

Tobacco-Free Policies and Tobacco Cessation Systems at Health Centers Serving Lesbian, Gay, Bisexual, and Transgender Clients

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Abstract

Purpose: LGBT populations have high rates of tobacco use. Health centers serving LGBT clients are an important source of care. The researchers aimed to assess the implementation of recommended systems-level tobacco cessation interventions at these health centers.

Methods: Using systematic searching, directories, and expert review, we identified health centers serving LGBT clients that provide primary care. We conducted phone-based, semi-structured interviews with administrators ($n = 11$) between September 2016 and March 2017 regarding implementation of the Clinical Practice Guideline, Treating Tobacco Use and Dependence: 2008 Update (the Guideline). Two authors confirmed saturation and two authors conducted thematic coding.

Results: Eight themes were identified, including clear evidence of systems-level procedures for asking about, advising on, and assessing tobacco use. Interviewees viewed tobacco use as important given existing disparities. However, there was room for improvement in the following areas: (1) Education for staff on tobacco cessation was ad hoc and not formalized; (2) materials and resources for tobacco cessation available in the center varied widely and changed when a staff champion arrived or left; (3) no point person was assigned to coordinate tobacco cessation efforts; and, (4) assessment of tobacco use as a vital sign is not consistent—some centers met meaningful use quality metrics (e.g., once or more in the past 24 months) instead of the Guideline recommendation (every visit). Addressing tobacco use competes with addressing other health risk behaviors.

Conclusions: Administrators at health centers serving LGBT clients viewed tobacco use as an important issue. However, there was room for improvement in implementation of systems recommended in the Guideline. Targeted outreach is warranted to improve standardization of implementation and promote cessation of tobacco use.

Keywords: gay, lesbian, LGBT, sexual minorities, transgender

Introduction

TOBACCO USE IS a leading preventable cause of mortality in the United States, and cigarette smoking results in over 480,000 premature deaths annually.¹ Sexual and gender minorities (e.g., people identifying as LGBT) are at greater risk of smoking than their majority counterparts (i.e., those identifying as straight and cisgender).^{2,3} These disparities likely stem from (1) stressors (e.g., discrimination)⁴ that make tobacco use initiation easier and quitting harder, (2) community norms⁵ that accept tobacco use as a part of LGBT identity and spaces, and (3) targeted marketing⁶ by

the tobacco industry.⁷ LGBT individuals are targeted by the tobacco industry by means of direct advertising, community promotions and outreach, and bar promotions.^{6,8}

Growing evidence identifies interventions to reduce these disparities,^{9–11} including media interventions,¹² clinical interventions,^{13,14} and community-based smoking cessation groups.^{15–17} However, no published study has addressed systems-level interventions in health centers serving LGBT clients.⁹ These health centers should be particularly interested in systems-level interventions to address tobacco use disparities. Nationally, 42% of LGB adults who smoke and had seen a healthcare professional in the past year did *not*

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report receiving advice to quit from a healthcare provider.¹⁸ LGBT adults are significantly less likely to report use of medications/pharmacotherapy or counseling to quit smoking than their heterosexual counterparts.¹⁸

The Clinical Practice Guideline *Treating Tobacco Use and Dependence: 2008 Update* from the U.S. Public Health Service (“the Guideline”) details the evidence of effective systems-level practices to reduce tobacco use.¹⁹ These recommendations, which have been in place for over 17 years,²⁰ have been reaffirmed in the 2015 U.S. Preventive Services Task Force recommendation statement on interventions for smoking cessation.²¹ Specifically, the Guideline suggests: (1) implementation of a tobacco user identification system to document tobacco use and to assess tobacco use as a vital sign; (2) providing resources, education/training, and feedback on performance to members of the clinical team; and (3) designating a staff member as a point-person for maintaining these systems and coordinating efforts.¹⁹ The purpose of this study was to investigate the current use of the Guideline’s systems-level recommendations in U.S.-based health centers serving LGBT clients that provide primary care services.

