January 2014

Vermont Quit by Phone Program
Summary by Registrant Medicaid Status, FY 2011–FY 2013

Final Report

Prepared for

Stephen Morabito
Administrator
Vermont Tobacco Evaluation and Review Board
13 Baldwin Street
Montpelier, VT 05602

Prepared by

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RTI International is a trade name of Research Triangle Institute.
The Behavioral Risk Factor Surveillance System (BRFSS) contains measures of current smoking in Vermont as well as measures of family income that can be used to approximate Medicaid eligibility of Vermonters. We define Medicaid eligibility as having an annual family income of less than or equal to 250% of the Federal Poverty Level (FPL). According to the BRFSS, the age-adjusted prevalence of current cigarette smoking among Vermont adults was 20.2% in 2011 and 17.3% in 2012 (Table 1).

- The age-adjusted prevalence of current cigarette smoking among the Medicaid-eligible adult population in Vermont was 29.4% in 2011 and 27.2% in 2012.
- The age-adjusted prevalence of current cigarette smoking among the non-Medicaid-eligible adult population in Vermont was 12.7% in 2011 and 11.9% in 2012.

More than half of current adult cigarette smokers in Vermont were Medicaid-eligible in 2011 (61%) and 2012 (56%).

Table 1. Age-Adjusted Prevalence of Current Cigarette Smoking among Vermont Adults and Estimated Current Adult Cigarette Smokers in Vermont by Medicaid Eligibility, BRFSS 2011–2012

<table>
<thead>
<tr>
<th>Medicaid Eligibility</th>
<th>Year</th>
<th>Current Adult Cigarette Smoking Prevalence in Vermont^a</th>
<th>Estimated Current Adult Cigarette Smokers in Vermont^b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>2011</td>
<td>20.2%</td>
<td>95,000</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>17.3%</td>
<td>81,000</td>
</tr>
<tr>
<td>Medicaid-Eligible</td>
<td>2011</td>
<td>29.4%</td>
<td>58,000</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>27.2%</td>
<td>46,000</td>
</tr>
<tr>
<td>Non-Medicaid-Eligible</td>
<td>2011</td>
<td>12.7%</td>
<td>37,000</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>11.9%</td>
<td>35,000</td>
</tr>
</tbody>
</table>

^a Age-adjusted current adult cigarette smoking prevalence in Vermont in 2011 and 2012 was calculated using BRFSS data for landline and cell phone respondents.

^b Estimated current adult smokers in Vermont were rounded to the nearest thousand. The proportion of current adult cigarette smokers in Vermont who were Medicaid-eligible and non-Medicaid-eligible in 2011 and 2012 was calculated using BRFSS data for landline and cell phone respondents. The estimated number of current adult cigarette smokers who were Medicaid-eligible and non-Medicaid-eligible was calculated by multiplying the overall number of current adult cigarette smokers by the proportion of current adult cigarette smokers who were Medicaid-eligible and non-Medicaid-eligible.

The Vermont Tobacco Control Program (VTCP) provides tobacco use cessation assistance through a variety of programs and services. The Vermont Quit Network is VTCP’s flagship tobacco use cessation program, providing free tobacco use cessation counseling and nicotine replacement therapy (NRT) to Vermont tobacco users. The Vermont Quit Network provides telephone counseling through the Quit by Phone program, in-person group cessation counseling through the
Quit in Person program, and Web-based cessation support through the Quit Online program. Each of the Vermont Quit Network programs also directly ships free NRT to tobacco users who register with the program and meet eligibility requirements. This brief report summarizes use of the Quit by Phone program by Vermont tobacco users from fiscal year (FY) 2011 through FY 2013 by registrant Medicaid status.

Quit Network registrants are tobacco users who provide information about themselves to the Quit Network program during the intake process and agree to receive services from the Quit Network. The Quit by Phone program collects information about registrants’ health insurance during the registration process. We used those data to categorize tobacco users who registered for the program by Medicaid status, either Medicaid or non-Medicaid. Figure 1 presents the number of tobacco users who registered to receive services from the Quit by Phone program from FY 2011 through FY 2013.

Figure 1. Tobacco Users Who Registered to Receive Services from the Quit by Phone Program by Medicaid Status, FY 2011–FY 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Medicaid</th>
<th>Non-Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2011</td>
<td>481 (27%)</td>
<td>1,289 (73%)</td>
</tr>
<tr>
<td>FY 2012</td>
<td>526 (29%)</td>
<td>1,262 (71%)</td>
</tr>
<tr>
<td>FY 2013</td>
<td>284 (24%)</td>
<td>921 (76%)</td>
</tr>
</tbody>
</table>

Note: FY 2013 does not include data for July 2012.

