Arizona Smokers' Helpline Monthly Report

ASHLINE

November 2014

E-Cigarette Use

Client Demographics

Improving the Health of Arizonans

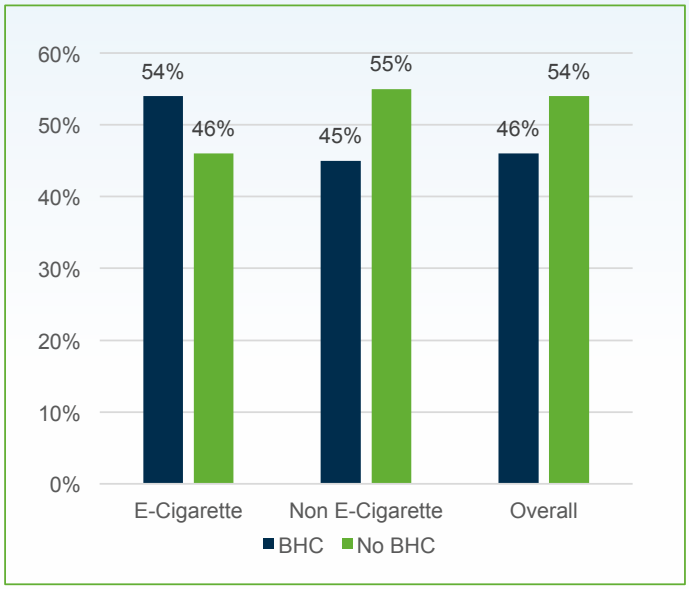
The University of Arizona
Mel and Enid Zuckerman College of Public Health

E-Cigarette Use Among ASHLine Clients – Six Part Series
Part III – E-Cigarette Use Among Behavioral Health Clients

This is the third installment in a six-part series that explores electronic cigarette (e-cigarette) use among ASHLine clients. Part III focuses on e-cigarette use among ASHLine clients who self-reported having at least one behavioral health condition (BHC). In Parts I and II, we detailed e-cigarette use among 2,059 ASHLine clients enrolled between April and August 2014; we presented demographic and tobacco use history profiles of clients who are users and non-users of e-cigarettes.

In stratifying ASHLine clients by the presence or absence of a BHC, we found a notable difference in rates of e-cigarette use. The overall prevalence of ASHLine clients with a BHC is 46%; for clients who use e-cigarettes the prevalence increases to 54%, while the prevalence remains consistent for non-users (45%) compared to the overall ASHLine population (Figure 1, χ^2: $p<.05$).

Figure 1. E-Cigarette Use by Behavioral Health Status



These findings are congruent with a nationally representative study published earlier this year. In the study, University of California San Diego (UCSD) researchers analyzed smoking history, e-cigarette use, and FDA approved cessation medication (CM) use among individuals with a mental health condition (MHC).[1] The researchers found that individuals with a MHC were more likely to try and to continue to use e-cigarettes than those without a MHC. In their sample, over 40% of current smokers with a MHC reported ever using an e-cigarette and 8.6% reported current use of an e-cigarette. Only 28.7% and 5.4% of non-behavioral health tobacco users ever tried or currently use e-cigarettes respectively.[1]

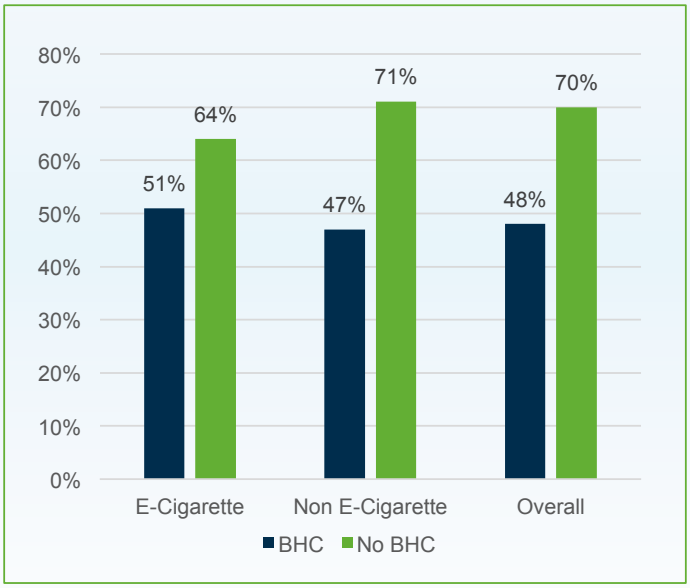
It is well documented that behavioral health clients use tobacco at higher rates and have poorer cessation outcomes than non-behavioral health tobacco users.[2,3] It will be important to clarify, however, whether e-cigarettes facilitate or hinder these individuals' ability to quit tobacco. One way of approaching this question is by analyzing CM use.