Methods

This study used a qualitative approach to assess themes related to the implementation of the Guideline. This approach was chosen based on experiences shared from a prior research project that used both surveys and interviews to assess tobacco cessation systems and practices in college health clinics.²² Those researchers found that interviews provided a rich picture of implementation and avoided some social desirability bias.²²

Sampling frame and recruitment

The researchers first created a list of health centers with primary care services that had a focus on LGBT populations. To identify these health centers, the researchers utilized the following sources: lists of advisory groups to the National LGBT Tobacco Control Network (now LGBT Health-Link),²³ a list of LGBT health services maintained by the U.S. Centers for Disease Control and Prevention,²⁴ a list of transgender health clinics,²⁵ and the authors’ knowledge. This resulted in a list of 32 potential health centers. Centers were eligible for inclusion if they had a primary aim of providing care for LGBT patients. Designation as a state- or federally qualified health center was not required.

Two authors (J.G.L.L., M.E.D.) then examined the website of each health center for inclusion based on service descriptions and organizational mission; differences in coding were reconciled through discussion. This resulted in 16 health centers that appeared to meet eligibility. Others were excluded for not providing primary care services ($n=7$), not being LGBT-serving ($n=4$), being focused solely on HIV services ($n=3$), or being private practices ($n=2$). The research team then mailed a recruitment letter via postal mail to the medical director, clinic manager, or equivalent staff person at each clinic. Then, the second author contacted each of the 16 eligible centers with phone calls and e-mails up to four times between September 2016 and March 2017 to request a telephone-based interview. Those with no response by March 2017 were coded as no response. No compensation or incentives were provided.

Interview guide

To qualitatively assess the implementation of the Guideline, we created a semi-structured interview guide (Supplementary Appendix SA1; Supplementary Data are available online at www.liebertpub.com/lgbt) with questions mapped to each of the three systems recommendations. Two certified tobacco treatment specialists reviewed the interview guide. Interviews, which lasted between 11 and 25 minutes ($M=18.5$, $SD=3.9$), were recorded and professionally transcribed with a smooth verbatim protocol.

Analysis

Of the 16 centers, two were determined to be ineligible during the phone screening (one private practice and one without primary care), five did not reply to interview requests, and two new centers were suggested by interviewees. After obtaining verbal consent, 11 telephone interviews were completed with medical directors ($n=6$), clinical care administrators ($n=3$), a director of behavioral health, and a director of wellness. Two authors confirmed saturation of themes. Transcripts were thematically coded²⁶ in NVivo (v.11). The researchers first developed deductive codes to capture each of the guidelines, sub-areas of guidelines, facilitators, and barriers. One author (M.E.D.) then coded all transcripts. A second author (J.G.L.L.) reviewed and confirmed the coding. Two authors (J.G.L.L., M.E.D.) both conducted iterative thematic coding followed by the development of new inductive codes regarding barriers and facilitators. These were discussed and agreed upon by two authors (J.G.L.L., M.E.D.). The East Carolina University and Medical Center Institutional Review Board approved the study protocol (No. 16-001362).

Results

Coding yielded eight themes (Table 1), which we present organized in three categories: guideline, policies, and barriers/facilitators.

Guideline systems recommendation 1: Implement a tobacco user identification system

The guideline recommends that the tobacco use status of every patient is documented and that, for patients who use tobacco, tobacco use is assessed as a vital sign at every visit.¹⁹ Theme 1 indicates that this is happening with two important caveats. Systems for asking about, advising on, assessing, assisting with, and (sometimes) arranging help to quit tobacco use are present in health centers serving LGBT clients. However, tobacco use is not assessed consistently as a vital sign across the health centers. Identification of tobacco users ranges from assessing use as a vital sign (i.e., at every visit) to asking tobacco users about their use based on meaningful use quality metrics²⁷ (e.g., once every 24 months). In addition, centers’ systems that ask about tobacco use focus on smoking and may not include other tobacco products.

“When we switched to our new electronic health record, there’s a spot in the health record right from the beginning so that every patient who is roomed gets asked about smoking every single time by a medical assistant.” (Interview 10)

