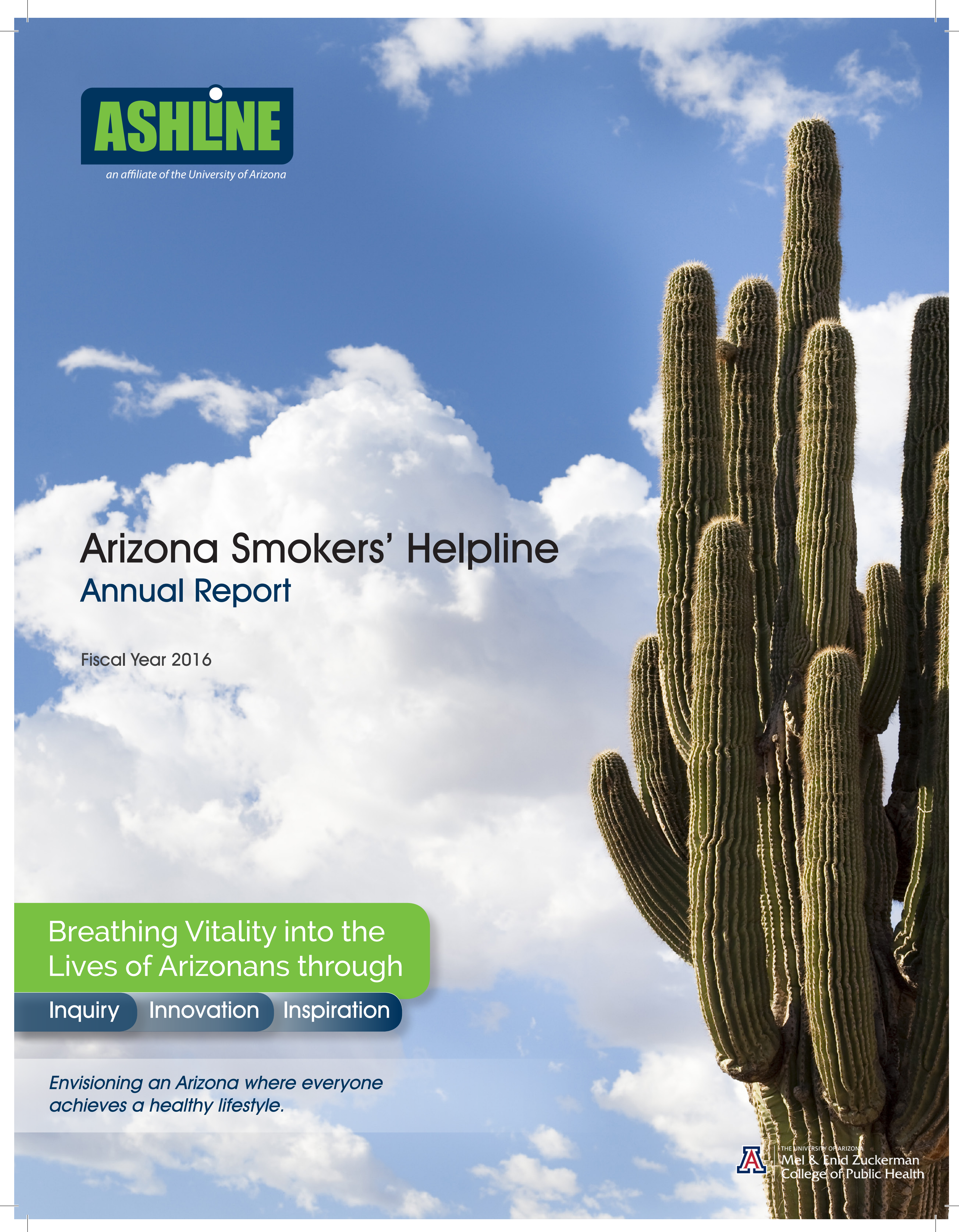

ASHLINE
an affiliate of the University of Arizona
Arizona Smokers' Helpline
Annual Report
Fiscal Year 2016
Breathing Vitality into the
Lives of Arizonans through
Inquiry
Innovation
Inspiration
Envisioning an Arizona where everyone
achieves a healthy lifestyle.
THE UNIVERSITY OF ARIZONA
Mel & Enid Zuckerman
College of Public Health

Arizona Smokers' Helpline

Annual Report: FY16

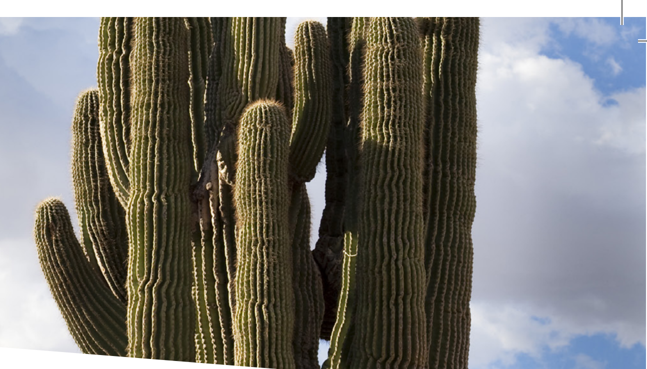


Table of Contents

I. **Executive Summary**

Calls and Enrollment 1

II. **Community Development**

Partner Training and Technical Assistance Program 2

Promoting Health Systems Change 3

Public-Private Partnerships (PPP) 3

III. **Communications and Branding**

Branding Team 4

New Call Center Platform 4

IV. **Client Enrollment and Characteristics**

Call Volume 5

Client Characteristics 7

Percent Enrolled by AHCCCS Insurance Plans 7

V. **Clinical Services**

Utilization of Services 8

Tailored Protocols 8

Overall Quit Rates 9

Quit Rates among High-Risk Populations 9

VI. **Research Initiatives and Dissemination of Findings**

Research Program 10

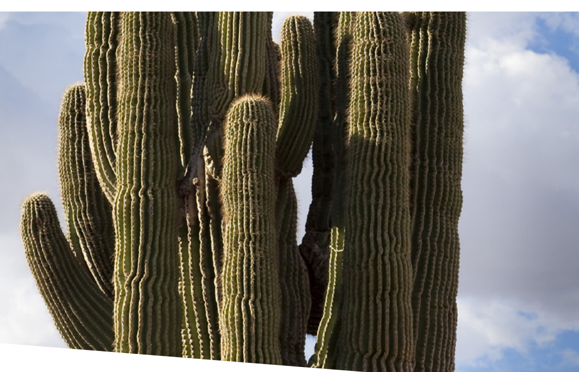
VII. **Data Brief**

What Do We Know about ENDS? 11

VIII. **List of Figures and Tables** 14

Arizona Smokers' Helpline

Annual Report: FY16



I. Executive Summary

Calls and Enrollment

The 2016 fiscal year (FY16) has established the Arizona Smokers' Helpline (ASHLine) as a leader in tobacco cessation across the U.S. On nearly every measure, ASHLine improved on 2015 standards, largely due to the consistent commitment and engagement of ASHLine faculty and staff, in partnership with the Arizona Department of Health Services (ADHS).

