefit. Research findings indicated that individuals with low socioeconomic status access health information on digital platforms via smartphones and computers (Rescue Social Change Group, 2012). This finding was contrary to assumptions at the time suggesting individuals with low socioeconomic status did not use the Internet to obtain health information.

The statewide qualitative research conducted in 2012, followed by message testing in 2013 and annual surveys that assessed perception, use, and appeal of cessation resources among Vermont tobacco users with low socioeconomic status, aided in understanding audience receptivity toward cessation resources. Focus groups findings (smokers 18-34 years old, <\$30,000 household income, high school or less education) indicated that the former cessation program brand (The Vermont Quit Network) was perceived as being corporate (Rescue Social Change Group, 2012). This led to message testing of five potential logos, including the former Vermont Quit Network, in two additional focus groups with the same participant profile. These findings guided VTCP to create a new brand known as “802Quits” (802 is Vermont’s only area code). Focus group participant comments on VT Quit Network had indicated it “sounds uncaring” and “like a corporation looking to make money” while comments on the new 802Quits brand included “you don’t feel alone because it’s the whole state, a group” and “community-minded.”

VTCP also refocused media buys to populations with lower socioeconomic status, personalized the quit-in-person resources as Vermont Quit Partners, and featured testimonials with real Vermonters in ads, Web videos, and print promotions, including two statewide mailings to Medicaid members, describing and encouraging the use of resources free to them or to a loved one using tobacco. DVHA offered its member and provider mailing lists. Providers were mailed a letter from the Commissioners of Health and DVHA to signal commitment to addressing tobacco use among members. These communications were supplemented by DVHA’s annual newsletter and targeted mass media buys using the CDC’s *Tips From Former Smokers* campaign. Strategies implemented based on the research findings are summarized in Table 1.

A redesign of the cessation website, 802Quits.org, provided ease of navigability and was optimized for mobile; as a result of Web flow and promotions, visits by mobile increased 251% from January to September 2013 compared to the same time period in 2015. The website, television, and radio advertisements featured stories of

TABLE 1
VTCP Promotional Strategy for Tobacco Users Covered by Medicaid

Conducted primary research 2012-2017	<ul style="list-style-type: none"> Fielded foundational research statewide 2012 (focus groups, in-depth interviews) 2013 research on existing cessation brand led to new brand: 802Quits 2014-2016 surveys on brand awareness and perception continued 2017 usability study and analyses of 802Quits customer journey online
Customized cessation resources for low socioeconomic status audience based on research	<ul style="list-style-type: none"> Rebranded Vermont Quit Network to 802Quits Created 802Quits.org with easy navigation, icons, tested language, featuring Real Stories, and made mobile platform Targeted media buys to low socioeconomic status (household income < \$30,000, high school or less education) Direct mail to Medicaid members 18-65 years of age with joint mailing between DVHA and VTCP Developed resources for statewide partners to amplify all promotions
Humanized cessation resources based on primary research	<ul style="list-style-type: none"> Branded quit-in-person Vermont Quit Partners Used Vermont Quit Partners as spokespeople in mass reach communications Filmed testimonials with smokers who quit by using Vermont Quit Partners; featured them in television and radio ads, digital promotion, and direct mail Posted video vignette testimonials on 802Quits.org under Real Stories; collected testimonials and tips continually through website
Engaged providers as crucial partners in cessation	<ul style="list-style-type: none"> Created 802Quits.org/providers with downloadable resources Filmed peer-to-peer testimonials for provider section on website Created a digital provider ad Collaborated with CDC's <i>Talk With Your Doctor</i> campaign with a VTCP mailing to medical providers and pharmacies Continued mailings with 802Quits launch, adding dentists to the provider list in 2014 and 2015 Placed ads in trade newsletters promoting new cessation counseling CPT codes Placed articles in Blue Cross Blue Shield provider newsletter Disseminated e-blasts to statewide nurse practitioner list Implemented comprehensive pay-per-click provider digital campaign Conducted primary research in 2017 with primary care and specialists; subsequent development of resources for outreach and education

NOTE: DVHA = Department of Vermont Health Access; VTCP = Vermont Tobacco Control Program; CDC = Centers for Disease Control and Prevention, CPT = current procedural terminology.

people trying to quit as companion messages to the CDC's *Tips From Former Smokers* campaign. Finally, medical providers were engaged as key partners by designing a section on 802Quits.org with peer videos and downloadable resources. In 2015, a dedicated provider section on 802Quits.org was launched with links to Medicaid, which emphasized the provider's instrumental role in quit success. Outreach, including mailings and digital ads, informed providers of these resources.

