

# Final Report Memorandum

**To:** Beth Roberts and Veronica Mansfield; Middlesex Hospital  
**CC:** Barbara Walsh, Marian Storch; Connecticut Department of Health, Tobacco Use Prevention and Control Program  
**From:** Professional Data Analysts, Inc.: Traci Capesius, MPH; Anne Betzner, PhD.  
**Date:** 3-31-13  
**Re:** **Middlesex Hospital Tobacco Cessation Program** (contract #2012-0119) - Cumulative Summary Report (February 2012 – January 2013)

---

PDA received tobacco cessation program data from CT DPH for Middlesex Hospital's tobacco cessation program (contract #2012-0119). PDA has produced a final, cumulative evaluation report, based on data from February 2012 through January 2013<sup>1</sup>. This report provides a summary and analysis of referral sources, participant demographic and clinical characteristics, program utilization, program completion, patient satisfaction and patient follow up data. The report concludes with a summary of key program successes, challenges, and recommended next steps. Selected results are also provided graphically in the accompanying Middlesex Hospital graphic dashboard report.

## Snapshot of Results

Key *successes* of Middlesex Hospital's tobacco cessation program include:

- REFERRALS FROM PRIMARY CARE PROVIDERS – Nearly three-quarters of the referrals came from a primary care provider. Further, the program is reaching a relatively large proportion of older smokers, who are most likely to be experiencing the effects of tobacco use. In fact, 78% of participants were currently receiving or had received treatment in the past for one or more physical health conditions and 62% were currently receiving or had received treatment for one or more mental health conditions.

---

<sup>1</sup> Middlesex Hospital's contract ends 10/31/2013, so this report does not reflect all data that will be collected.

- RECRUITMENT OF TARGET POPULATION – Middlesex was contracted to serve uninsured and underinsured tobacco users in Middlesex County, and a number of uninsured tobacco users were served. The extent to which underinsured tobacco users were served is unknown, as this information was not available to PDA.
- SUCCESS WITH RELAPSE PREVENTION – Middlesex has had more success than some other CT community grantees in getting clients to participate in relapse prevention sessions.

Key *challenges of and next steps* for Middlesex Hospital's tobacco cessation program include:

- IDENTIFY ADDITIONAL METHODS OF RECRUITMENT – To meet contracted enrollment goals, consider additional methods of recruitment, such as expanding the number and/or type of providers to recruit tobacco users or creating marketing for younger tobacco users.
- PROVIDE ADDITIONAL INCENTIVES TO INCREASE UTILIZATION – While one-third of enrollees attended three or more counseling sessions, more than half attended fewer sessions. Consider providing additional incentives and/or collecting and reviewing patient satisfaction data to identify methods to increase utilization.
- INCREASED COMPLETION OF DATA COLLECTION – Tobacco use data (program completion/drop out and 4 and 7-months post-enrollment) are good opportunities to see the impact of the cessation program's efforts as well as a way to check in with clients to see what they liked about the program and whether they are in need of additional cessation assistance. Aim to collect tobacco use data from 50% or more of enrollees.

## Results

### Referral Sources

The majority of Middlesex Hospital's tobacco cessation program referrals, not surprisingly, came from a primary care provider (76%, n=38). Other referral sources included, other referral source/self-referral (8%, n=4), brochure/flyer (8%, n=4), counselor/therapist (6%, n=3), some other source (4%, n=6), and, friends and family

members (2%, n=1). These results show that Middlesex Hospital was successful at utilizing providers as a referrals source.

### Numbers Served

Middlesex Hospital enrolled a total of 50 individuals in tobacco cessation programming between February 2012 and January 2013. This represents 33% of Middlesex Hospital's contracted goal of individuals served (group or individual sessions). In general, it appears enrollees prefer individual sessions over group sessions. Overall, while Middlesex Hospital has not yet met its contracted goal of numbers served, they are a young program and still have ten months left in their contract, so they still have time to meet their goal by the end of October 2013.

### Enrollee Characteristics

*Demographic Characteristics.* Of the 50 unique participants that enrolled in Middlesex Hospital's cessation programs, 100% were adults (25+ years of age), 54% were female and 96% reported being heterosexual/straight. The majority of enrollees were White (90%), 8% were Black or African American, 2% were American Indian/Alaskan Native, and 2% did not report their race. One enrollee reported being of Hispanic/Latino origin. Half of enrollees (50%) had a high school or GED degree, 36% had a college degree or higher and 14% had some high school education or less. Almost half (48%) had an annual income less \$15,000 or less, 46% had incomes of \$15,000-\$50,000, and 6% had incomes of greater than \$50,000. The majority of enrollees (68%) had some form of government-sponsored health insurance, 16% had private insurance, and 16% had no health insurance.

As an additional point of reference, the demographic characteristics of Middlesex Hospital's cessation program participants were compared to those estimated by the 2011 Connecticut Behavior Risk Factor Surveillance Survey (BRFSS 2011). As shown below in Table 1 below, when comparing Middlesex Hospital's program participant demographic characteristics to the population of cigarette smokers in Connecticut, it appears that Middlesex Hospital is serving a significantly older population of cigarette users than would be expected given 2011 BRFSS estimates. None of the other demographic characteristics appeared to differ significantly; however, calculations are based on a small number of enrolled clients to date (< 100).

Overall, Middlesex appears to be reaching an older, mostly non-Hispanic, White population of tobacco users with either a high school degree or a college degree or more, with most having some form of health insurance.

Table 1. Comparison of Middlesex Hospital cessation program participants to the general population of Connecticut cigarette users on several key demographic variables (BRFSS 2011)

Item	Response	Tobacco users <sup>a</sup> served by program		Cigarette users Statewide (BRFSS 2011, weighted)	
		N	%	N	%
<b>Gender</b>	Male	23	46.0	250,710	53.3
	Female	27	54.0	219,426	46.7
	Total	50	100.0	470,136	100.0
NS					
<b>Age in years</b>	18-24	0	0.0	65,591	14.1
	25-34	4	8.2	109,763	23.4
	35-44	7	14.3	81,674	17.4
	45-54	18	36.7	104,673	22.4
	55-64+	20	40.8	106,192	22.7
	Total	49	100.0	468,253	100.0
$\chi^2 = 22.58, df=4, p=.0002$					
<b>Non-Hisp. Race</b>	White	44	89.8	359,557	77.1
	Black or African-American	4	8.2	53,985	11.6
	Other <sup>b</sup>	1	2.0	52,909	11.3
	Total	49	100.0	466,451	100.0
NS					
<b>Hispanic Ethnicity</b>	Yes	1	2.0	52,333	11.2
	No	48	98.0	415,586	88.8
	Total	49	100.0	467,919	100.0
NS					
<b>Education level</b>	<9 <sup>th</sup> grade/some HS	7	14.0	71,600	15.2
	HS grad/GED	25	50.0	187,899	40.0
	Some college	0	0.0	139,915	29.8
	College degree or more	18	36.0	70,722	15.0
	Total	50	100.0	470,136	100.0
NS					
<b>Insurance status</b>	Uninsured	8	16.0	94,745	20.3
	Insured (govt. or private) <sup>c</sup>	42	84.0	372,591	79.7
	Total	50	100.0	467,337	100.00
NS					
<sup>a</sup> All enrollees were cigarette users, three of whom also used other forms of tobacco					
<sup>b</sup> For Middlesex, this includes: Asian (n=0), American-Indian/Alaskan Native (n= 1), and Native Hawaiian or					