Figure 1. Program Highlights

Total Calls 28,513 ↑ *73% from FY2015*

Total Referrals 10,383 ↑ *2.5% from FY2015*

Total Enrollments 9,739 ↑ *25% from FY2015*

7-Month Tobacco Quit Rate 41% ↑ *6% from FY2015*

I will highlight a few of our improvements. Calls to ASHLine increased by 73% from FY15 to FY16. ASHLine also worked with healthcare providers with the goal of offering tobacco users access to cessation support at every healthcare visit. This resulted in over 10,000 referrals (median number of referrals reported by U.S. quitlines in FY15 was 1,900). By collaborating with ADHS, we were able to reach more clients through large-scale media campaigns. The enrollment team rose to the challenge and completed 9,739 enrollments this year, a 25% increase over FY15. Coaching staff were also able to better serve clients as we extended nicotine replacement therapy (NRT) to 4-weeks and implemented special protocols for assisting high-risk populations (e.g., pregnant smokers, behavioral health clients, the LGBTQI/GSM community). These improvements seem to have paid off. In FY16, we achieved our highest 7-month quit rate to date—41% . This rate far exceeded that of other state quitlines.

Novel initatives did not end there; we also expanded our research capacity. Under the leadership of Dr. Uma Nair, ASHLine participated in a number of national conferences. Staff were invited to attend the North American Quitline Consortium (NAQC) annual meeting as well as the NAQC Board meeting held in Phoenix this year. Our newly hired Public-Private Partnership lead, Adrienne Lent and our Business Manager, William Peck, led a discussion on future funding opportunities and increasing the impact of tobacco cessation quitlines. ASHLine also worked with the University of Arizona's College of Public Health IT department, the University Privacy Officer, and Arizona Research Labratories to become HIPAA compliant. Together, we conducted risk analyses to assess potential vulnerabilities in how ASHLine deals with client information. As a result, we have created twenty-eight HIPAA policies and a ASHLine Facility Privacy & Security Plan.

At ASHLine, we seek to adopt best-practice services while remaining open to innovation. To name a few examples, we have recently partnered with a call service center to provide around-the-clock enrollment into ASHLine. This strategy will help us in the coming year to meet or exceed our enrollment and quit rate goals. Another is our expanded software platform. The platform is specifically designed to increase efficiencies in coaching, advanced metric assessments, and to expand our quality improvements efforts. In FY17, we anticipate reaching more clients, offering additional tailored protocols, and adding new multimodal forms of communications including text messaging, web-based quit resources, and targeted social media effort

Regards,

Cynthia Thomson, PhD, RD
Director, Arizona Smokers' Helpline

Arizona Smokers' Helpline

Annual Report: FY16

II. Community Development

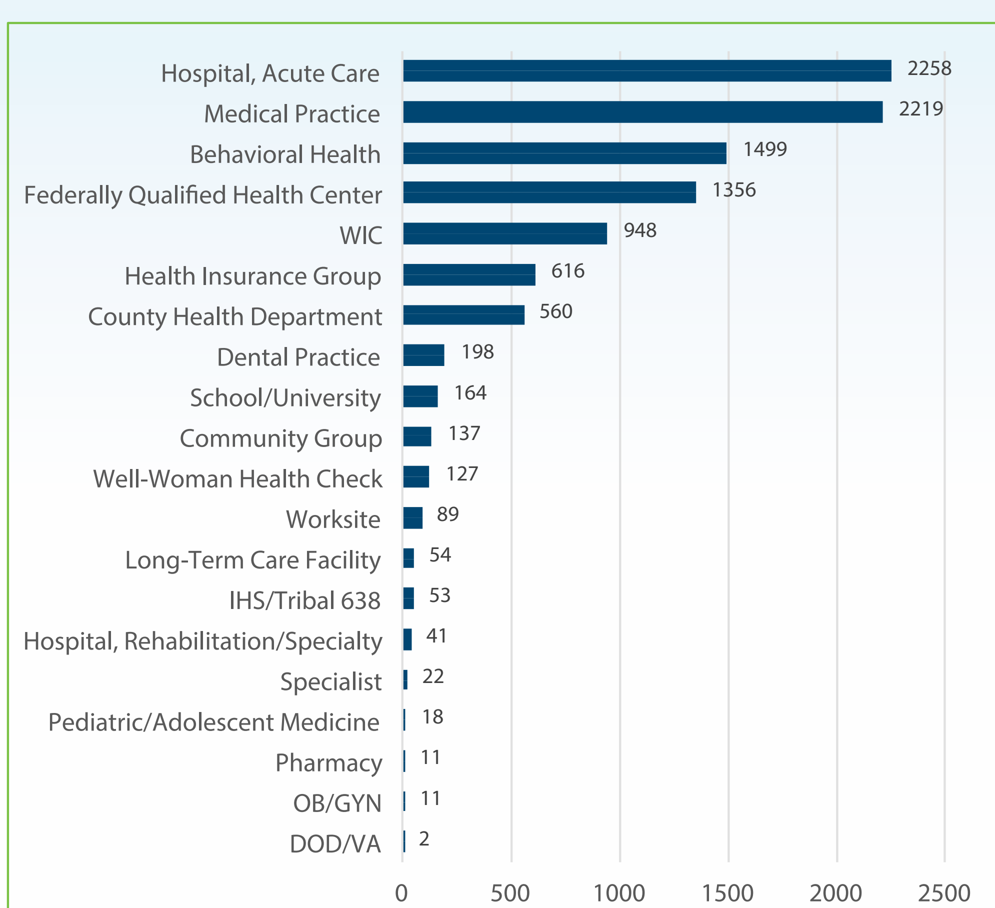
Partner Training and Technical Assistance Program

ASHLine's Community Development Team offers partner training and technical assistance to health care providers and community organizations in Arizona. This effort increases awareness of our provider referral program, including available services, and promotes the utilization of evidence-based tobacco cessation treatment. This past year, the team provided nearly 150 trainings on a variety of topics including the Ask, Advise, Refer (AAR) brief intervention process, electronic referral submissions, the benefits of quitting tobacco for employees of partner organizations, and customized trainings on topics such as Electronic Nicotine Delivery Systems (ENDS).

Specifically, the team delivered a total of 54 AAR trainings in medical settings to over 650 providers and 54 AAR trainings in behavioral settings to over 900 partners. In addition, the team delivered 9 Lunch & Learn trainings to more than 50 employees and 26 customized trainings to over 490 partners.

Feedback from partners during these trainings emphasized the value of information provided on existing services, AHCCCS benefits (Arizona's Medicare program), the referral process, and ENDS. Providing such training within hospitals, medical, and behavioral settings likely contributes to the strong number of referrals received from partners in these fields (see Figure 2).

Figure 2. Referrals by Location Type



Arizona Smokers' Helpline

Annual Report: FY16

Promoting Health Systems Change

The goal for the Community Development Team for this fiscal year was to promote health systems change. We focused our training and technical assistance in four primary areas – behavioral health, Federally Qualified Community Health Centers (FQHCs), insurance plans (especially Medicaid or AHCCCS plans), and medical partners (especially hospitals) (see Table 1). We saw particular progress within the behavioral health community this year, a high-risk group of tobacco users who experience increased health disparities. The highest referring behavioral health provider organizations statewide this fiscal year were: Southwest Network, Terros Health, La Frontera, CODAC Behavioral Health Services, and Horizon Health & Wellness.