TABLE 1. THEMES FROM 11 INTERVIEWS WITH ADMINISTRATORS AT HEALTH CENTERS SERVING LGBT CLIENTS, 2016–2017

Guideline systems recommendation 1: Implement a tobacco user identification system in every clinic.	
1. Systems for asking about, advising on, assessing, assisting with, and (sometimes) arranging help to quit tobacco use are present. However, assessment of tobacco use as a vital sign is not consistent. Center practices ranged from assessing tobacco use as a vital sign (i.e., at every visit) to assessing tobacco use to meet meaningful use quality metrics instead of the Guideline recommendation. The focus is on smoking, and other tobacco products may not be addressed.	
Guideline systems recommendation 2: Provide education, resources, and feedback to promote provider intervention.	
2. Education for staff on tobacco cessation is ad hoc and not formalized.	
3. Materials and resources for tobacco cessation vary widely. The arrival or loss of staff champions can dramatically change the resources that are available.	
Guideline systems recommendation 3: Dedicate staff to provide tobacco dependence treatment, and assess the delivery of this treatment in staff performance evaluations	
4. Designated coordinator: “I can’t say that there’s one person, one key person who does that.”	
5. Documentation of smoking status and advice to quit are assessed in electronic health record or chart reviews.	
Policies	
6. There are no-smoking policies indoors, but outdoor and vaping policies are inconsistent.	
7. Industry donation policies: “I’m sure we would say, no, but it’s not a written policy.”	
Barriers and facilitators	
8. Tobacco use is a critically important and known LGBT disparity. For some centers, however, it is not high on leaders’ radar because metrics are good and there are many competing priorities. Alternatively, other leaders were looking for ways to improve.	

“[O]ne of [the key quality measures] is tobacco screening. So, we have a really a major incentive to screen for tobacco use, and we have a policy in accordance with the monitoring that we’re under to screen everybody for tobacco at least every 24 months.” (Interview 3)

Guideline systems recommendation 2: Provide education, resources, and feedback to promote provider intervention

Two themes emerged for this recommendation. First, theme 2, education on tobacco cessation for clinicians and staff is ad hoc and not formalized. Second, theme 3, is that materials and resources for tobacco cessation varied widely.

Theme 2 identified a general pattern of ad hoc trainings for clinicians and staff members about tobacco cessation. That said, some centers participated in state-run trainings and others had standardized trainings for particular staff roles (e.g., nursing). Trainings were sometimes related to the presence of grant funding. Nonetheless, the general theme that emerged suggested that training varied, was ad hoc, and was not always present for new hires.

“We did one for the entire staff of our organization, which was done with the [state] folks as well as myself, about tobacco cessation and specifically the [telephone-based cessation service], which we incorporated, and then we had two separate trainings for clinical staff.” (Interview 2)

“They honestly feel kind of random. We don’t have a set schedule to do them.” (Interview 10)

Theme 3 identifies a wide variety of resources available to clinicians and patients regarding quitting tobacco. Resources available could vary substantially with the arrival or loss of a staff champion. Resources included Quitline referrals, behavioral health programs, acupuncture detox programs, state-created pamphlets, LGBT-targeted pamphlets, discounts on pharmacotherapy, support groups, a protocol to send in behavioral health staff for counseling while a patient is waiting, and cessation counseling referrals. The availability of self-help materials varied from being handed out by providers, to

being placed front and center where all patients had to see them, to being placed in every room.

“[I]t would just be the [state] resources. We can refer out to other agencies. Unfortunately, that’s one area where don’t have a lot of resources internally anymore.” (Interview 7)

“They’re everywhere. They’re in the waiting room, they’re in the hallways. [...] We have—there’s stuff on smoking from [LGBT smoking cessation group] on the back of all the doors, so if a patient is sitting in the exam room waiting to be seen, they can look at the stuff on the back of the door.” (Interview 9)

Guideline systems recommendation 3: Dedicate staff to provide tobacco dependence treatment and assess the delivery of this treatment in staff performance evaluations

The Guideline recommends that a staff person be designated as the coordinator at each clinical site.¹⁹ This coordinator should ensure the implementation and monitor the quality of Recommendations 1 and 2 as well as be a point person for connecting patients with resources. Training of newly hired staff should orient each staff member to their role in addressing tobacco use.

Theme 4 (“I can’t say that there’s one person, one key person who does that.”) shows that there is a consistent lack of a designated tobacco coordinator. This theme indicates that these tasks are often thought of as a group effort, and they may be the responsibility of both everyone and no one in particular. As such, other parts of the recommended tasks may not happen or may rely on a series of other staff members. Assistance with connecting patients with tobacco cessation options was reported to include health educators, nursing services, and behavioral health providers.