Item	Response	Tobacco users <sup>a</sup> served by program		Cigarette users Statewide (BRFSS 2011, weighted)	
		N	%	N	%
Pacific Islander (n=0), and "other: please specify" (n=0). The "other" category for BRFSS includes: Asian (n=10,436), Native Hawaiian or Pacific Islander (n=887), American-Indian/Alaskan Native (n=4,562), other race (n=29,021), and multiracial (n=8,003).					
<sup>c</sup> Includes any type of insurance (private and government-sponsored). The majority of insured program participants have government-sponsored (68%) and 32% have private insurance. BRFSS only asks those that are 64 years of age and under. Middlesex served 5 individuals that are 65+.					

*Clinical Characteristics.* Data collected from each enrollee's most recent enrollment, reveals that all program enrollees (100%) had used tobacco sometime within the 30 days prior to program enrollment, 100% were every-day cigarette users and 6% (n=3) reported using other forms of tobacco in addition to cigarettes. Additionally, 10% of program enrollees that were cigarette users were light smokers (<10 cigarettes per day), 58% were moderate smokers (11-20 cigs. per day), and 16% were heavy smokers (21+ cigs. per day). Most (90%) reported having tried to quit using tobacco before enrolling in the program and 43% reported living with another smoker. In terms of other self-reported co-morbid health conditions, 78% were receiving or had received treatment for one or more physical health condition at the time of program enrollment and 62% had received or were currently receiving treatment for one or more mental health condition.

*Target Population.* Middlesex Hospital was contracted to serve youth and adult tobacco users in Middlesex County, targeting those that are uninsured and underinsured. The cessation program most likely reached tobacco users from within this service area, as most were referrals from providers within Middlesex Hospital and the surrounding community. They served a number of uninsured tobacco users. It is difficult to say, however, what proportion of underinsured they served, as PDA does not have information about the provisions of enrollee's health plans (private or government-sponsored). The program has not yet served any youth, only those 25 years of age and older.

Overall, Middlesex Hospital has so far reached a modest number of adult tobacco users that are generally older, White, that have a high school or college degree, are uninsured or have government-sponsored insurance, and that smoke every day. Slightly less than half reported living with another smoker and most had tried to quit unsuccessfully in the past. More three-quarters of enrollees reported current or past treatment for one or

more physical health condition (i.e. heart disease, lung disease)—conditions likely to be caused or negatively impacted by tobacco use.

### Program Utilization

Overall, 28% of enrollees attended one or more group session and 98% attended one or more individual session, indicating that individual sessions are a more appealing choice for this population. Combining group and individual sessions together, almost all enrollees (98%, n=49) attended at least one cessation counseling session. Of these enrollees, 62% (n=31) attended 1-2 counseling sessions, 28% (n=14) had attended 3-4 sessions, and 8% (n=4) had attended 5 or more counseling sessions. The average number of sessions attended was 2.29 (stdev=1.46; min=1, max=6). When these levels of program utilization are compared to program utilization described in a previous study of similar face-to-face programs<sup>2</sup>, Middlesex Hospital appears to have had a slightly larger proportion of those that attended 4 or more sessions (18% vs. 12%), a slightly smaller proportion attending 1 session (40% vs. 47%), and about the same proportion attending 2-3 sessions (40%). Finally, 20% (n=10) of enrollees attended one or two relapse prevention sessions.

In general, these results show that Middlesex Hospital's relatively young tobacco cessation program has been successful in getting around a third of enrollees to attend two or more counseling sessions with utilization similar or somewhat higher than other face-to-face programs; however, the remaining two-thirds only attended one session. They have been fairly successful, however, in getting a good number of enrollees to come back for relapse prevention sessions, in comparison to some other community-based cessation programs.

### Program Completion / Drop Out

Tobacco use data at program completion and drop out were collected from 8% (n=4) of program enrollees using the program completion / drop out portion of the Attendance Tracking Form. None of the 4 (2 completers, 2 drop-outs) were abstinent<sup>3</sup> from tobacco at the time they completed the form. Two smoked 10 or fewer cigarettes per day and 2 smoked 11-19 cigarettes per day. None reported using any other forms of tobacco.

---

<sup>2</sup> Paula A. Keller, M.P.H.; Anne Betzner, Ph.D.; Lija Greenseid, Ph.D.; Barbara A. Schillo, Ph.D.; Jennifer L. Cash, M.P.H.; Michael G. Luxenberg, Ph.D. *Relative Reach, Utilization, Effectiveness and Costs of ClearWay Minnesota's<sup>SM</sup> QUITPLAN<sup>®</sup> Services*. Poster presented during the 2011 Society for Research on Nicotine and Tobacco annual meeting.

<sup>3</sup> Abstinent from any form of tobacco use for 30 days prior to completion of the form

Three of the four reported trying to quit using tobacco while participating in the cessation program and all three reported using some form of medication (NRT or Wellbutrin) to assist in their quit attempt. Additionally, two respondents reported trying to reduce the amount they smoked in their home, car, at work, or in public and two reported only smoking outside. All four reported having been referred to the CTQL, two reported being referred to a relapse support group, two reported being referred to individual counseling and one reported being referred to a community program as relapse prevention resources.

Overall, these results appear to show some provisional successes of Middlesex Hospital's tobacco cessation program in helping participants make quit attempts and make other changes to their smoking behaviors. However, data was only available for a small number of enrollees, so no conclusions can be drawn confidently regarding the program's success in helping participants quit.

### Patient Satisfaction & Patient Follow-Up

No patient satisfaction or patient follow-up data was collected as of January 2013.

## Conclusions

### Key Strengths

These results show that Middlesex Hospital was successful at utilizing primary care providers as referrals sources. The cessation program is reaching a large proportion of smokers 45 years of age and older, an age group most likely experiencing the effects of long-term tobacco use; and is reaching those that had tried to quit unsuccessfully in the past and may need more assistance quitting (especially if they live with another smoker). The program is reaching a large population of those with government-sponsored insurance as well as the uninsured.

Just over a third of enrollees have attended three or more counseling sessions to date and Middlesex has had more success than some other community grantees in getting clients to participate in relapse prevention sessions. Of those clients that have been

followed up after program participation, some had tried to quit, had used cessation medications, and had reduced the amount they smoke around others.