Among FQHCs, progress continued to be made in providing training, with the highest referrals from Chiricahua Community Health Centers, El Rio Community Health Center and Maricopa Integrated Health Center. Mercy Care Plan was the highest referring health insurance plan by a wide margin, largely due to their commitment to improve the health of their members via implementation of health systems changes and ongoing AAR training for their staff. Among hospital systems, training and the provision of technical assistance by both Community Development Specialists and county tobacco programs supported a strong volume of referrals from a variety of partners including Banner Health, Havasu Regional Medical Center, HonorHealth, and Northwest Medical Center.

Table 1. Referral Reach and Enrollments by Top Six Location Types

Location Type	Number of Referrals	Percent Reached	Percent Enrolled from Reach	Percent enrolled
Hospital, Acute Care	2,258	46%	36%	16%
Medical Practice	2,219	57%	50%	28%
Percent Enrolled from Those Reached	1,499	51%	47%	24%
Overall Percent Enrolled	1,356	58%	45%	26%
WIC	948	46%	38%	17%
Health Insurance Group	616	61%	37%	23%

Public-Private Partnerships (PPP)

Adrienne Lent joined ASHLine in March 2016 as the new manager for Public-Private Partnerships (PPP) and has focused on research, networking and strategic planning. Ms. Lent represented ASHLine at the 2016 North American Quitline Consortium (NAQC) board meeting where she led discussions on health insurance plans' utilization of tobacco cessation quitlines and strategies for creating public-private partnerships across health care settings. She has worked with partners in the field (e.g., National Jewish Health) to learn best practices for developing sustainable partnerships. Her PPP efforts also include a collaboration with the University of Arizona's Eller School of Management to review, revise and refocus ASHLine's strategic and business plans to ensure successful sustainability efforts. This collaboration has also expanded ASHLine's student training opportunities through a business internship program. Other efforts in this direction have included research on understanding state and nationwide costs associated with chronic disease, including tobacco, to inform return on investment messaging and Affordable Care Act requirements. This information will serve as a framework to guide ASHLine's provision of preventive health services through contracts, business proposals (e.g., tailored service menu with pricing structures, contract templates), and marketing materials.

III. Communications and Branding

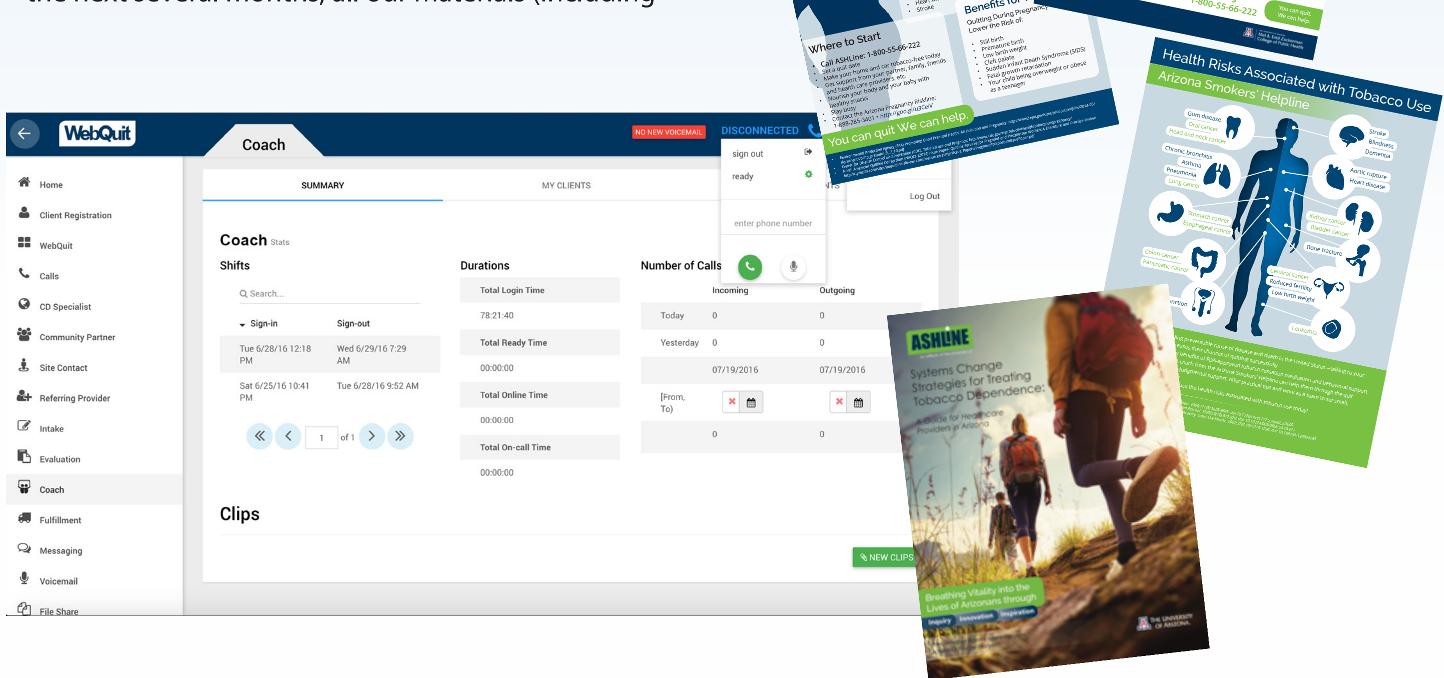
Branding Team

The Communications and Branding team welcomed a part-time graphic designer, Jennifer McComb, who has assisted in developing new print materials. Her first project was to design the new, 32-page toolkit for the Community Development Team entitled, "Systems Change Strategies for Treating Tobacco Dependence: A Guide for Healthcare Providers in Arizona." The team has also re-designed all outgoing client materials with updated content to assure we are keeping with current practices.

Toward the end of fiscal year 2016, the Communications and Branding team collaborated with the University of Arizona's Undergraduate Translation and Interpretation Program. Under the direction of Jaime Fatás-Cabeza of the Department of Spanish and Portuguese, a student intern program was developed. Program interns have already begun reviewing and translating existing ASHLine print materials for client mailings and community outreach into Spanish. Approximately 90% of all print materials have been translated (or updated). Over the next several months, all our materials (including the www.ashline.org website) will be translated to assure that we are able to better serve our Spanish-speaking clientele.

New Call Center Platform

In collaboration with ARL, ASHLine launched a state-of-the-art, multi-modal web-based call center platform. Most of the functionality of the system is currently in place, and by the end of August 2016, we anticipate that remaining modifications and updates will have been completed to maximize the platform's performance.