In the UCSD study, the frequency of MHC smokers trying any form of CM was higher than for non-MHC smokers. The authors concluded that MHC smokers were more likely to integrate CM into their quit attempt. Thus, by extension, MHC clients would likely find e-cigarettes to be an acceptable form of CM, an attitude possibly not shared to the same degree by non-MHC smokers.[1]

In evaluating CM use between BHC and non-BHC ASHLine clients we observed an inverse relationship in contrast to the UCSD study.

In our sample, non-BHC clients requested and received CM (patch or gum) at a higher percentage (70%) than BHC clients (48%). Stratified by e-cigarette use, Figure 2 shows that non-BHC clients at ASHLine, regardless of e-cigarette use, received CM at a higher rate than BHC clients. Interestingly, the percentage of non-BHC clients who received CM decreased from 71% for non-users of e-cigarettes to 64% for users of e-cigarettes (χ^2: $p<.05$). Of note, clients who self-reported having AHCCCS were not included in the CM analysis, due to unavailability of medication data from AHCCCS.

Figure 2. ASHLine Clients Who Received Cessation Medication



Among clients with a BHC, the fact that more clients who use e-cigarettes are receiving CMs is interesting, and it may be as the UCSD study authors suggest, individuals with a BHC are turning to e-cigarettes where they have not had success with other quit strategies.

In future studies, it will be important to further clarify whether there is a trend in duel use between approved CM and e-cigarettes, and if so, to determine if the combination of CM and e-cigarettes has a positive or negative effect on the cessation rate of clients who self-report having at least one BHC.

1. Cummins SE, Zhu S-H, Tedeschi GJ, Gamst AC, Myers MG. Use of e-cigarettes by individuals with mental health conditions. Tob. Control 2014.
2. Centers for Disease Control and Prevention (CDC). Vital Signs: Current Cigarette Smoking Among Adults Aged ≥18 Years with Mental Illness — United States, 2009–2011. MMWR 2013;62:81-7.
3. In an ASHLine Data Brief - October 6th, 2011, it was found that behavioral health clients were just as likely to take at least one coaching call and use cessation medication, nonetheless they had an 8.5% lower quit rate compared to all other clients

Appendix: Statistics and Demographics November 2014

Table 1. Referrals, Enrollments, and Coaching Calls by County

	Referrals		Enrollments		Total Coaching Calls		Avg # Coaching Calls for Exited Clients	
County	**November 2014**	**Year-to-Date**	**November 2014**	**Year-to-Date**	**November 2014**	**Year-to-Date**	**November 2014**	**Year-to-Date**
Apache	4	24	6	21	19	69	3.00	4.71
Cochise	34	146	13	83	43	272	5.11	4.16
Coconino	28	166	9	78	43	219	5.17	3.83
Gila	1	29	5	25	7	92	5.00	4.38
Graham	3	29	3	24	17	110	6.50	6.82
Greenlee	2	4	2	4	2	13	0.00	4.83
La Paz	5	25	1	11	4	31	1.00	3.38
Maricopa	413	2,180	238	1,819	968	5,986	4.16	4.24
Mohave	20	142	16	147	91	663	5.60	4.69
Navajo	0	10	3	40	20	150	3.50	4.38
Pima	152	1,053	62	579	333	2,147	4.95	5.05
Pinal	5	48	29	184	89	611	4.35	4.24
Santa Cruz	2	28	6	26	10	91	4.50	5.05
Yavapai	13	129	14	130	64	424	4.61	4.24
Yuma	23	94	15	72	31	173	2.38	3.43
Unknown	0	0	2	8	1	13	4.00	4.00
Total	**705**	**4,107**	**424**	**3,251**	**1,742**	**11,064**	**3.99**	**4.46**