## Key Challenges

While Middlesex has recruited 50 enrollees, they are only about a third of the way toward reaching their contracted goal of 150 enrollees with ten months left in their contract. This may be in part due to their program being newer, with a slower ramp-up time; however, they may need to consider other methods of recruitment to boost their numbers served and keep enrollees coming back for more sessions. Additionally, more data needs to be collected at program completion / drop out and 4 and 7-month follow-up, to calculate reliable outcomes (tobacco reduction and quit rate estimates) for enrollees.

## Recommended Next Steps

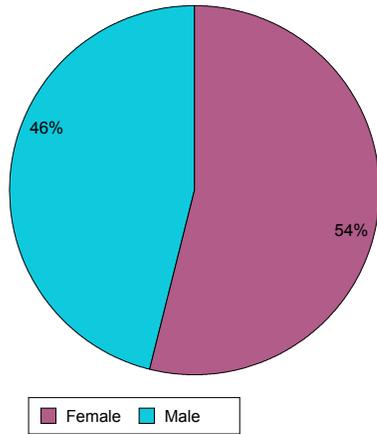
*Recruitment.* In order to meet contracted enrollment goals, additional methods of recruitment may be needed. For example, pulling in more providers or providers from different parts of the hospital system that serve a large proportion of tobacco users may help with recruitment. Also, since a large proportion of enrollees live with another smoker, it may be beneficial to recruit them to join the program as well. Having enrollees other medical providers (primary, specialty care) encourage use of the program may also be helpful. Middlesex Hospital also largely serves an older population of smokers. If the program seeks to serve more participants in a younger age range (or those with different demographic characteristics than who they are currently serving), the program will likely need to further adjust their marketing, recruitment, and referral practices.

*Program Utilization.* While a decent proportion of enrollees have attended three or more sessions, more than half attended only one or two sessions. The program may need to provide additional incentives (e.g. transportation vouchers, food for group sessions, stipend) to entice enrollees to attend multiple sessions, as a greater amount of treatment received (counseling or counseling + medication) typically results in higher rates of tobacco cessation.

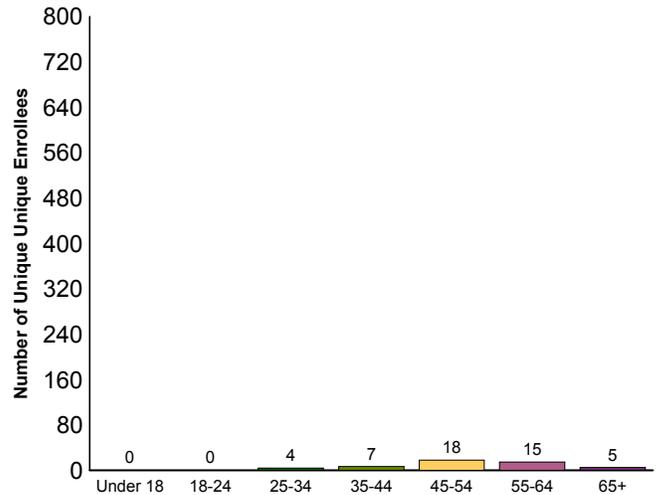
*Data Collection.* Data collection at program completion/drop out and 4 and 7-months post program enrollment are good opportunities to see the impact of the cessation program's efforts as well as a way to check in with clients to see what they liked about the program and whether they are in need of additional cessation assistance. Gathering tobacco use data from 50% or more of enrollees (for each form) will help yield reliable satisfaction, tobacco use reduction, and quit rate estimates.

Demographic Characteristics\* (N= 50)\*\*

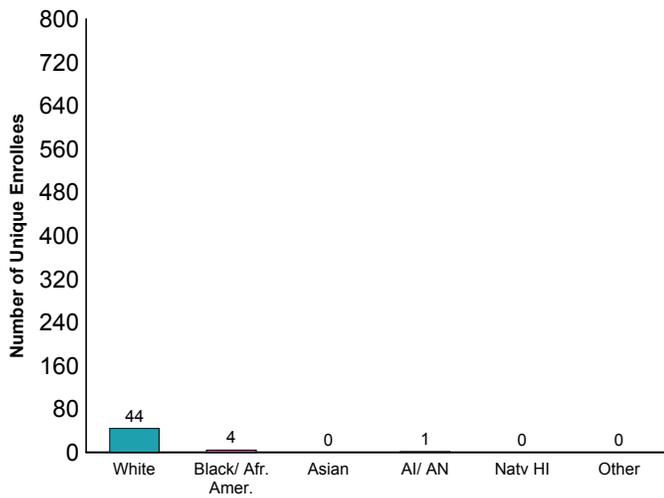
Gender (n=50)



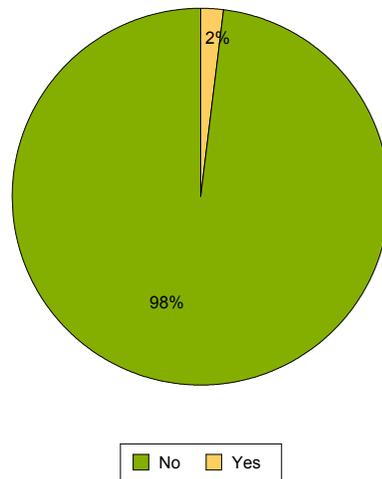
Age (n=49)



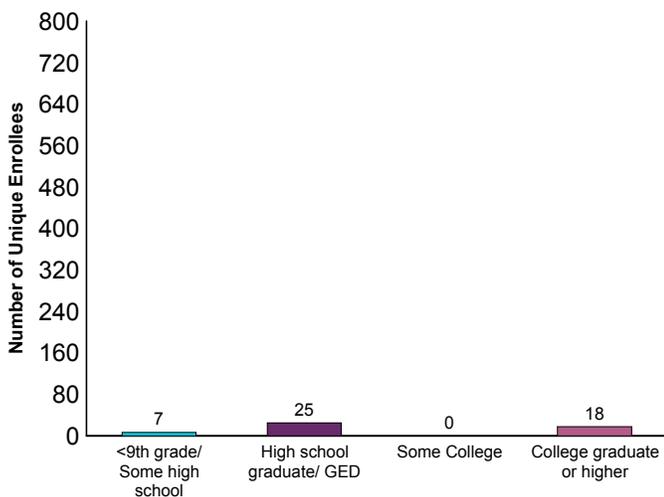
Race (n=49)



Hispanic Ethnicity (n=49)



Education (n=50)

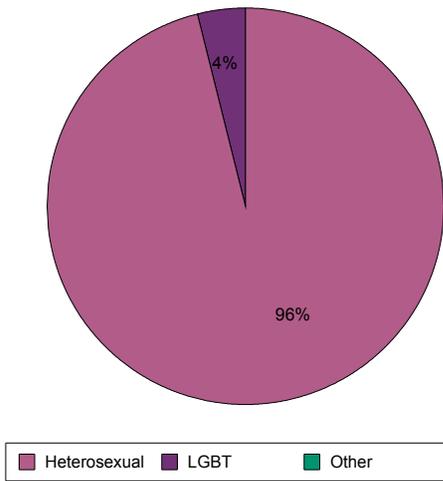


\*Data source is the Program Enrollment and Referral Form; data are from the most recent enrollment.