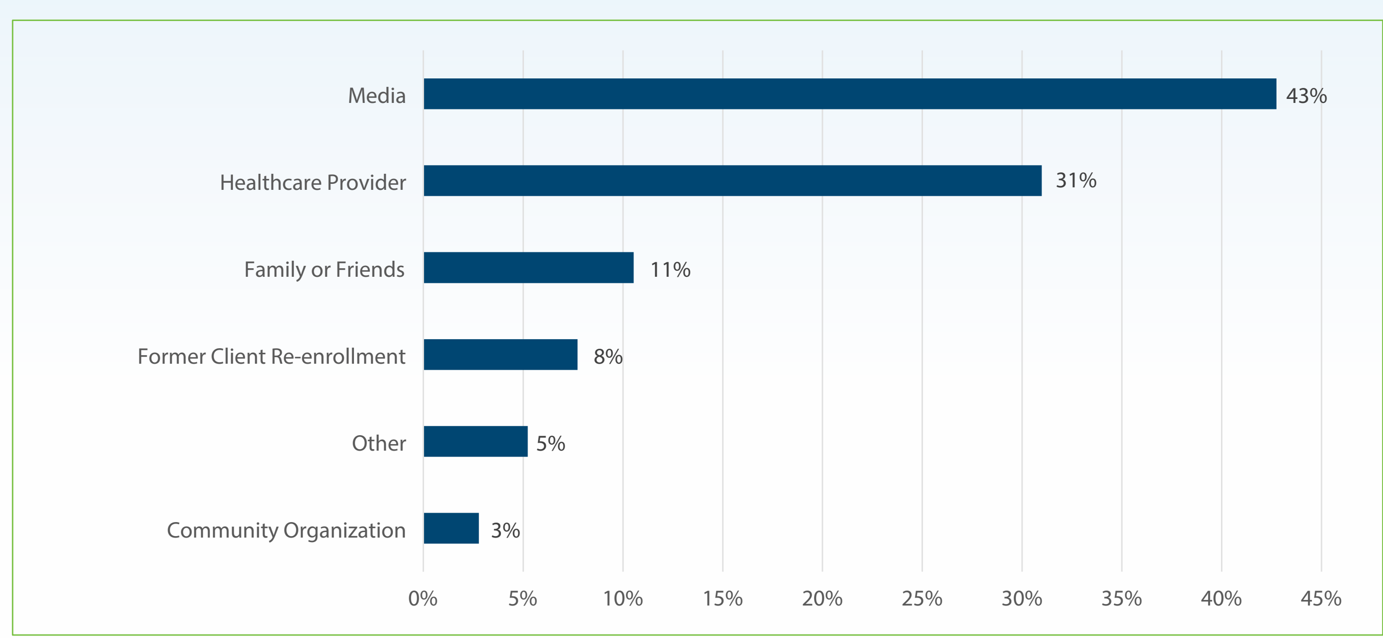
IV. Client Enrollment and Characteristics

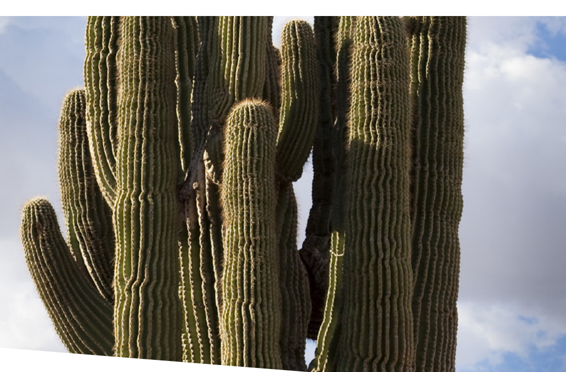
Call Volume

ASHLine experienced a 73% increase in calls this fiscal year (over 28,500 calls compared to approximatly 16,000 in FY15). Given that about 16.5% of adults in Arizona smoke, this means that this year we were able to reach (promotional reach) 3.4% of all smokers in the state. This is a substantial increase over FY15's promotional reach of 1.1%. These improvements were driven by extensive media campaigns run by the Centers for Disease Control and Prevention (CDC)—"TIPS from Former Smokers"—and the Arizona Department of Health Services. This year, 43% of enrolled callers reported hearing about ASHLine from media ads (while media is the most common way for clients to hear about ASHLine, almost a third of clients heard about us from their healthcare provider [see Figure 3]).

As noted in the Director's comments, starting in December 2015, ASHLine became a 24/7 call center service. This initiative was the result of a partnership with Contact One, a local call center service that pre-enrolls clients who call ASHLine during off-business hours. Contact One staff are trained to answer general questions about ASHLine's services. This provides callers with information about our program and helps us capitalize on client motivation by and pre-enroll them into our program. Through our partnership, we have been able to serve an additional 3,500 individuals who called outside of our regular business hours.