► RESULTS

The Tobacco Benefit Expansion and Promotion Initiative aimed to increase access to and utilization of cessation supports in alignment with the state's Healthy People 2020 goals, ultimately driving a reduction in

smoking prevalence among Medicaid members (Figure 1). Key indicators defined for utilization of cessation supports and discussed in this section include Medicaid CPT codes for provision of cessation counseling, Medicaid NRT claims data, quitline registrants, and Medicaid members who use tobacco and report that their providers advise cessation and refer to cessation supports. Progress on key indicators could not have happened without coordination across departments; therefore systems improvement results are discussed in this section as well.

Systems Improvements Through Coordination

The initiative increased interdepartmental coordination and yielded systems improvements to support

TABLE 2

Total Number of Paid Claims and Unique Users for Cessation Counseling and Nicotine Replacement Therapy Among Medicaid Members (2012-2016)

Measure	2012	2013	2014	2015	2016
Total CPT code use	121	171	1,603	2,470	3,578
Total unique users of CPT codes	88	154	1,173	1,622	1,722
Total CPT code users per 10,000 Medicaid enrollees	14.1	24.4	167.3	179.8	188.6
Total NRT uses	7,522	7,734	7,514	9,851	10,068
Total unique users of NRT	4,065	4,077	4,022	4,876	4,820
Total no. of NRT users per 10,000 Medicaid enrollees	651.4	645.5	573.8	540.4	527.9

NOTE: CPT = current procedural terminology; NRT = nicotine replacement therapy. Annual Medicaid enrollment is an average of quarterly caseload including adult Medicaid members except those who are dually insured by Medicaid and Medicare: 62,400 (2012), 63,162 (2013), 70,095 (2014), 90,234 (2015), 91,307 (2016).

cessation among Medicaid members. This included provision of dual NRT by both Medicaid and the quitline, concomitant short- and long-acting cessation products, individual cessation counseling provided by health care professionals, and extended use of the cessation benefit allowed by Medicaid.

Access to NRT. The collaboration assessed the policy exempting Medicaid members from the quitline's NRT direct ship benefit. Determining this a barrier to accessing tobacco treatment, the departments worked together to reconcile this discrepancy and established direct ship of NRT via the quitline to Medicaid members. Although Medicaid covered provision of NRT for a 16-week period, the team identified the benefit of and challenges for Medicaid members in receiving an optimal NRT combination, through the quitline or through their provider. Per Cochrane Review evidence on using short- and long-acting NRT together and working with DVHA's Drug Utilization and Review Board, the departments changed their respective benefits to provide dual NRT concomitantly to increase quit efficacy (Cahill, Stevens, Perera, & Lancaster, 2013). DVHA also changed its preferred drug list and removed the two-cycle limit per year on NRT to have no limits on the number of quit attempts a member can be supported in each year.

Access to Counseling. Recognizing the need for Vermont's Medicaid cessation benefit to provide comprehensive coverage, including counseling, VTCP drafted a cost estimate, based on claims data, for cessation treatment that was already provided to women during pregnancy (NRT and cessation counseling). This provided DVHA an estimate of the added expense of expanding and promoting coverage for cessation counseling to all Medicaid

members. Upon review of the cost analysis by DVHA leadership and VTCP talking with the Massachusetts Tobacco Control Program for additional information on its outcomes, DVHA approved expansion of the cessation benefit to include counseling. DVHA and VTCP developed a State Plan Amendment to expand the benefit to include cessation counseling. On January 1, 2014, DVHA activated 99406 (up to 10 minutes) and 99407 (intensive, more than 10 minutes) cessation counseling CPT codes to support Medicaid provider reimbursement for individual and group cessation counseling.

Increased Cessation Activity Between Medicaid Members and Providers

With increased coordination, provider knowledge, and access by members to cessation supports, cessation activity among Medicaid members and providers increased. This is evidenced by increases in delivery of cessation counseling per CPT code utilization over time (Table 2) and increases in the percentage of Medicaid members who use tobacco and report that their health care provider advised cessation and/or referred to a cessation support.