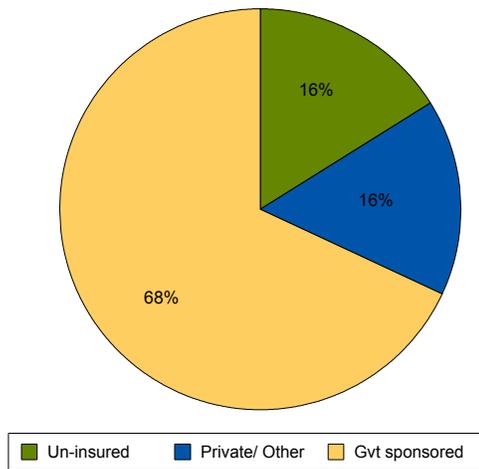
\*\* Missing data are removed; each chart now reflects valid data only. The n per chart may differ from the total (N= 50).

Demographic Characteristics\* (N= 50)\*\*

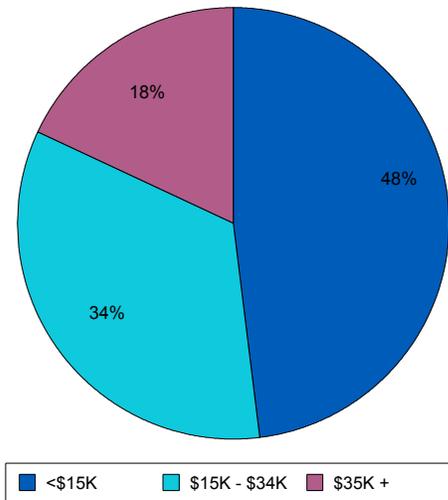
Sexual Orientation (n=50)



Insurance Status (n=50)



Annual Income (n=50)



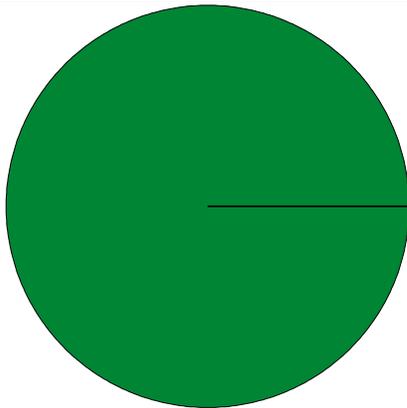
\*Data source is the Program Enrollment and Referral Form; data are from the most recent enrollment.

\*\* Missing data are removed; each chart now reflects valid data only. The n per chart may differ from the total (N= 50).

**Clinical Characteristics \* (N= 50)**

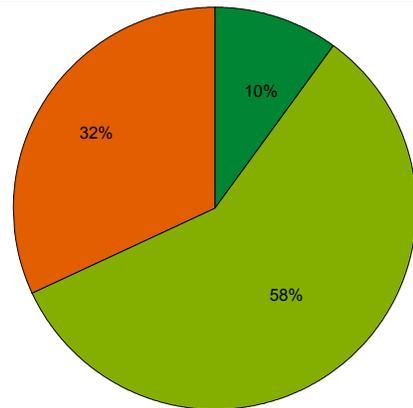
**Tobacco Use and Quit History**

**Tobacco use in past 30-days (n=50)**



■ Yes- using tobacco

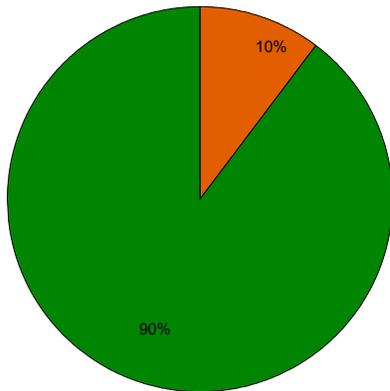
**Cigarettes per day \* (n=50 out of 50)**



■ Light (0-10) ■ Moderate (11-20) ■ Heavy (21+)