Figure 3. How Clients Heard about ASHLine

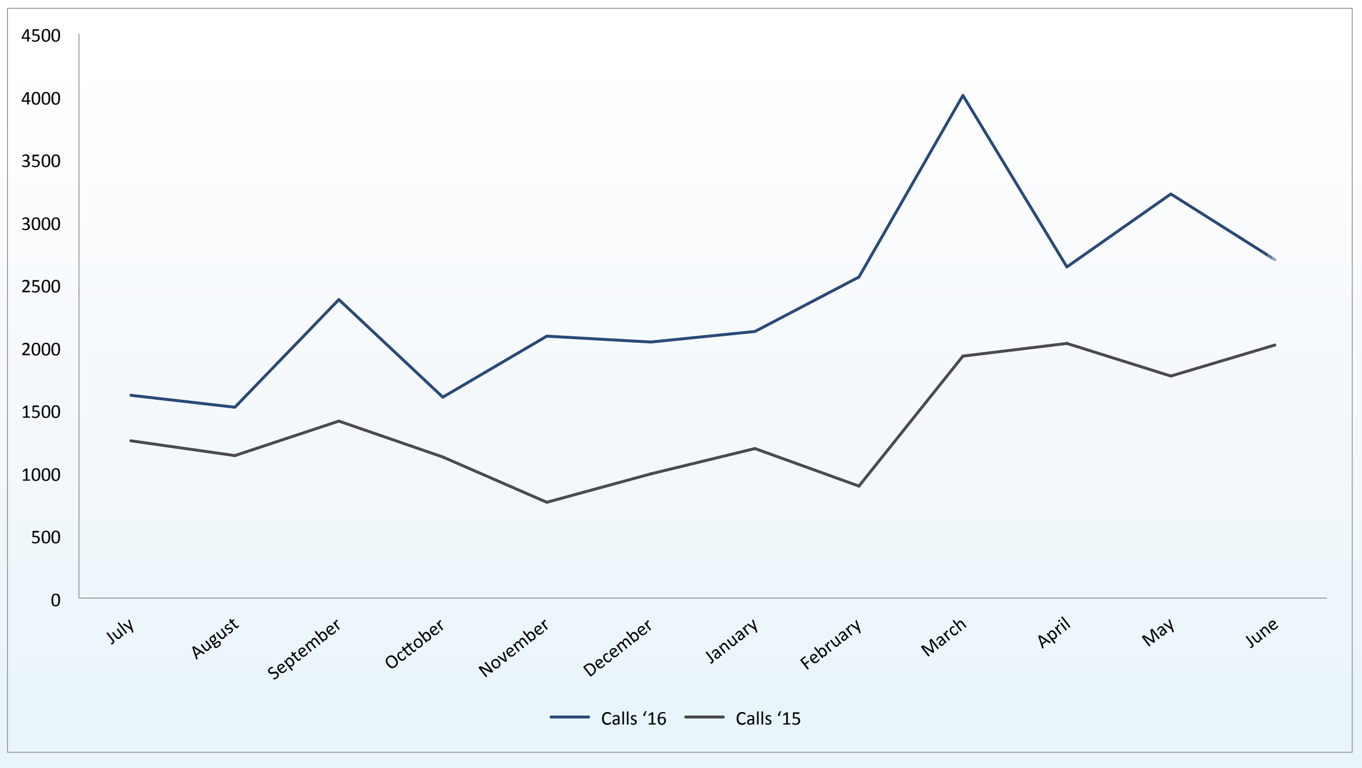




Arizona Smokers' Helpline

Annual Report: FY16

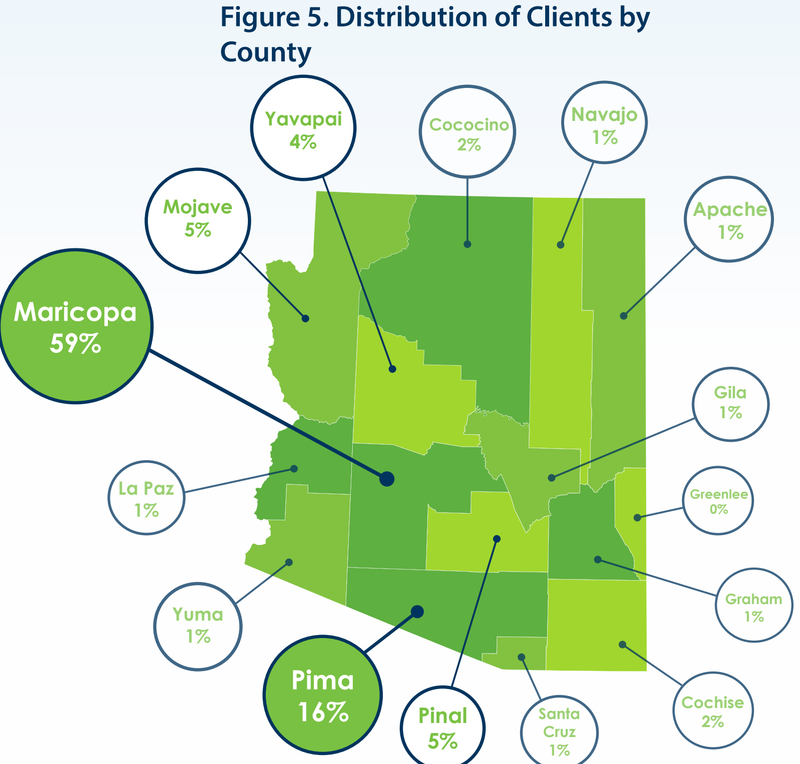
Figure 4. Total Calls for Fiscal Years 2015 and 2016



Along with call volume, the total number of enrolling clients also increased in FY16, by more than 25%. ASHLine's treatment reach (the percentage of smokers in Arizona who received at least one coaching session) was .9%—an increase from FY15 (.7%).

Where Figure 4 depicts a substantial increase in calls from FY15 to FY16, our goal for FY17 will be to continue improving our treatment reach, to enroll and serve an even greater proportion of Arizona tobacco users (see Figure 5 for distribution of clients by county).

Figure 5. Distribution of Clients by County



Client Characteristics

Client demographics in FY16 remain consistent with previous years. About 56% of ASHLine clients are women, 85% identify as White, 8.5% as Black, 1.5% as American Indian and one-quarter as Hispanic. Almost half of our clients are uninsured or insured through AHCCCS (42%) and the majority (70%) are over 45 years of age.

Over 71% of ASHLine clients report having a chronic and/or mental health condition, indicating that almost three quarters of the clients we serve are a high-risk group of tobacco users who experience barriers to tobacco behavior change. Almost 9% report using electronic nicotine delivery systems (ENDS; often times referred to as electronic or e-cigarettes) at the time of enrollment.

Percent Enrolled by AHCCCS Insurance Plans

The distribution of ASHLine clients who are enrolled in an AHCCCS plan are predominatly congretated in three plans: Mercy Care Plan, UnitedHealthcare Community Plan, and Health Choice Arizona (see Table 2). Together, clients with these plans account for over half of all AHCCCS clients.

Table 2. Percent Enrolled by AHCCCS Insurance Plans

AHCCCS Insurance Plans	Percent Enrolled
Bridgeway - Acute & LTC	0.2%
Care1st Health Plan Arizona, Inc.	5.4%
CRS – UnitedHealthcare Community Plan	0.5%
Health Choice Arizona	12.3%
Health Net of Arizona	3.3%
Maricopa Health Plan	6.5%
Mercy Care Plan	**22.4%**
Phoenix Health Plan-010299 (PHP)	2.0%
UnitedHealthcare Community Plan	18.1%
University Family Care (UFC)	4.9%
Not Sure	24.4%

V. Clinical Services

The Clinical Services Team utilizes a client-directed, outcome-informed approach for providing cessation treatment. This approach allows us to tailor our services based on clients' individual needs. In addition to providing evidence-based strategies that maximize tobacco use behavior change, our coaches provide clients with up-to-date scientific evidence on nicotine replacement therapy and ENDS.

Utilization of Services

During FY16, over 36% of ASHLine clients received 5 or more coaching calls (a NAQC recommendation for the minimum number of coaching sessions) and 50% of our clients used some form of quit medication.

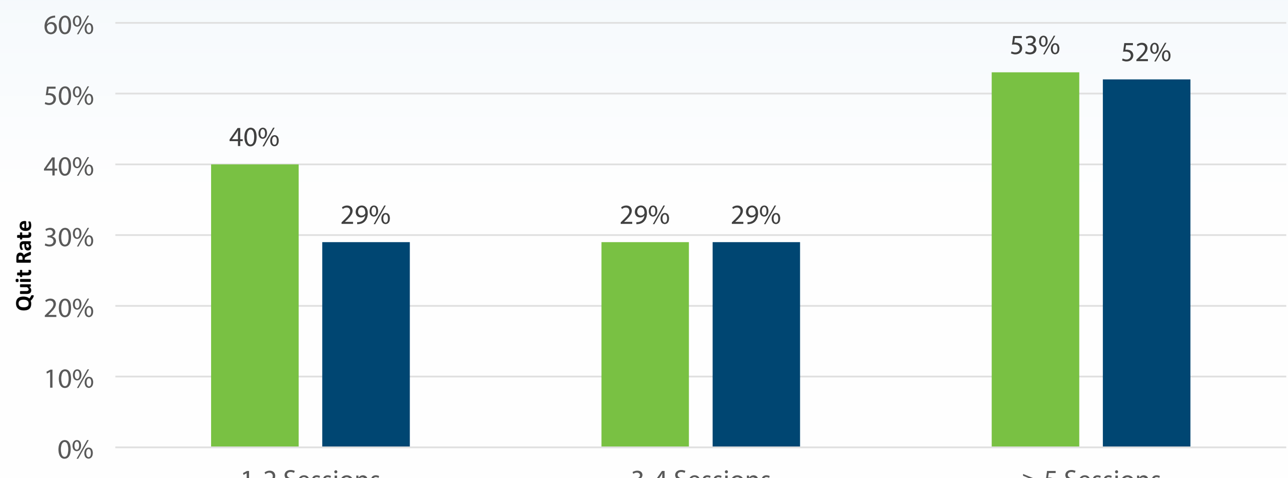
Best practice for tobacco cessation is a combination of nicotine replacement therapy (e.g, patch, gum, lozange) and receiving behavioral coaching during the quit process.