“I can’t say that there’s one person, one key person who does that. I think that it is a group effort, but I’m the medical director, so I think it’s ultimately it’s really my responsibility to see that we’re doing what we need to do in terms of tobacco screening and counseling.” (Interview 4)

“[Q:] Can you tell me about any procedures that are in place for training newly-hired staff about tobacco dependence? [A:] Yeah, that one, we haven’t gotten to yet.” (Interview 2)

Theme 5 indicates that there was consistent evidence of feedback on the documentation of smoking status in chart reviews or health records. This finding was attributed both to tobacco use being important clinically and to required quality metrics.

“[N]ot just tobacco cessation, but all meaningful use measures are discussed at the physician’s meeting.” (Interview 2)

“Yes, so we do full-chart reviews and it’s just one of many items that we go over. I think it’s an area we stress.” (Interview 7)

Policy

We identified two themes related to policies about tobacco use on the health center’s grounds. Theme 6 found that policies preventing smoking were present, but these policies did not always include all areas controlled by the health center (i.e., indoors and outdoors) and could have ambiguities about e-cigarette use or vaping. Theme 7 addressed acceptance of tobacco industry funds.

In theme 6, respondents clearly reported policies for smoke-free buildings and a variety of policies regarding outdoor spaces. Policies were not consistently inclusive of all tobacco products, and vaping policies were also not always formalized or included in signage. However, our interviewees suggested that indoor vaping would not be allowed even in the absence of a formal policy.

“No cigarettes, no e-cigarettes in the clinic, or in the hallways, or within [number] feet of the door.” (Interview 10)

“I don’t know that it does [include e-cigarettes] explicitly, but people treat it as if it does. Nobody vapes internally, and people are following the same guidelines with anything like that.” (Interview 8)

In theme 7, we found a consistent lack of policies regarding donations from the tobacco industry. However, our interviewees intimated that such donations would not be accepted.

“We haven’t been approached for tobacco funding for a long time, but there was a period of time maybe [X] years ago when we turned down tobacco funding because that was not in line with our mission.” (Interview 8)

“I’m sure we would say, no, but it’s not a written policy.” (Interview 7)

Barriers and facilitators

As an overarching theme about tobacco use, theme 8 documents that tobacco use is considered a serious problem by health centers serving LGBT clients. Certain centers viewed tobacco use as important, but competing patient priorities meant that questions beyond meaningful use screening were often not asked. Others identified an interest in improving tobacco cessation systems and finding innovative ways to address tobacco use in LGBT communities.

“I think everybody here understands how important it is, and so I think it’s a regular topic of conversation among patients who get their primary care here.” (Interview 5)

“Well we do a pretty, I mean, when we look at our quality measures, we actually do a pretty good job on assessing tobacco use, and counseling people on their options, so we don’t have any, it doesn’t sort of rise to the top because actually we’re doing a pretty good job with it, I think.” (Interview 6)

“When we do get a smoker today, it’s rarely, that’s rarely their only issue. They’ve also come back positive for three STDs in the last six months. They’re also drinking. They may have some issues with law enforcement. We just don’t see a lot of people who are only smokers.” (Interview 7)

Interviewees reported seeking out ways to better address tobacco use. These included partnering with other organizations to address tobacco use in the community (not just among patients), building infrastructure for support groups, implementing better trainings and feedback systems, developing in-house self-help materials, partnering with research groups, and identifying effective supports that would also be eligible for reimbursement. These efforts indicate an interest in and openness to improving efforts to address tobacco use.

“[W]e are looking for funding to broaden our ability to address smoking cessation in a more effective way informally. We have very good policies, procedures, and accessories in the formal questioning, and offering quitting aids, and doing all of that, but then reaching the people who are out there, who would come to an activity but wouldn’t necessarily have the same response to a medical appointment. We’re still looking at other options as far as help that would work for our LGBT population.” (Interview 1)

Discussion

Principal findings

Eight themes were identified, including clear evidence of systems-level procedures for asking about tobacco use, advising to quit, and assessing interest in quitting. Interviewees viewed tobacco use as important given existing disparities. However, there was room for improvement in the following areas: (1) education for staff on tobacco cessation was ad hoc and not formalized; (2) materials and resources about tobacco cessation available in the center varied widely and changed when a staff champion arrived or left; (3) there was not a designated point person for coordination of tobacco cessation interventions; and, (4) assessment of tobacco use as a vital sign is not consistent—some centers meet meaningful use quality metrics (e.g., once or more in the past 24 months) instead of the Guideline recommendation (i.e., every visit).