From FY 2011 through FY 2013, a higher proportion of Medicaid tobacco users who registered with the Quit by Phone program were aged 18 to 44 compared with non-Medicaid registrants (Figure 2). More than half of all tobacco users who registered for the Quit by Phone program in FY 2011 through FY 2013 were female, and a higher proportion of Medicaid registrants were female compared with non-Medicaid registrants (Figure 3).
From FY 2011 through FY 2013, a higher proportion of Medicaid registrants had less than a high school education compared with non-Medicaid registrants (Figure 4). A smaller proportion of Medicaid registrants had a college degree compared with non-Medicaid registrants (Figure 5).

**Figure 2.** Tobacco Users Aged 18 to 44 as a Percentage of Total Tobacco Users Who Registered to Receive Services from the Quit by Phone Program by Medicaid Status, FY 2011–FY 2013

Note: FY 2013 does not include data for July 2012.

**Figure 3.** Female Tobacco Users as a Percentage of Total Tobacco Users Who Registered to Receive Services from the Quit by Phone Program by Medicaid Status, FY 2011–FY 2013

Note: FY 2013 does not include data for July 2012.
Figure 4. Tobacco Users with Less than a High School Education as a Percentage of Total Tobacco Users Who Registered to Receive Services from the Quit by Phone Program by Medicaid Status, FY 2011–FY 2013

![Chart showing percentage of tobacco users with less than a high school education registered to receive services from the Quit by Phone Program by Medicaid status for FY 2011 to FY 2013.]

Note: FY 2013 does not include data for July 2012.

Figure 5. Tobacco Users with a College Degree as a Percentage of Total Tobacco Users Who Registered to Receive Services from the Quit by Phone Program by Medicaid Status, FY 2011–FY 2013

![Chart showing percentage of tobacco users with a college degree registered to receive services from the Quit by Phone Program by Medicaid status for FY 2011 to FY 2013.]

Note: FY 2013 does not include data for July 2012.
The reach of a program is the percentage of the target population served by the program over a specified period of time. Promotional reach represents the percentage of current adult cigarette smokers in Vermont who registered with, but did not necessarily receive services from, the Quit by Phone program. From FY 2011 through FY 2013, the promotional reach of the Quit by Phone program has consistently been lower among the Medicaid-eligible current adult smoking population in Vermont than among the non-Medicaid-eligible current adult smoking population (Figure 6).

Figure 6. Current Adult Cigarette Smokers Who Registered to Receive Services from the Quit by Phone Program by Medicaid Status, FY 2011–FY 2013

From FY 2011 through FY 2013, the percentage of Medicaid-eligible current adult cigarette smokers who registered to receive cessation services from the Quit by Phone program has been consistently lower than the percentage of non-Medicaid-eligible current adult cigarette smokers who registered to receive services from the Quit by Phone program.

From FY 2011 through FY 2013, more than half of the current adult cigarette smokers who registered to receive services from the Quit by Phone program smoked one or more packs of cigarettes per day at the time they registered for services, with few differences between Medicaid and non-Medicaid registrants (Figure 7). The majority of current adult cigarette
smokers who registered for the **Quit by Phone** program, both Medicaid and non-Medicaid, reported smoking within 30 minutes of waking (Figure 8).

**Figure 7. Percentage of Current Adult Cigarette Smokers Who Registered to Receive Services from the Quit by Phone Program Who Smoke One or More Packs of Cigarettes Per Day by Medicaid Status, FY 2011–FY 2013**

Note: FY 2013 does not include data for July 2012.

**Figure 8. Percentage of Current Adult Cigarette Smokers Who Registered to Receive Services from the Quit by Phone Program Who Smoke Cigarettes within 30 Minutes of Waking by Medicaid Status, FY 2011–FY 2013**

Note: FY 2013 does not include data for July 2012.
The Quit by Phone program conducts follow-up evaluations with tobacco users who register to receive services from the program 7 months after registration. The 7-month follow-up surveys measure quit attempts and successful quits among registrants. From FY 2011 through FY 2013, 7-month follow-up survey response rates for the Quit by Phone program were lower among Medicaid registrants than among non-Medicaid registrants (Figure 9).

![Figure 9. 7-Month Follow-Up Evaluation Survey Response Rates by Medicaid Status, FY 2011–FY2013](image)

Quit attempts are measured by whether registrants were able to quit smoking for 24 hours or longer at some point since registering with the program. Quit rates are a measure of whether registrants were smoke-free at the time of their evaluation. The standard measure of quit is 30-day point prevalence, which measures whether clients have been smoke-free for the past 30 days at the time of their follow-up evaluation survey. We also examined quit attempts and quit rates among registrants using an intent-to-treat approach that adjusts for nonresponse by assuming that all individuals who were contacted for, but did not complete, follow-up surveys did not make a quit attempt lasting at least 24 hours at some point following registration or were not smoke-free for the past 30 days at the time they were contacted for follow-up evaluation. This approach yields a more conservative estimate of quit attempts and quit rates among registrants. It is also a direct function of the survey response rates in that lower response rates will also result in lower rates of quit attempts and quit success.
From FY 2011 through FY 2013, the majority of Quit by Phone registrants who completed 7-month follow-up evaluation surveys, both Medicaid and non-Medicaid, reported making a quit attempt lasting at least 24 hours at some point since registering for the program (Figure 10). The rates of 24-hour quit attempts, both the responder rate and the intent-to-treat rate, were lower among Medicaid registrants for the Quit by Phone program than among non-Medicaid registrants from FY 2011 through FY 2013.