Medicaid claims data show provider utilization of cessation counseling CPT codes increased 123% when comparing 2016 to 2014 when the CPT codes were activated (Table 2). There has been a steady increase in the total use of CPT codes and unique users of the CPT codes, even when accounting for the increase in total Medicaid enrollees during this time frame. The rate of CPT code use per 10,000 Medicaid enrollees increased from 167.3 in 2014 to 188.6 in 2016 (DVHA, 2017b).

Survey data from Consumer Assessment of Healthcare Providers and Systems showed increases

TABLE 3
Use of Cessation Supports, Cessation Activity, and Smoking Prevalence Among Medicaid Members

Measure	2013	2014	2017
% Providers <i>advising</i> smokers and tobacco users to quit ^a	N/A	55	79
% Providers discussing <i>cessation medications</i> with smokers and tobacco users ^a	N/A	33	62
% Providers discussing <i>cessation strategies</i> with smokers and tobacco users ^a	N/A	30	49
Past-year quit ratio ^b	8% [5%, 14%]	10% [7%, 15%]	13% [9%, 18%]
Current smoking prevalence ^b	36% [31%, 41%]	32% [28%, 37%]	31% [27%, 36%]

^aVermont Consumer Assessment of Healthcare Providers and Systems Survey, 2014 and 2017. Denominator for Advising Smokers and Tobacco Users to Quit, Discussing Cessation Medications, and Discussing Cessation Strategies is self-reported tobacco users. Numerator includes those who responded *usually* or *always* and excludes those who responded *never* or *sometimes*. ^bVermont Behavioral Risk Factor Surveillance System (2013, 2014, and 2017). Prevalence and 95% confidence interval reported. Past-year quit ratio = number of past year successful quitters divided by the number of past-year smokers. Current smoking prevalence is age-adjusted to the U.S. 2000 population.

in the percentage of Medicaid members who use tobacco and report that their health care provider advised cessation and/or referred to a cessation support (Table 3). From 2014 to 2017, the percentage of Medicaid members who use tobacco and report that their provider advised them to quit increased from 55% to 79%. The percentage of providers discussing cessation medications nearly doubled from 2014 to 2017 (33% to 62%), and the percentage discussing cessation strategies increased from 30% to 49%.

Increased Access and Utilization of NRT

With increased access to the state's quitline resources utilization of the quitline increased among Medicaid members. The percentage of quitline registrants who are Medicaid members increased from 16% (2013) to 27% (2016).

Concurrently, the total number of prescriptions for NRT and unique users of NRT among Medicaid members increased from 2012 to 2016 (DVHA, 2017a; Table 2). The increase in prescription claims may be a result of heightened awareness of and access to cessation benefits among providers and enrollees. Still, the rate per 10,000 enrollees decreased over this same time period. This could reflect higher enrollment due to Medicaid expansion, which resulted in an 11% increase in enrollees. The Affordable Care Act allowed Medicaid expansion to include higher income eligibility, therefore potentially capturing a population with a lower smoking rate and contributing to the decline in the overall rate of NRT users.

Reduction in Medicaid Smoking Prevalence

With an increase in cessation supports, there was also a reduction in smoking prevalence among Medicaid members, per Behavioral Risk Factor Surveillance System data (Table 3). While not statistically significant, there was an upward trend in past-year quit ratios among Medicaid members and a subsequent downward trend in smoking prevalence. Between 2013 and 2017, the quit ratio among Medicaid members increased from 8% to 13% and the smoking rate decreased from 36% to 31%.

► DISCUSSION

This article provides a framework and considerations for implementing CDC best practice for programs to expand insurance coverage and utilization of proven tobacco treatments. As of 2016, nine states provided comprehensive cessation coverage for Medicaid members, including Vermont (DiGiulio et al., 2016). VTCP and DVHA efforts to expand and promote the cessation benefit resulted in policy change and systems improvements to support Medicaid members in quitting. This ultimately resulted in increased cessation supports from health care providers and a decrease in smoking prevalence among Medicaid members. Key elements to success were collaboration between the Departments of Health and Medicaid; data shared across different data sources; developing programs, brands, and access points of value to Vermonters insured by Medicaid; reimbursing providers for tobacco cessation counseling; and research

-informed strategic communication to promote cessation supports to members and providers.