\*Only Reported for Tobacco users who used cigarettes in last 30 days

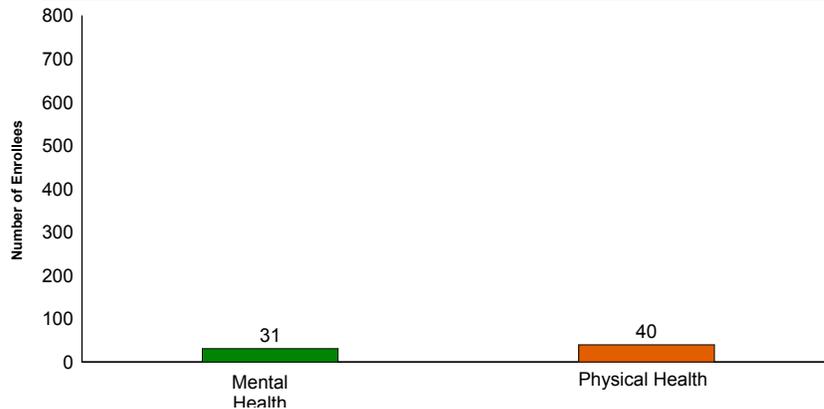
**Ever tried to quit (n=49)**



■ No ■ Yes

**Physical and Mental Health History**

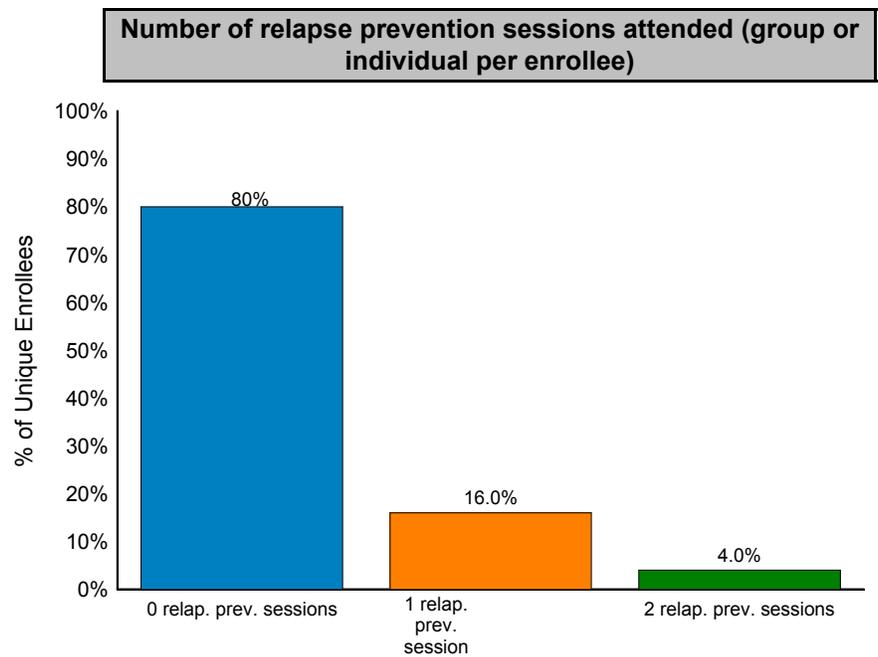
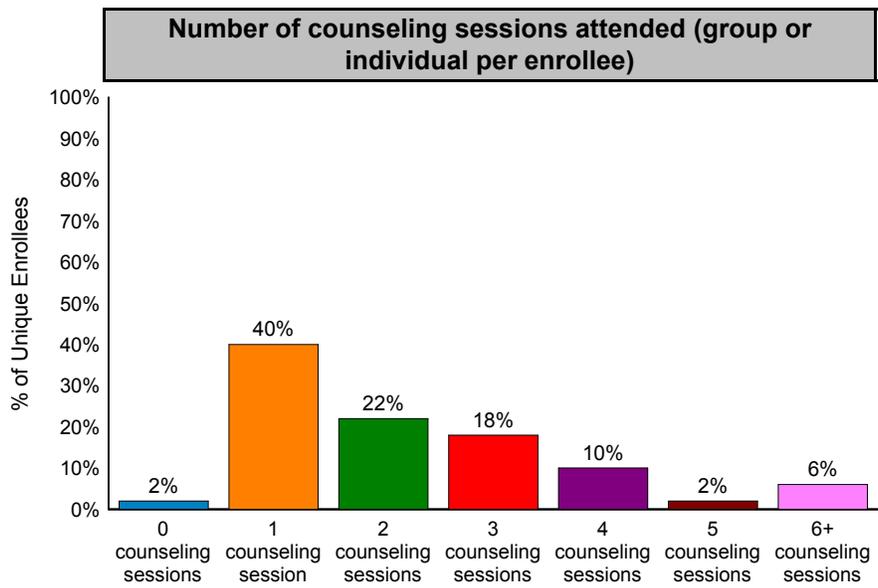
**Treatment for at least one physical and mental health conditions**



\*Data source is the Program Enrollment and Referral Form; data are from the most recent enrollment.

\*\* Missing data are removed; each chart now reflects valid data only. The n per chart may differ from the total (N= 50).

### Program Utilization\* (N= 50)

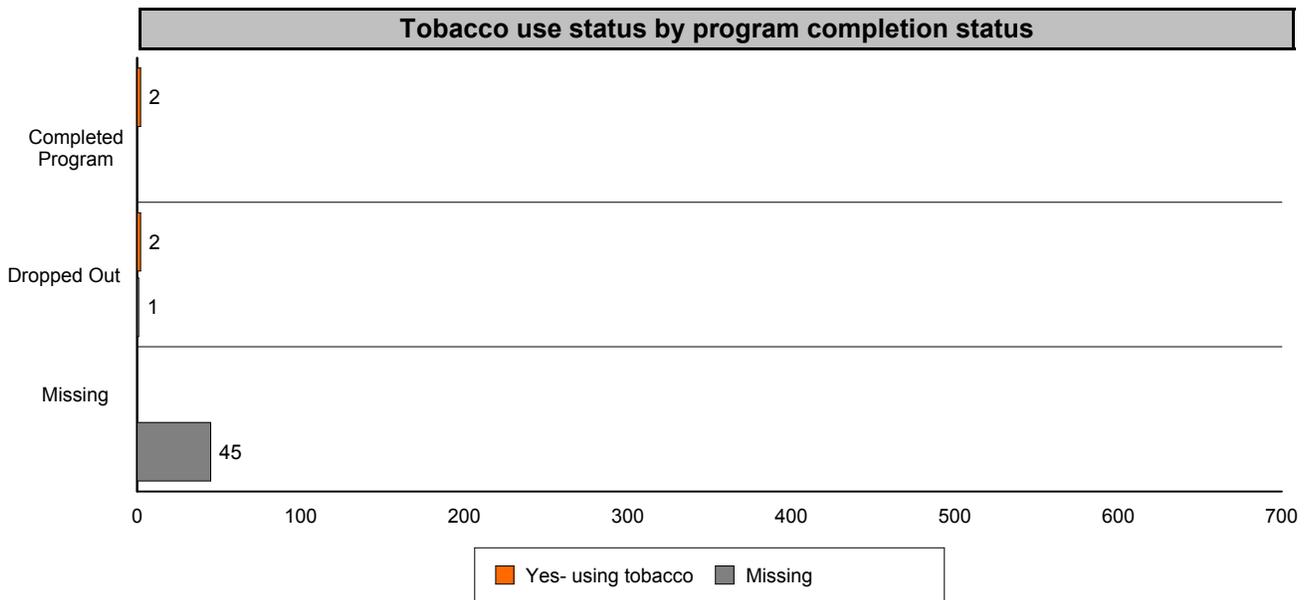


\*Data source is the Attendance Tracking and Program Completion Form; data is from the most recent enrollment.

\*\* Missing data are removed; each chart now reflects valid data only. The n per chart may differ from the total (N= 50).

\*\*\*Utilization, graduation, and patient satisfaction are only reported for most recent enrollments with either at least one recorded counseling session, a recorded completion status or a last contact date dated three or more months ago.

Program Completion\* (N= 50)



\* A program completion form was to be filled out when a client either completed a cessation program (completer) or if the client had no contact/ no sessions attended for 3+ months (drop out)

\*\*Cigarette use reduction was calculated for completers and drop-outs who were still using cigarettes at program completion or dropout. No enrollees with missing program completion status or missing cigarette use status were included in the analysis. Tests for significant differences are only

**Report Appendix A**

## PRIMER ON TOBACCO ABSTINENCE RATES

- **Responder Rates (RR).** This rate is calculated as:

$$\text{Responder Rate} = \frac{\# \text{ abstinent}}{\# \text{ who responded to the survey}}$$

The responder rate is based on those that complete a survey. The disadvantage of this rate is that it is overly optimistic. If 25% of participants didn't respond to the survey, at least in part because many are still smoking, then the abstinence rate is biased upwards. If everyone had responded to the survey the rate would be lower. Programs want to know about everyone they served, not just the people who responded to the survey. The intent-to-treat rate addresses this concern, but it is biased also – in the opposite direction.

- **Intent-to-Treat Rates (ITT).** This rate answers the question: of the people you intended to serve, how many are abstinent given the most conservative assumptions? The rate is calculated as:

$$\text{Intent to Treat Rate} = \frac{\# \text{ abstinent}}{\# \text{ eligible for the survey}}$$

The ITT rate is based on the entire group of people that were chosen to be surveyed (called the “sample”). The ITT rate **assumes that anyone who didn't answer the survey is still smoking**. This is a more conservative assumption than the responder rate.