**Figure 10. Percentage of Tobacco Users Who Made a Quit Attempt Lasting 24 Hours or More since Registering to Receive Services from the Quit by Phone Program, FY 2011–FY 2013**

<table>
<thead>
<tr>
<th>Year</th>
<th>Medicaid</th>
<th>Non-Medicaid</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2011</td>
<td>69%</td>
<td>85%</td>
</tr>
<tr>
<td>FY 2012</td>
<td>78%</td>
<td>86%</td>
</tr>
<tr>
<td>FY 2013</td>
<td>65%</td>
<td>43%</td>
</tr>
<tr>
<td>FY 2011</td>
<td>25%</td>
<td>43%</td>
</tr>
<tr>
<td>FY 2012</td>
<td>29%</td>
<td>43%</td>
</tr>
<tr>
<td>FY 2013</td>
<td>24%</td>
<td>41%</td>
</tr>
</tbody>
</table>

Notes: For each column above, the top number represents the responder rate and the bottom number represents the intent-to-treat rate. The responder rate is limited to individuals who completed 7-month follow-up evaluations. The intent-to-treat rate is among all individuals for whom follow-up surveys were attempted and assumes that all individuals who were contacted for, but did not complete, 7-month follow-up evaluations did not make a 24-hour quit attempt since registering for services with the program.

From FY 2011 through FY 2013, the 30-day quit rates for Quit by Phone registrants were consistently lower among Medicaid registrants than among non-Medicaid registrants (Figure 11). In FY 2013, only 13% of the Medicaid registrants who completed 7-month follow-up evaluations reported being smoke-free for 30 days or longer at the time of their evaluation, while 31% of the non-Medicaid registrants who
completed 7-month follow-up evaluations reported being smoke-free for 30 days or longer at the time of their evaluation.

**Figure 11. Percentage of Tobacco Users Who Were Smoke-Free for 30 Days at Follow-Up, FY 2011–FY 2013**

![Percentage of Tobacco Users Who Were Smoke-Free for 30 Days at Follow-Up, FY 2011–FY 2013](image)

Notes: For each column above, the top number represents the responder rate and the bottom number represents the intent-to-treat rate. The responder rate is limited to individuals who completed 7-month follow-up evaluations. The intent-to-treat rate is among all individuals for whom follow-up surveys were attempted and assumes that all individuals who were contacted for, but did not complete, 7-month follow-up evaluations did not make a 24-hour quit attempt since registering for services with the program.
Conclusions

- In 2011 and 2012, the Vermont Medicaid-eligible adult population smoked cigarettes at nearly 2.5 times the rate of the non-Medicaid-eligible adult population.

- Smokers in Vermont, both Medicaid-eligible and non-Medicaid-eligible, are not fully utilizing the Quit by Phone program.

- More than half of current smokers in Vermont were Medicaid-eligible in 2011 (61%) and 2012 (56%); however, only 27% of Quit by Phone clients in FY 2011, 29% in FY 2012, and 24% in FY 2013 were Medicaid-insured.

- From FY 2011 through FY 2013, the Quit by Phone program had a higher proportion of Medicaid registrants who were aged 18 to 44, were female, and had less than a high school education compared with non-Medicaid registrants. The proportion of Medicaid registrants with a college degree was smaller than the proportion of non-Medicaid registrants with a college degree.

- From FY 2011 through FY 2013, Quit by Phone Medicaid registrants had lower follow-up response rates and significantly worse cessation outcomes in terms of 24-hour quit attempts and 30-day quit rates compared with non-Medicaid registrants.

The current cigarette smoking rate is substantially higher among the adult Medicaid-eligible population in Vermont than among the adult non-Medicaid-eligible population. The proportion of Quit by Phone registrants who are Medicaid-insured is lower than the proportion of the smoking population in Vermont that is Medicaid-eligible. Quit by Phone follow-up evaluation data suggest that the Medicaid-eligible smoking population in Vermont may have a harder time making quit attempts and successfully remaining smoke-free.

These findings suggest that VTCP should continue to focus efforts on the Medicaid-eligible smoking population in Vermont. There is room for improvement in terms of getting Medicaid-eligible smokers to use Quit Network programs and to provide quality interventions to Medicaid-eligible smokers that are effective at helping them quit smoking and remain smoke-free.