Study findings in context

The majority of smokers wish they had never started smoking.²⁸ Evidence-based interventions for LGB people lag behind those of heterosexual people.¹⁸ While LGBT-targeted interventions such as media campaigns¹² and smoking cessation groups^{15–17} can be effective, there remains a critical gap in how best to address well-documented disparities in tobacco use for LGBT people.⁹ This study partially fills that gap by examining the implementation of evidence-based, systems-level interventions in health centers serving LGBT clients.

We found that meaningful use metrics may have potential downsides to improving LGBT health. The Guideline calls for assessing smoking status at every visit, which is stronger than the meaningful use requirement of assessing smoking every 24 months. LGBT health centers should consider how meaningful use metrics for smoking may fall short of addressing population-specific needs and should leverage existing guidelines to provide more tailored care.

In addition, tobacco use often presents in a constellation of other, competing health challenges. Health centers should examine whether there are additional systems-level recommendations that should be implemented to address other health challenges that affect LGBT people disproportionately (e.g., alcohol use). Future research should work to integrate systems-level interventions to address multiple substances and sources of risk.

Limitations

The limitations of this study include our inability to generalize to all health centers that serve LGBT clients. The qualitative approach does not allow us to quantify the implementation of recommendations. The health centers included in this study represent an important part of healthcare services for LGBT people; however, many LGBT people across the United States do not have access to health centers that specifically serve LGBT clients. Finally, we interviewed only one person in each center at a single point in time; other perspectives may be present. Future research should examine implementation of other preventive guidelines and assess intervention outcomes.

Implications

Health centers serving LGBT clients should ensure that tobacco use is assessed as a vital sign at every visit regardless of the reason for the visit. This can increase the provision of counseling to quit.²⁹ Health centers serving LGBT clients should designate a staff point-person to ensure the effective implementation of systems and the provision of materials and feedback. Meaningful use guidelines should be assessed for their potential to undermine other evidence-based guidelines. Tobacco-free policies should be considered to promote tobacco-free norms in the LGBT community.

Conclusions

Proportional responses to tobacco use—a major contributor to health disparities in LGBT communities—require robust adherence to evidence-based best practices in clinical systems. Interviewees reported varying levels of implementation of systems-level tobacco cessation strategies. Targeted outreach to health centers serving LGBT clients is warranted to increase implementation of the assessment of tobacco use as a vital sign, to formally include responsibilities as a tobacco cessation coordinator in a staff position, and to ensure training of new staff about their role in systems that help patients quit.

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References

1. U.S. Department of Health and Human Services: Smoking-attributable morbidity, mortality, and economic costs: *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014, pp 647–684.
2. Buchting FO, Emory KT, Scout, et al.: Transgender use of cigarettes, cigars, and e-cigarettes in a national study. *Am J Prev Med* 2017;53:e1–e7.
3. Jamal A, King BA, Neff LJ, et al.: Current cigarette smoking among adults—United States, 2005–2015. *MMWR Morb Mortal Wkly Rep* 2016;65:1205–1211.
4. Gruskin EP, Byrne KM, Altschuler A, Dibble SL: Smoking it all away: Influences of stress, negative emotions, and stigma on lesbian tobacco use. *J LGBT Health Res* 2008; 4:167–179.
5. Offen N, Smith EA, Malone RE: Is tobacco a gay issue? Interviews with leaders of the lesbian, gay, bisexual and transgender community. *Cult Health Sex* 2008;10:143–157.
6. Stevens P, Carlson LM, Hinman JM: An analysis of tobacco industry marketing to lesbian, gay, bisexual, and transgender (LGBT) populations: Strategies for mainstream tobacco control and prevention. *Health Promot Pract* 2004;5(3 Suppl):129S–134S.
7. Blossnich J, Lee JG, Horn K: A systematic review of the aetiology of tobacco disparities for sexual minorities. *Tob Control* 2013;22:66–73.
8. Fallin A, Davis B: LGBT organisation successfully advocated for ban on tobacco promotions in San Jose, California. *Tob Control* 2016;25:504–505.
9. Lee JG, Matthews AK, McCullen CA, Melvin CL: Promotion of tobacco use cessation for lesbian, gay, bisexual, and transgender people: A systematic review. *Am J Prev Med* 2014;47:823–831.
10. Baskerville NB, Dash D, Shuh A, et al.: Tobacco use cessation interventions for lesbian, gay, bisexual, transgender and queer youth and young adults: A scoping review. *Prev Med Rep* 2017;6:53–62.
11. Berger I, Mooney-Somers J: Smoking cessation programs for lesbian, gay, bisexual, transgender, and intersex people: A content-based systematic review. *Nicotine Tob Res* 2017; 19:1408–1417.
12. Plant A, Montoya JA, Tyree R, et al.: The break up: Evaluation of an anti-smoking educational campaign for lesbians, gays, and bisexuals in Los Angeles County. *J Health Commun* 2017;22:29–36.
13. Covey LS, Weissman J, LoDuca C, Duan N: A comparison of abstinence outcomes among gay/bisexual and heterosexual male smokers in an intensive, non-tailored smoking cessation study. *Nicotine Tob Res* 2009;11:1374–1377.
14. Grady ES, Humfleet GL, Delucchi KL, et al.: Smoking cessation outcomes among sexual and gender minority and nonminority smokers in extended smoking treatments. *Nicotine Tob Res* 2014;16:1207–1215.