The “true” quit rate lies somewhere in between the responder rate and the intent to treat rate. The best way to improve the accuracy of our estimates is to get more people to respond to the survey, which brings the responder and intent to treat rates closer together.

**Confidence Intervals (CI).** The confidence interval is a mechanism to see potential error in our estimates due to small sample size or study design. Larger sample sizes will, in most cases, produce smaller confidence intervals, meaning that the quit rate calculation is more likely to be accurate.

- For example, using a 95% confidence interval, if the quit rate is 26.5% with a margin of error of  $\pm 4.3$ , that means that 95 times out of 100 the true quit rate will lie somewhere between 22.2% and 30.8%. The margin of error is smaller for ITT rates, because their sample sizes are larger and closer to population rates, so the error decreases.

**Additional Note Concerning Exclusions:** Those that indicated that they had not used tobacco (of any kind) for more than 30 days at enrollment or did not have data for “last time used tobacco” at enrollment were excluded from quit rate calculations as the inclusion of these people may bias the quit rate.

**Report Appendix B**

**Enrollments and Referral Sources**

**Table 1. Primary Referral Source for Enrollees at Intake**

	<b>N</b>	<b>%</b>
Primary Care Provider	38	76.0
Quitline	0	.0
Other health care/Dental provider	0	.0
Brochure/Flyer	4	8.0
Counselor/Therapist	3	6.0
Friend/Family	1	2.0
Employer	0	.0
Other referral source/self	4	8.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Middlesex Hospital Tobacco Cessation Program Aggregate Report – Final Report (Feb. '12 – Jan. '13)**

**Table 2. Number of Total Enrollments per Month (includes dual enrollments)**

	<b>N</b>	<b>%</b>
February 2012	3	6.0
March 2012	5	10.0
April 2012	6	12.0
May 2012	5	10.0
June 2012	6	12.0
July 2012	5	10.0
August 2012	7	14.0
September 2012	7	14.0
October 2012	3	6.0
November 2012	2	4.0
January 2013	1	2.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 3. Number of Unique Enrollments per Month (excludes dual enrollments)**

	<b>N</b>	<b>%</b>
February 2012	3	6.0
March 2012	5	10.0
April 2012	6	12.0
May 2012	5	10.0
June 2012	6	12.0
July 2012	5	10.0
August 2012	7	14.0
September 2012	7	14.0
October 2012	3	6.0
November 2012	2	4.0
January 2013	1	2.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Demographic Characteristics at Intake**

**Table 4. Gender of Participant-**

	<b>N</b>	<b>%</b>
Female	27	54.0
Male	23	46.0
Other	0	.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 5. Age at Intake**

	<b>N</b>	<b>%</b>
Under 18	0	.0
18-24	0	.0
25-34	4	8.2
35-44	7	14.3
45-54	18	36.7
55-64	15	30.6
65+	5	10.2
Total	49	100.0

\*\* 1 or 2.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 6. Race of Participant**

	<b>N</b>	<b>%</b>
White	44	89.8
Black or African American	4	8.2
Asian	0	.0
American Indian or Alaskan Native	1	2.0
Native Hawaiian or Pacific Islander	0	.0
Other/Mixed	0	.0
Total	49	100.0

\*\* 2 or 2.0% of 50 cases are missing a response to item so are not reported in the table above.

**Middlesex Hospital Tobacco Cessation Program Aggregate Report – Final Report (Feb. '12 – Jan. '13)**

**Table 7. Educational Level of Participant at Intake**

	<b>N</b>	<b>%</b>
9 <sup>th</sup> grade/Some high school	7	14.0
High school graduate/GED	25	50.0
Some college	0	.0
College graduate or higher	18	36.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 8. Ethnicity of Participant**

	<b>N</b>	<b>%</b>
Yes – Hispanic or Latino	1	2.0
No – Not Hispanic or Latino	48	98.0
Total	49	100.0

\*\* 1 or 2.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 9. Sexual Orientation at Intake**

	<b>N</b>	<b>%</b>
Heterosexual/Straight	48	96.0
Gay / Bisexual	1	2.0
Other	1	2.0
Total	50	100.0

\*\* 1 or 2.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 10. Primary Language of Enrollees at Intake**

	<b>N</b>	<b>%</b>
English	50	100.0
Spanish	0	.0
Other	0	.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Middlesex Hospital Tobacco Cessation Program Aggregate Report – Final Report (Feb. '12 – Jan. '13)**

**Table 11. Type of Health Insurance at Intake**

	<b>N</b>	<b>%</b>
No insurance	8	16.0
Government sponsored insurance	34	68.0
Private insurance	8	16.0
Other Type of Insurance	0	.0
Total	50	100.0

\*\* 50 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 12. Annual Income of Enrollees at Intake**

	<b>N</b>	<b>%</b>
Less than \$10,000	7	14.0
\$10,000 to less than \$15,000	17	34.0
\$15,000 to less than \$20,000	8	16.0
\$20,000 to less than \$25,000	4	8.0
\$25,000 to less than \$35,000	5	10.0
\$35,000 to less than \$50,000	6	12.0
\$50,000 to less than \$75,000	2	4.0
\$75,000 or more	1	2.0
Refused/Don't Know	0	0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 13. Pregnant Enrollees at Intake (Reported for “Females” and “Other” Gender)**

	<b>N</b>	<b>%</b>
Yes	0	.0
No	27	100.0
Total	27	100.0

\*\* 0 or .0% of 27 cases are missing a response to item so are not reported in the table above.

**Clinical Characteristics at Intake**

**Table 14. Enrollees Use of Tobacco in the past 30 days at intake**

	<b>N</b>	<b>%</b>
No tobacco – 30 day abstinent	0	.0
Yes – Not 30 day abstinent	50	100.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 15. Enrollees Use of Cigarettes at intake**

	<b>N</b>	<b>%</b>
No	0	.0
Yes	50	100.0
Total	50	100.0

\*\* 0 or .0 % of 50 cases are missing a response to item so are not reported in the table above.

**Table 16. Average Number of Cigarettes per day at Intake**

	<b>N</b>	<b>Mean</b>
Cigarettes Per Day	50	22.0

\*\* 0 or .0% of 160 cases are missing a response to item so are not reported in the table above.

**Table 17. Number of Cigarettes Smoked per day at Intake**

	<b>N</b>	<b>%</b>
Light (0-10)	5	10.0
Moderate (11-19)	29	58.0
Heavy (21+)	16	32.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 18. Enrollees Smoking Status**

	<b>N</b>	<b>%</b>
Everyday	50	100.0
Somedays	0	.0
Not at all	0	.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Middlesex Hospital Tobacco Cessation Program Aggregate Report – Final Report (Feb. '12 – Jan. '13)**

**Table 19. Enrollees Use of Tobacco Other than Cigarettes at Intake**

	<b>N</b>	<b>%</b>
No	47	94.0
Yes	3	6.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 20. Exclusive other (non-cig.) tobacco users at Intake**

	<b>N</b>	<b>%</b>
No	3	100.0
Yes	0	.0
Total	3	100.0

\*\* 0 or 0% of 3 cases are missing a response to item so are not reported in the table above.