The efficacy of using a combination approach is evident in Figure 6. Specifically, 53% of our clients who utilize our behavioral support (5+ coaching sessions) and use cessation medication report being quit at follow-up.

Tailored Protocols

In FY16 we focused heavily on improving clinical services by developing and implementing tailored protocols for special populations. These protocols were developed based on scientific literature and incorporated feedback from both coaches and experts in each of the specific topic areas. Coaches received, on average, one training per month, and were assessed for knowledge mastery on each of the newly developed protocols. Specialized protocols included tobacco cessation for: pregnancy and post-partum, smokeless tobacco, electronic nicotine delivery systems, mental health conditions, cancer survivors, second-hand smoke, youth, and Hispanics/Latinos.

Figure 6. Quit Rates by Number of Coaching Sessions and Cessation Medication Use



Overall Quit Rates

Due to increasing number of quitline clients using ENDS, the North American Quitline Consortuim has recommended that starting in January 2016, quitlines report two quit rates—a tobacco quit rate that relates to quitting all forms of tobacco, and a nicotine quit rate for those who report not using any nicotine product (cigarettes, smokeless tobacco or ENDS).

For FY16, ASHLine's tobacco quit rate at 7-month follow up was 41% and our nicotine quit rate was 38%.

We were able to reach 43% of our clients at 7-month follow-up. This response rate is up five percentage points from last year. The improvement is largely due to protocol changes that involve additional calls to each client, survey staff trainings, and hiring additional staff.

Quit Rates among High-Risk Populations

As mentioned above, we implemented specialized coaching protocols for priority populations. The pregnancy and post-partum, and mental health protocols were the first protocols introduced and we have already begun to see improvement among these populations.

Pregnancy and post-partum:
Compared to FY15, quit rates for clients who indicated they were pregnant or up to one-year post-partum were 12% higher in FY16 (48% vs. 36% in FY15).

Clients with mental health conditions:
Having a mental health condition is a known barrier to successful tobacco use behavior change. Our preliminary data suggest that since we introduced our specialized protocols, quit rates for clients who reported having a mental health condition improved from 32% in FY15 to 34% in FY16.

Our initial trends indicate that the number of coaching sessions that clients engage in may help facilitate quit rates in this group. For instance, over 40% of our clients with a mental health condition reported quitting tobacco after receiving five or more coaching sessions (with or without cessation medication) compared to 26% when they received 4 or fewer coaching calls.

Figure 7. FY16 Quit Rates

Measure	Rate	Change
7-Month Tobacco Quit Rate	41%	↑ 6% from FY2015
7-Month Nicotine (Tobacco + ENDS) Quit Rate	38%	
Response Rate at 7-Month Follow-Up	43%	↑ 5% from FY2015

VI. Research Initiatives and Dissemination of Findings

Research Program

ASHLine researchers presented at three national conferences in FY16: Society for Research in Nicotine and Tobacco (SRNT), Society of Behavioral Medicine (SBM), and American Society for Preventive Oncology (ASPO). To share these findings with a broader community of researchers and public health practioners, many of the following conference abstracts are currently under preparation as manuscripts for submission to peer-reviewed journals.

Nair, U.S., et al (2016). *Smoking cessation outcomes among smokers with co-morbid mental health and chronic conditions enrolled in a tobacco quitline.* SRNT, Chicago, IL.
In this study we looked at quit rates for clients who reporting having at least one chronic or mental health condition. We found that having a health condition was associated with lower quit rates and smokers with multiple conditions had the lowest quit rates. These results underline the need for quitlines, like ours, to utilize more intensive and tailored services for smoking cessation for clients reporting these conditions

Yuan et al (2016). *Impact of home smoking bans on tobacco cessation among individuals seeking assistance from a quitline.* SBM, Washington, DC.
Little is known about how implementing in-home smoking bans can influence smoking abstinence among quitline callers. This analysis found that when ASHLine clients implemented smoking bans as part of the quit process, it increases their liklihood to quit tobacco at the end of the program. Along with offering coaching and cessation medication, quitlines should support tobacco users in creating smoke-free homes as part of their quit plan.

Crane et al (2016). *Predicting Electronic Cigarette Use and Tobacco Cessation in a State-based Quitline.* SBM, Washington, DC.
The purpose of this analysis was to look at characteristics of ENDS users and understand quit rates among ASHLine clients who reported using ENDS. Results confirmed the increase in frequency of dual users (using ENDS and traditional tobacco) and that ENDS users are more likely to experience barriers to quitting compared to non-ENDS users. Our findings suggest that quitlines are effective in supporting tobacco cessation for individuals choosing to use ENDS.

Nair et al. (2016). *Predictors of Retention at 7-Month Follow-Up among Clients Enrolled In a State-Based Quitline.* SBM, Washington, DC.
High drop-out rates from treatment programs is a known challenge. Our goal for this study was to examine factors predicting why clients may stay or drop-out from treatment after enrolling at ASHLine. We found that utilization of services (completing three or more coaching calls) was an important predictor of staying in the program. Quitlines may benefit from using multiple modes to enhance client engagement in-program (e.g., text messages, apps) to boost retention rates at follow-up.

Crane et al (2016). *Cancer Patients Report Better Tobacco Quit Outcomes During Cancer Therapy: Results from the Arizona Smokers' Quitline.* ASPO, Columbus, OH
The purpose of this study was to compare tobacco cessation outcomes among ASHLine clients who report being in cancer treatment with those who are out of treatment or do not have cancer. Results suggest that for those currently in treatment, receiving 6 or more coaching sessions was indicative of quitting smoking. Future work should focus on increasing health care provider engagement to refer cancer patients into the quitline services.

VII. Data Brief

What Do We Know about ENDS?

Electronic Nicotine Delivery Systems (ENDS) are electronic products that heat liquid, often times containing nicotine, into a vapor. Tobacco control experts, health agencies, and smoking cessation service providers are interested in understanding how ENDS are being used and how they affect tobacco use and individuals' efforts to stop smoking. Different views have been expressed as to the risks and benefits posed by ENDS use, stemming largely from an overall lack of quality data on the topic.