Table 2. Incoming Calls and Quit Rate

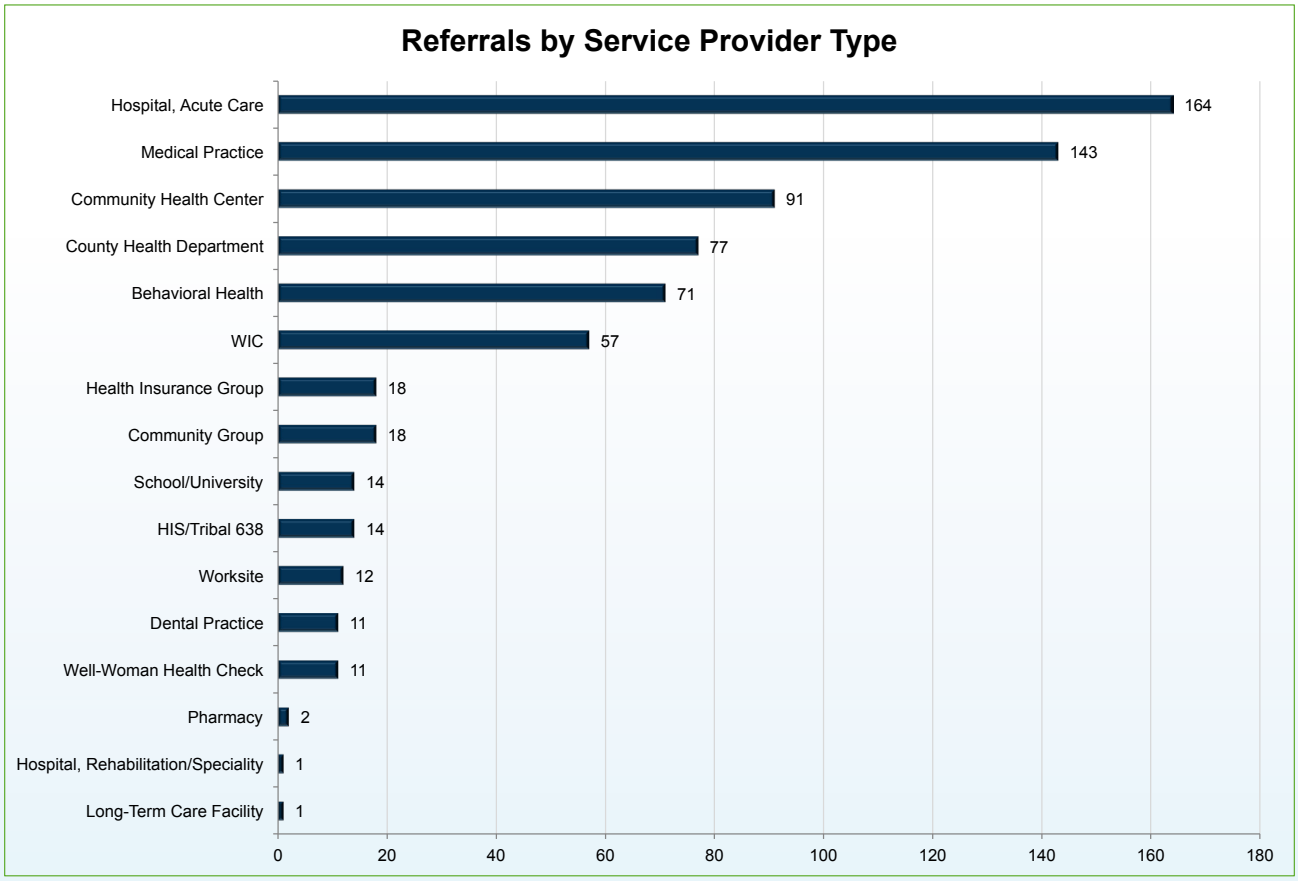
Summary Statistics	November 2014	Year-to-Date
# Incoming Calls	764	5,691
7-Month Quit Rate	38%	35%

Table 3. Demographics and Intake Type

Gender	Quit Coaching* (N = 424)	Information Only** (N = 26)	Total (N = 450)
Male	176	1	177
Female	246	3	249
Missing	2	22	24
Race			
White	315	4	319
Black or African American	29	0	29
Asian	3	0	3
Hawaiian	1	0	1
American Indian	11	0	11
Multiracial	7	0	7
Other Race	8	0	8
Unknown	50	22	72
Hispanic Identification			
Hispanic	72	0	72
Non-Hispanic	228	4	232
Unknown/Missing	124	22	146
Age			
Less than 18	0	0	0
18-24	24	0	24
25-34	54	0	54
35-44	79	1	80
45-54	119	0	119
55-64	102	0	102
65-79	40	0	40
80+	4	0	4
Unknown/Missing	2	25	27

** Clients enrolled in quit coaching program with or without Nicotine Replacement Therapy (NRT)*
*** Clients who only requested self-help quit material*

Figure 1. Total Number of Referrals by Service Provider Type



Note: Self-referred client excluded; Total Referrals = 705