**Table 21. Average Number of Times per day Tobacco Other than cigarettes is Used at Intake**

	<b>N</b>	<b>Mean</b>
Tobacco Per Day	2	5.50

\*\* 1 or 33.3% of 3 cases are missing a response to item so are not reported in the table above.

**Table 22. Tobacco used per day at Intake**

	<b>N</b>	<b>%</b>
Light (0-10)	2	100.0
Moderate (11-19)	0	.0
Heavy (21+)	0	.0
Total	2	100.0

\*\* 1 or 33.3% of 3 cases are missing a response to item so are not reported in the table above.

**Table 23. Tried to Quit**

	<b>N</b>	<b>%</b>
No	5	89.8
Yes	44	10.2
Total	49	100.0

\*\* 1 or 2.0% of 50 cases are missing a response to item so are not reported in the table above.

**Middlesex Hospital Tobacco Cessation Program Aggregate Report – Final Report (Feb. '12 – Jan. '13)**

**Table 24. Type of Quit Method Used at Intake –percent or percent of cases?**

	<b>N</b>	<b>%</b>
Nicotine Spray	0	.0
Nicotine Patch	26	59.1
Nicotine Lozenge	7	15.9
Zyban	1	2.3
Wellbutrin	11	25.0
Chantix	16	36.4
Group Counseling	1	2.3
Individual Counseling	1	2.3
Quit Cold Turkey	29	65.9
Other	3	6.8
Nicotine Gum	11	25.0
Total	106	241

\*\* 0 or .0% of 44 cases are missing a response to item so are not reported in the table above.

\*\*\* Multiple response set for those who indicated previous use of quit methods at Intake. Individuals using multiple methods are represented multiple times; therefore, percents will total over 100%.

**Table 25. Number of Enrollees Living with a Smoker**

	<b>N</b>	<b>%</b>
No	28	57.1
Yes	21	42.9
Total	49	100.0

\*\* 1 or 2.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 26. Received Treatment for Heart Disease at Intake**

	<b>N</b>	<b>%</b>
Past/Current	14	87.5
None	2	12.5
Total	16	100.0

\*\* 34 or 68.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 27. Received Treatment for Blood Pressure at Intake**

	<b>N</b>	<b>%</b>
Past/Current	11	91.7
None	1	8.3
Total	12	100.0

\*\* 38 or 76.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 28. Received Treatment for Diabetes at Intake**

	<b>N</b>	<b>%</b>
Past/Current	8	88.9
None	1	11.1
Total	9	100.0

\*\* 41 or 82.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 29. Received Treatment for Cholesterol at Intake**

	<b>N</b>	<b>%</b>
Past/Current	11	100.0
None	0	.0
Total	11	100.0

\*\* 39 or 78.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 30. Received Treatment for Stroke at Intake**

	<b>N</b>	<b>%</b>
Past/Current	1	50.0
None	1	50.0
Total	2	100.0

\*\* 48 or 96.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 31. Received Treatment for Cancer at Intake**

	<b>N</b>	<b>%</b>
Past/Current	2	50.0
None	2	50.0
Total	4	100.0

\*\* 46 or 92.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 32. Received Treatment for Lung Disease at Intake**

	<b>N</b>	<b>%</b>
Past/Current	27	93.1
None	2	6.9
Total	29	100.0

\*\* 21 or 42.0% of 50 cases are missing a response to item so are not reported in the table above.

**Middlesex Hospital Tobacco Cessation Program Aggregate Report – Final Report (Feb. '12 – Jan. '13)**

**Table 33. Received Treatment for Drug Addiction at Intake**

	<b>N</b>	<b>%</b>
Past/Current	11	91.7
None	1	8.3
Total	12	100.0

\*\* 38 or 76.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 34. Received Treatment for Depression at Intake**

	<b>N</b>	<b>%</b>
Past/Current	10	83.3
None	2	16.7
Total	12	100.0

\*\* 38 or 76.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 35. Received Treatment for Anxiety at Intake**

	<b>N</b>	<b>%</b>
Past/Current	9	81.8
None	2	18.2
Total	11	100.0

\*\* 39 or 78.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 36. Received Treatment for Schizophrenia at Intake**

	<b>N</b>	<b>%</b>
Past/Current	3	60.0
None	2	40.0
Total	5	100.0

\*\* 45 or 90.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 37. Received Treatment for Bipolar at Intake**

	<b>N</b>	<b>%</b>
Past/Current	5	83.3
None	1	16.7
Total	6	100.0

\*\* 44 or 88.0% of 50 cases are missing a response to item so are not reported in the table above.

**Middlesex Hospital Tobacco Cessation Program Aggregate Report – Final Report (Feb. '12 – Jan. '13)**

**Table 38. Received Treatment for Gambling Addiction at Intake**

	<b>N</b>	<b>%</b>
Past/Current	1	33.3
None	2	66.7
Total	3	100.0

\*\* 47 or 94.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 39. Received Treatment for Alcohol Addiction at Intake**

	<b>N</b>	<b>%</b>
Past/Current	13	86.7
None	2	13.3
Total	15	100.0

\*\* 35 or 70.0% of 50 cases are missing a response to item so are not reported in the table above.

**Program Utilization**

**Table 40. Total Number of Group or Individual Counseling Sessions**

	<b>N</b>	<b>%</b>
No sessions	1	2.0
One session	20	40.0
Two sessions	11	22.0
Three sessions	9	18.0
Four sessions	5	10.0
Five sessions	1	2.0
Six or more sessions	3	6.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 41. Tobacco Cessation Program Utilization per Enrollee by Session Type (Excluding those without program utilization)**

		<b>Average Individual Sessions per Enrollee</b>	<b>Average Group Sessions per Enrollee</b>	<b>Average Total Sessions per Enrollee</b>
	<b>N</b>	49	49	49
	<b>Mean</b>	1.76	.53	2.29
	Std. Dev.	1.42	.92	1.46
	Minimum	1.00	.00	1.00
	Maximum	6.00	3.00	6.00

**Table 42. Number of Group or Individual Relapse Sessions**

	<b>N</b>	<b>%</b>
No sessions	40	80.0
One session	8	16.0
Two sessions	2	4.0
Three sessions	0	.0
Four sessions	0	.0
Five sessions	0	.0
Six or more sessions	0	.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

*Middlesex Hospital Tobacco Cessation Program Aggregate Report – Final Report (Feb. '12 – Jan. '13)*

**Table 43. Relapse Prevention Utilization per Enrollee by Session Type  
(Excluding those without program utilization)**