Through this systematic effort, VTCP and DHVA learned about improvements that must occur on both sides of the state system to reach a priority population and affect behavior change. The collaboration reduced barriers to quitting for Medicaid members who smoke by delivering targeted promotions to members and providers and regularly assessing progress and identifying next steps: overcoming lack of provider and member awareness of existing benefit, identifying inaccurate assumptions of how to effectively reach and communicate health information to those with low socioeconomic status, and removing copays and prior approvals for use of the benefit. A barrier faced in this initiative was the amount of time required for establishing trust and continuing collaboration, especially quarterly data sharing. Interested states may need to dedicate up to 50% full-time equivalent of a marketing professional and 20% of analyst and director positions and be realistic with expectations from Medicaid colleagues. The cost of direct mail to Medicaid members also presented a barrier. Additionally, outreach to Medicaid members to promote their use of quit tool kits resulted in double the number of kits ordered, which came at a cost. The mailing cost to VTCP rose from approximately \$70,000 to \$90,000.

Limitations and Future Research

More evaluation is needed to assess and describe the extent to which clinical health outcomes are improving and overall tobacco use is decreasing for Vermont's Medicaid members due to this initiative. VTCP is analyzing Medicaid claims data for a deeper understanding of use of the tobacco cessation benefit over time, demographic characteristics of those using the benefit, and health service utilization before and after using the benefit.

Another potential limitation is that during the time frame of this initiative, Medicaid expansion occurred, which is part of the context the collaborative team includes as it evaluates this initiative's impact. Higher enrollment numbers and a possible change in the smoking prevalence are two contextual factors of Medicaid expansion. Those who were able to enroll in expansion may have benefited from a more generous tobacco treatment benefit than offered in traditional Medicaid plans or those from the marketplace exchange (Hill, 2015).

Conclusion

Demonstrated increases in the use of cessation supports and decreases in smoking prevalence speak

to the effectiveness of collaboration, data sharing, and benefit promotion. As other programs and practitioners work to address tobacco burden among Medicaid members and implement best practice, investments in these components can lead to a context and an infrastructure that are supportive in increasing access, awareness, and use of resources to result in improved health.

Note

1. Smoking prevalence for Medicaid-insured was not available prior to 2013. Medicaid-eligible was used as a proxy for Medicaid-insured.

REFERENCES

American Lung Association. (2016). *Approaches to promoting Medicaid tobacco cessation coverage: Promising practices and lessons learned*. Retrieved from <http://www.lung.org/assets/documents/advocacy-archive/promoting-medicaid-tobacco-cessation.pdf>

Cahill, K., Stevens, S., Perera, R., & Lancaster, T. (2013). Pharmacological interventions for smoking cessation: An overview and network meta-analysis. *Cochrane Database of Systematic Reviews*, (5), CD009329. doi:10.1002/14651858.CD009329.pub2

Centers for Disease Control and Prevention. (2014). *Best practices for comprehensive tobacco control programs-2014*. Retrieved from https://www.cdc.gov/tobacco/stateandcommunity/best_practices/pdfs/2014/comprehensive.pdf

Centers for Disease Control and Prevention. (2017). *At a glance 2016 tobacco use. Extinguishing the epidemic*. Retrieved from <https://www.cdc.gov/chronicdisease/resources/publications/aag/tobacco-use.htm>

Department of Vermont Health Access. (2017a). *Nicotine replacement therapy/smoking cessation product utilization, 2012-2016* [Unpublished data file]. Williston, VT: Author.

Department of Vermont Health Access. (2017b). *Paid claims for cessation counseling for Medicaid-insured patients, 2012-2016* [Unpublished data file]. Williston, VT: Author.