15. Walls NE, Wisneski H: Evaluation of smoking cessation classes for the lesbian, gay, bisexual, and transgender community. *J Soc Serv Res* 2010;37:99–111.
16. Eliason MJ, Dibble SL, Gordon R, Soliz GB: The last drag: An evaluation of an LGBT-specific smoking intervention. *J Homosex* 2012;59:864–878.
17. Matthews AK, Li CC, Kuhns LM, et al.: Results from a community-based smoking cessation treatment program for LGBT smokers. *J Environ Public Health* 2013;2013: 984508.
18. Babb S, Malarcher A, Schauer G, et al.: Quitting smoking among adults—United States, 2000–2015. *MMWR Morb Mortal Wkly Rep* 2017;65:1457–1464.
19. Fiore MC, Jaén CR, Baker TB, et al.: *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, 2008.
20. Fiore MC, Hugh H: *Treating Tobacco Use and Dependence*. Rockville, MD: U.S. Department of Health and Human Services, 2000.
21. Siu AL; U.S. Preventive Services Task Force: Behavioral and pharmacotherapy interventions for tobacco smoking cessation in adults, including pregnant women: U.S. Preventive Services Task Force Recommendation Statement. *Ann Intern Med* 2015;163:622–634.
22. Sutfin EL, Swords DC, Song EY, et al.: Screening and counseling for tobacco use in student health clinics: Reports of health care providers. *Am J Health Promot* 2015;30:e41–e49.
23. National LGBT Tobacco Control Network: About the Network. 2011. Available at <https://web.archive.org/web/20110727031916/http://www.lgbttobacco.org/about.php> Accessed January 9, 2017.
24. Centers for Disease Control and Prevention: Lesbian, gay, bisexual, and transgender health: Health services. 2014. Available at <https://www.cdc.gov/lgbthealth/health-services.htm> Accessed May 31, 2017.
25. Trans-Health.com & Trans Media Network: Trans health clinics. 2016. Available at www.trans-health.com/clinics/ Accessed May 31, 2017.
26. Ulin PR, Robinson ET, Tolley EE: *Qualitative Methods in Public Health: A Field Guide for Applied Research*. Hoboken, NJ: John Wiley & Sons, 2012.
27. HealthIT.gov: Meaningful Use Definition & Objectives. 2015. Available at <https://www.healthit.gov/providers-professionals/meaningful-use-definition-objectives> Accessed December 19, 2017.
28. Fong GT, Hammond D, Laux FL, et al.: The near-universal experience of regret among smokers in four countries: Findings from the International Tobacco Control Policy Evaluation Survey. *Nicotine Tob Res* 2004;6 Suppl 3:S341–S351.
29. McCullough A, Fisher M, Goldstein AO, et al.: Smoking as a vital sign: Prompts to ask and assess increase cessation counseling. *J Am Board Fam Med* 2009;22:625–632.

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