In this brief, confusion around ENDS, including what is known about the products, their use, as well as differing opinions on use held by tobacco control organizations is closely examined. The topic will be addressed in a two brief series. In Part I, key issues surrounding ENDS will be reviewed and what is known about ENDS based on the current evidence is described. A model is presented to provide at least one explanation as to why different positions and recommendations exist around ENDS, particularly when the science does not seem to allow such varying interpretations. In the second brief, the tobacco control organizations' positions and recommendations regarding ENDS will be explored in more detail and differences in messaging will be discussed. Finally, implications for establishing coaching protocols around ENDS use at a tobacco quitline will be shared.

The Evolution of ENDS

To start, it is important to note that not all ENDS products are similar, and the diversity of product "types" has increased over time. The evolution of ENDS types is commonly viewed, particularly within the ENDS industry, in terms of four distinct generations: 1) cig-a-likes, 2) vape pens, 3) advanced personal vaporizers (APVs), and 4) Innovative APVs (see figure 8).[1]

First debuted as 'electronic cigarettes,' first generation cig-a-likes offer a similar look and experience of smoking cigarettes. Subsequent generations of ENDS, however, are an intentional departure from the cig-a-like model, resulting from technological advances in design and efforts to define "vaping" as a cultural phenomenon distinct from smoking. Though most ENDS users begin with cig-a-likes, users who become long-term users typically shift to vaping and adopt subsequent generation products. The majority of regular ENDS users today use these products;[2] vaping sales now outpace retail cig-a-likes.[3] This is not surprising, given that later generation products are less expensive to use, more customizable, offer virtually endless flavor options, and are manufactured and sold independent of Big Tobacco. Understanding this evolution is important, as the type of electronic system individuals use appears to affect their experience and desire to continue using.

Figure 8. Four generations of ENDS products

1st Gen: Cig-a-like	2nd Gen: Vape Pen	3rd Gen: Advanced Personal Vaporizer (AVP)	4th Gen: Innovative AVP

What Do We Know about ENDS?

Several compelling questions have dominated discussions around ENDS. Three issues that seem to have had the greatest influence on how tobacco control agencies view ENDS are addressed below:

Are ENDS safe to use? Not completely, but perhaps safer than traditional cigarettes.

Aerosol produced by ENDS contains numerous chemicals and particulate matter known to be harmful.[4] Unreliable product performance, incorrect product labeling,[5] and varying levels of nicotine [6] have also been noted problems for some ENDS products, resulting in inconsistent doses. When studied under laboratory [7] and normal use conditions,[8] however, it appears that users' exposure to these chemicals is limited. While questions about long-term harm from ENDS use remain unanswerable at this time, when compared to the harm from using combustible cigarettes, ENDS are a safer alternative to smoking.

Are ENDS a gateway to tobacco? For some, but not on a large scale.

For the past several years, population surveys have shown that ENDS use has increased among adolescent and young adult populations. There is concern that nicotine exposure through ENDS product use could promote early addiction in the developing brain. Further, individuals could be introduced to nicotine through ENDS and eventually transition to smoking traditional cigarettes. There is some evidence that this is happening, but data suggest that it is on a limited scale. Though surveys report an increase number of youth who have ever tried ENDS,[9] it appears that most are not daily users and do not use ENDS that contain nicotine.[10] Of those who use ENDS regularly, the overwhelming majority have a history of tobacco use and just over 1% of never-smokers use ENDS containing nicotine on a daily basis.[11] At least at this time, ENDS use is associated with non-regular use or daily use among those with a history of tobacco use.

Can ENDS help people quit smoking? Potentially, but more research is needed.

Most smoking cessation studies that have addressed the use of ENDS as a way of reducing tobacco use are preliminary and many of these are of low-quality. A number of systematic reviews tentatively point towards a positive relationship between ENDS and smoking cessation,[12-16] indicating that "e-cigarettes may be an alternate smoking cessation method."[14] It appears that regular users who use advanced generation products are more likely to stay quit.[17] In a large study of e-cigarette users in which participants matched the characteristics of the population, it was found that 67% of current e-cigarette users had quit or reduced smoking.[11]

Why the Confusion?

Though ENDS are still an evolving product category and additional research is needed to answer remaining questions, the data suggest that there is less ambiguity on the points noted above than tobacco control stakeholders suggest. For example, in April 2015, the American College of Physicians (ACP) stated that the efficacy of ENDS for tobacco cessation is not well understood. The ACP recommended that ENDS products should be regulated, taxed, and controlled as tobacco products, ENDS advertising should be restricted, and public campaigns and interventions should focus on warning of the risks of ENDS use.[18] Conversely, The Royal College of Physicians (RCP) in London (a region with higher prevalence of tobacco product use than the U.S.) issued a report the following year in which it encouraged smokers to switch to e-cigarettes. Calling e-cigarettes the next step in a journey to tobacco harm reduction, the RCP believes that e-cigarettes hold the potential to prevent death, disability, and to "hasten our progress to a tobacco-free society."[19] How could two reputable, trusted public health organizations arrive at such different positions regarding ENDS use?

Explaining Contradictory Positions

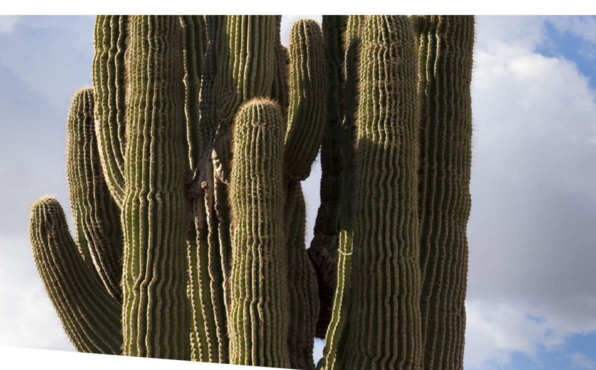
In our view, differences in tobacco stakeholders' attitudes towards ENDS are explained, in large part, by the variations in the tobacco control aims that organizations adopt. If an organization's aim is to eliminate all risk and/or to eliminate all nicotine dependency, then the appearance of ENDS only makes the problem more difficult to solve. On the other hand, if an organization's goal is to reduce the burden of disease and premature death caused by tobacco, ENDS can be part of the solution, promoted as a safer alternative. These are the hard choices and trade-offs tobacco control organizations face. Positions on ENDS use are expressed in terms of the organization's tobacco control strategy.[20] Policy statements and conversations that ignore this tend to be unproductive.

To adequately debate ENDS use, involved parties need to be clear about the aims and organizational objectives they prioritize. ENDS holds potential to be good or bad, depending on the context in which ENDS are used. It is possible that ENDS are 'good' because they provide a healthier option for someone who cannot or does not desire to quit smoking and 'bad' because they may introduce an otherwise never-smoker to nicotine and possibly tobacco. Ultimately, the most important debate is not about whether to recommend ENDS, but which tobacco control strategy is worth prioritizing. If organizational statements on ENDS are not presented as a response to explicitly stated aims, it is likely they will continue to create confusion and fail to serve the public. Further, ENDS use alone, without appropriate support or coaching for tobacco cessation, it is unlikely users will achieve their goal of switching or quitting.