		<b>Average Individual Relapse Prevention Sessions per Enrollee</b>	<b>Average Group Relapse Prevention Sessions per Enrollee</b>	<b>Average Total Relapse Prevention Sessions per Enrollee</b>
	<b>N</b>	10	10	10
	<b>Mean</b>	.20	1.00	1.20
	Std. Dev.	.42	.67	.42
	Minimum	.00	.00	1.00
	Maximum	1.00	2.00	2.00

**Program Completion/ Drop-Out Form**

**Table 44. Self-reported Completion of Program**

	<b>N</b>	<b>%</b>
No	3	60.0
Yes	2	40.0
Total	5	100.0

\*\* 45 or 90.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 45. Enrollees Use of Tobacco in the past 30 days at Program Completion or Drop Out**

	<b>N</b>	<b>%</b>
No tobacco – 30 day abstinent	4	100.0
Yes – Not 30 day abstinent	0	.0
Total	4	100.0

\*\* 46 or 92.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 46. Enrollees Use of Cigarettes at Program Completion or Drop Out**

	<b>N</b>	<b>%</b>
No	0	.0
Yes	4	100.0
Total	4	100.0

\*\* 46 or 92.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 47. Average Number of Cigarettes per day at Program Completion or Drop Out**

	<b>N</b>	<b>Mean</b>
Cigarettes Per Day	4	11.50

\*\* 0 or .0% of 4 cases are missing a response to item so are not reported in the table above.

**Table 48. Number of Cigarettes Smoked per day at Program Completion or Drop Out**

	<b>N</b>	<b>%</b>
Light (0-10)	2	50.0
Moderate (11-19)	2	50.0
Heavy (21+)	0	.0
Total	4	100.0

\*\* 0 or .0% of 4 cases are missing a response to item so are not reported in the table above.

**Middlesex Hospital Tobacco Cessation Program Aggregate Report – Final Report (Feb. '12 – Jan. '13)**

**Table 49. Enrollees Smoking Status at Program Completion or Drop Out**

	<b>N</b>	<b>%</b>
Everyday	3	75.0
Somedays	1	25.0
Not at all	0	.0
Total	4	100.0

\*\* 0 or .0% of 4 cases are missing a response to item so are not reported in the table above.

**Table 50. Enrollees Use of Tobacco Other than Cigarettes at Program Completion or Drop Out**

	<b>N</b>	<b>%</b>
No	47	100.0
Yes	3	.0
Total	50	100.0

\*\* 0 or .0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 51. Exclusive Tobacco users only at Program Completion or Drop Out**

	<b>N</b>	<b>%</b>
No	3	80.0
Yes	0	20.0
Total	3	100.0

\*\* 0 or .0% of 3 cases are missing a response to item so are not reported in the table above.

**Table 52. Average Number of Times per day Tobacco Other than cigarettes is Used at Program Completion or Drop Out**

	<b>N</b>	<b>Mean</b>
Tobacco Per Day	0	0

\*\* No cases to report.

**Table 53. Did You Try to Quit Using Tobacco While Participating in This Program of Enrollees at Program Completion or Drop Out**

	<b>N</b>	<b>%</b>
No	1	25.0
Yes	3	75.0
Total	4	100.0

\*\* 46 or 92.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 54. Type of Quit Method Used at Program Completion or Drop Out**

	<b>N</b>	<b>%</b>
Nicotine Spray	0	.0
Nicotine Patch	1	33.3
Nicotine Lozenge	1	33.3
Zyban	0	.0
Wellbutrin	1	33.3
Chantix	0	.0
Group Counseling	0	.0
Individual Counseling	0	.0
Quit Cold Turkey	1	33.3
Other	0	.0
Nicotine Gum	0	.0
Total	4	133.2

\*\* 0 or .0% of 3 cases are missing a response to item so are not reported in the table above.

\*\*\* Multiple response set for those who indicated previous use of quit methods at Intake. Individuals using multiple methods are represented multiple times; therefore, percents will total over 100%.

**Table 55. Self-Reported Changes in Smoking Habits Made**

	<b>N</b>	<b>%</b>
No	1	25.0
Yes	3	75.0
Total	4	100.0

\*\* 46 or 92.0% of 50 cases are missing a response to item so are not reported in the table above.

**Table 56. Changes Made to Smoking Behavior of Enrollees at Program Completion or Drop Out**

	<b>N</b>	<b>%</b>
Reduced or no longer smoke in home, work, car, or public	2	66.7
Only smoke outside	2	66.7
Stopped completely	0	.0
Other	0	.0
Total	4	133.4

\*\* 0 or .0% of 3 cases are missing a response to item so are not reported in the table above.

\*\*\* Multiple response set for those who indicated previous use of quit methods at Intake. Individuals using multiple methods are represented multiple times; therefore, percents will total over 100%.

**Table 57. Self-Reported Relapse Prevention Referrals for Enrollees at Program Completion or Drop Out**

	<b>N</b>	<b>%</b>
Quitline	4	100.0
Relapse Support Group	2	50.0
Individual Counseling	2	50.0
Community Program	1	25.0
Other Relapse Prevention	0	.0
Total	9	225.0

\*\* 46 or 92.0% of 50 are missing a response to item so are not reported in the table above.

\*\*\* Multiple response set for those who indicated previous use of quit methods at Intake. Individuals using multiple methods are represented multiple times; therefore, percents will total over 100%.

**Drop-Out Characteristics**

**Table 58. Gender of Participant at Drop Out**

	<b>N</b>	<b>%</b>
Female	1	33.3
Male	2	66.7
Total	3	100.0

\*\* 0 or .0% of 3 cases are missing a response to item so are not reported in the table above.

**Table 59. Age at Drop Out**

	<b>N</b>	<b>%</b>
Under 18	0	.0
18-24	0	.0
25-34	0	.0
35-44	0	.0
45-54	1	33.3
55-64	1	33.3
65+	1	33.4
Total	3	100.0

\*\* 0 or .0% of 3 cases are missing a response to item so are not reported in the table above.

**Table 60. Race of Participant at Drop Outs**

	<b>N</b>	<b>%</b>
White	2	66.7
Black or African American	1	33.3
Asian	0	.0
American Indian or Alaskan Native	0	.0
Native Hawaiian or Pacific Islander	0	.0
Other/Mixed	0	.0
Total	3	100.0

\*\* 0 or .0% of 3 cases are missing a response to item so are not reported in the table above.

**Table 61. Educational Level of Participant at Drop Outs**

	<b>N</b>	<b>%</b>
9 <sup>th</sup> grade/Some high school	0	.0
High school graduate/GED	1	33.3
Some college	0	.0
College graduate or higher	2	66.7
Total	3	100.0

\*\* 0 or .0% of 3 cases are missing a response to item so are not reported in the table above.

**Table 62. Ethnicity of Participant at Drop Outs**

	<b>N</b>	<b>%</b>
Yes – Hispanic or Latino	0	.0
No – Not Hispanic or Latino	3	100.0
Total	3	100.0

\*\* 0 or .0% of 3 cases are missing a response to item so are not reported in the table above.