DiGiulio, A., Haddix, M., Jump, Z., Babb, S., Schecter, A., Williams, K. S., . . . Armour, B. S. (2016). State Medicaid expansion tobacco cessation coverage and number of adult smokers enrolled in expansion coverage-United States, 2016. *Morbidity and Mortality Weekly Report*, 65, 1364-1369. doi:10.15585/mmwr.mm6548a2

Gammon, D. G., & Mann, N. H. (2012). *An evaluation of Vermont Quit Network clients by Medicaid status: FY 2011*. Research Triangle Park, NC: RTI International. Retrieved from <http://humanservices.vermont.gov/boards-committees/tobacco-board/independent-comprehensive-state-tobacco-control-program-evaluation/an-evaluation-of-vermont-quit-network-clients-by-medicaid-status-fy-2011/view>

Hill, S. C. (2015). Medicaid expansion in opt-out states would produce consumer savings and less financial burden than exchange coverage. *Health Affairs (Millwood)*, 34, 340-349. doi:10.1377/hlthaff.2014.1058

Jamal, A., King, B. A., Neff, L. J., Whitmill, J., Babb, S. D., & Graffunder, C.M. (2016). Current cigarette smoking among adults:

United States, 2005-2015. *Morbidity and Mortality Weekly Report*, 65, 1205-1211. doi:10.15585/mmwr.mm6544a2

Keller, P. A., Christiansen, B., Kim, S. Y., Piper, M. E., Redmond, L., Adsit, R., & Fiore, M. C. (2011). Increasing consumer demand among Medicaid enrollees for tobacco dependence treatment: The Wisconsin "Medicaid Covers It" campaign. *American Journal of Health Promotion*, 25, 392-395. doi:10.4278/ajhp.090923-QUAN-311

Land, T., Rigotti, N. A., Levy, D. E., Paskowsky, M., Warner, D., Kwass, J. A., . . . Keithly, L. (2010). A longitudinal study of Medicaid coverage for tobacco dependence treatments in Massachusetts and associated decreases in hospitalizations for cardiovascular disease. *Plos Medicine*, 7, e1000375. doi:10.1371/journal.pmed.1000375

Land, T., Warner, D., Paskowsky, M., Cammaerts, A., Wetherell, L., Kaufmann, R., . . . Keithly, L. (2010) Medicaid coverage for tobacco dependence treatments in Massachusetts and associated decreases in smoking prevalence. *Plos One*, 5, e9770. doi:10.1371/journal.pone.0009770

Mann, N. H. (2014). *Vermont Quit by Phone program summary by registrant Medicaid status, FY 2011-FY 2013* (Final report). Research Triangle Park, NC: RTI International. Retrieved from <http://human-services.vermont.gov/boards-committees/tobacco-board/independent-comprehensive-state-tobacco-control-program-evaluation/vermont-quit-by-phone-program-summary-by-registrant-medicaid-status-fy-20112013fy-2013/view>

Mann, N. H., & Gammon, D. G. (2013). *A brief summary of program utilization and cessation outcomes for current adult smokers who registered with the Quit by Phone or Quit in Person programs in FY 2012 by registrant Medicaid status* (Final report). Research Triangle Park, NC: RTI International. Retrieved from <http://human-services.vermont.gov/boards-committees/tobacco-board/independent-comprehensive-state-tobacco-control-program-evaluation/a-brief-summary-of-program-utilization-and-cessation-outcomes-for-current-adult-smokers-who-registered-with-the-quit-by-phone-or-quit-in-person-programs-in-fy-2012-by-registrant-medicaid-status/view>

McMenamin, S. B., Halpin, H. A., & Ganiats, T. G. (2012). Medicaid coverage of tobacco-dependence treatment for pregnant women: impact of the Affordable Care Act. *American Journal of Preventive Medicine*, 43, e27-29. doi:10.1016/j.amepre.2012.06.012

Rescue Social Change Group. (2012). *Reducing adult tobacco use in Vermont* (Research report). San Diego, CA: Author.

Richard, P., West, K., & Ku, L. (2012). The return on investment of a Medicaid tobacco cessation program in Massachusetts. *Plos One*, 7, e29665. doi:10.1371/journal.pone.0029665

U.S. Department of Health and Human Services. (2014). *The health consequences of smoking—50 years of progress: A report of the surgeon general*. Retrieved from <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf>

Zhu, S. H., Anderson, C. M., Zhuang, Y. L., Gamst, A. C., & Kohatsu, N. D. (2017). Smoking prevalence in Medicaid has been declining at a negligible rate. *Plos One*, 12, e0178279. doi:10.1371/journal.pone.0178279