In the next brief, we highlight the spectrum of positional differences that leading public health and tobacco control organizations have presented around ENDS and comment on how they affect coaching/counseling strategies at a tobacco cessation quitline.

References

1. Martins B. The 4 Generations of Electronic Cigarettes. Ecigclopedia. August 2015. http://ecigclopedia.com/the-4-generations-of-electronic-cigarettes/. Accessed July 12, 2016.
2. Yingst JM, Veldheer S, Hrabovsky S, Nichols TT, Wilson SJ, Foulds J. Factors Associated With Electronic Cigarette Users' Device Preferences and Transition From First Generation to Advanced Generation Devices. Nicotine Tob Res. 2015;17(10):1242-1246. doi:10.1093/ntr/ntv052.
3. Herzog B, Gerberi J, Scott A. Tobacco Talk: Independent Vapor Mfr. Survey. Wells Fargo; 2015:41. http://www.namastetechnologies.com/wp-content/uploads/2015/11/2.-WellsFargo-Vaporizer-Research-Report.pdf.
4. Grana R, Benowitz N, Glantz SA. E-Cigarettes A Scientific Review. Circulation. 2014;129(19):1972-1986. doi:10.1161/CIRCULATIONAHA.114.007667.
5. Hutzler C, Paschke M, Kruschinski S, Henkler F, Hahn J, Luch A. Chemical hazards present in liquids and vapors of electronic cigarettes. Arch Toxicol. 2014;88(7):1295-1308. doi:10.1007/s00204-014-1294-7.
6. Trehy ML, Ye W, Hadwiger ME, et al. Analysis of Electronic Cigarette Cartridges, Refill Solutions, and Smoke for Nicotine and Nicotine Related Impurities. Journal of Liquid Chromatography & Related Technologies. 2011;34(14):1442-1458. doi:10.1080/10826076.2011.572213.
7. Misra M, Leverette RD, Cooper BT, Bennett MB, Brown SE. Comparative In Vitro Toxicity Profile of Electronic and Tobacco Cigarettes, Smokeless Tobacco and Nicotine Replacement Therapy Products: E-Liquids, Extracts and Collected Aerosols. International Journal of Environmental Research and Public Health. 2014;11(11):11325-11347. doi:10.3390/ijerph111111325.
8. Hajek P, Etter J-F, Benowitz N, Eissenberg T, McRobbie H. Electronic cigarettes: review of use, content, safety, effects on smokers and potential for harm and benefit. Addiction. August 2014:n/a-n/a. doi:10.1111/add.12659.
9. Singh T, Arrazola RA, Corey CG, et al. Tobacco Use Among Middle and High School Students — United States, 2011–2015. MMWR Morbidity and Mortality Weekly Report. 2016;65(14):361-367. doi:10.15585/mmwr.mm6514a1.
10. National Institute on Drug Abuse. Monitoring the Future Figures 2015. https://www.drugabuse.gov/related-topics/trends-statistics/monitoring-future/overview-findings-2015/monitoring-future-figures-2015. Published December 16, 2015. Accessed July 19, 2016.
11. Farsalinos KE, Poulas K, Voudris V, Le Houezec J. Electronic cigarette use in the European Union: analysis of a representative sample of 27 460 Europeans from 28 countries. Addiction. January 2016:n/a-n/a. doi:10.1111/add.13506.
12. Malas M, Tempel J van der, Schwartz R, et al. Electronic Cigarettes for Smoking Cessation: A Systematic Review. Nicotine Tob Res. April 2016:ntw119. doi:10.1093/ntr/ntw119.
13. Khoudigian S, Devji T, Lytvyn L, Campbell K, Hopkins R, O'Reilly D. The efficacy and short-term effects of electronic cigarettes as a method for smoking cessation: A systematic review and a meta-analysis. International Journal of Public Health. January 2016. doi:10.1007/s00038-016-0786-z.
14. Rahman MA, Hann NR, Wilson AM, Mnatzaganian G, Worrall-Carter L. Abstract 14945: Electronic Cigarettes Are Effective for Smoking Cessation: Evidence From a Systematic Review and Meta-analysis. Circulation. 2014;130(Suppl 2):A14945-A14945.
15. Gualano MR, Passi S, Bert F, Torre GL, Scaioli G, Siliquini R. Electronic cigarettes: assessing the efficacy and the adverse effects through a systematic review of published studies. J Public Health. August 2014:fdu055. doi:10.1093/pubmed/fdu055.
16. McRobbie H, Bullen C, Hartmann-Boyce J, Hajek P. Electronic cigarettes for smoking cessation and reduction. In: Cochrane Database of Systematic Reviews. John Wiley & Sons, Ltd; 2014. http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010216.pub2/abstract. Accessed January 8, 2015.
17. Hitchman SC, Brose LS, Brown J, Robson D, McNeill A. Associations Between E-Cigarette Type, Frequency of Use, and Quitting Smoking: Findings From a Longitudinal Online Panel Survey in Great Britain. Nicotine Tob Res. April 2015. doi:10.1093/ntr/ntv078.
18. Crowley RA. Electronic Nicotine Delivery Systems: Executive Summary of a Policy Position Paper From the American College of Physicians Electronic Nicotine Delivery Systems. Ann Intern Med. 2015;162(8):583-584. doi:10.7326/M14-2481.
19. Promote e-cigarettes widely as substitute for smoking says new RCP report. RCP London. https://www.rcplondon.ac.uk/news/promote-e-cigarettes-widely-substitute-smoking-says-new-rcp-report. Published April 28, 2016. Accessed June 28, 2016.
20. Bates C. WHO position on ENDS (e-cigarettes) A critique of the use of science and communication of risk. http://www.clivebates.com/documents/WHOpapercritique.pdf.



List of Figures and Tables

Figure 1. Program Highlights 1
Figure 2. Referrals by Location Type 2
Table 1. Referral Reach and Enrollment by Top Six Location Types 3
Figure 3. How Clients Heard about ASHLine 5
Figure 4. Total Calls for Fiscal Years 2015 and 2016 6
Figure 5. Distribution of Clients by County 6
Table 2. Percent Enrolled by AHCCCS Insurance Plans 7
Figure 6. Quit Rates by Number of Coaching Sessions and Cessation Medication Use 8
Figure 7. FY16 Quit Rates 9
Figure 8. Four Generations of ENDS Products 9

Breathing Vitality into the Lives of Arizonans through

Inquiry Innovation Inspiration

Envisioning an Arizona where everyone achieves a healthy lifestyle.

For more information about the Arizona Smokers' Helpline:

ASHLine

University of Arizona
Mel and Enid Zuckerman College of Public Health

Arizona Smokers' Helpline
Abrams Public Health Center
3950 S. Country Club Road, Suite 300
Tucson, Arizona 85714

t. 800-55-66-222
f. 520-318-7222
w. *ashline.org*
e. *info@ashline.org*

For questions regarding our report, please contact Dr. Uma Nair at: umanair@email.arizona.edu

© Contents Copyright 2016, University of Arizona. All rights reserved.

OLD MAIN

The University of Arizona