helping benefit Oregon smokers

HEALTH PLAN BENEFIT RECOMMENDATIONS TO HELP OREGON SMOKERS QUIT

October 2010

A Project of the Helping Benefit Oregon Smokers Collaborative and the Oregon Health Authority

inside front cover
doesn’t print

table of contents

Background and Benefit Challenges 1

Elements of Benefit Design 3-9

- Routine screening and outreach to smokers 3
- Evidence-based treatment approaches 4
- Coverage of treatments separately and in combination 7
- Annual access to extended treatment 8
- Low or no out-of-pocket expenses 8
- Reimbursement for program-based treatment professionals 9
- Measurement outcomes 9

HBOS Recommendations for an Effective Benefit: Summary 13

Appendix A: About Programs 15

Appendix B: Professional Standards 19

Appendix C: Addressing Specific Populations 23

Appendix D: Collaborative Membership 27

Appendix E: Endorsements 29

Appendix F: Pharmacotherapy 31

table of contents

In 2009, the Oregon legislature passed SB 754 requiring all private, Oregon based health plans to cover a minimum of $500 for tobacco dependence treatment.[1] With the passage of this bill, it is estimated that over 70% of Oregon smokers now have coverage for treatment of their tobacco dependence.[2] With the majority of smokers covered, there is a new opportunity for Oregon's health plans and the health care community to collaborate on the benefit design most likely to produce effective results. In doing so, the costs and benefits of the coverage will be more equally applied across health plans with the result of improved health for Oregonians.

The decision by the Oregon legislature is timely. Tobacco use dependence causes or complicates many of Oregon's most prevalent and costly chronic diseases including cancer, coronary artery disease, stroke, hypertension, respiratory disease, and pneumonia.[3] A recent estimate of annual direct costs to the Oregon economy attributable to smoking was calculated to be in excess of $3.3 billion annually.[4] As a result, treatment for tobacco use dependence is an increasingly accepted standard of care for the prevention and treatment for chronic disease and is a prominent feature of the new, federal health care reform legislation.[5]

The provision of tobacco dependence treatment has been endorsed as one of the 20 priority areas for transforming health care by the Institute of Medicine and as a core healthcare quality measure (Health Plan Employer Data and Information Set/HEDIS) by the National Committee for Quality Assurance (NCQA).[6] The U.S. Surgeon General, the U.S. Centers for Disease Control and Prevention, the Institute of Medicine, and the National Commission on Prevention Priorities have all concluded that evidence-based tobacco dependence treatment services are effective, more than double or even triple a tobacco user's chances of quitting over an unaided quit attempt, and are more cost-effective than other common and covered disease prevention interventions, such as screening and treatment for hypertension and high blood cholesterol.[7] Recent findings by the National Commission on Prevention Priorities show evidence-based tobacco dependence treatments to be the single most effective and cost-effective preventive service for adults in the general population, saving more money in the long run (5+ years) than it costs to deliver and more than all other adult clinical preventive services combined.[8]

Oregon has a long history of leadership in tobacco control and tobacco cessation. Oregon was one of the first states to increase the tobacco tax and dedicate some of the revenue to programs and services to help prevent and treat tobacco use. Since the program began in 1996, cigarette consumption among Oregon adults has declined by nearly half, smoking among teens has been cut in half, and smoking among Oregon adults has declined by 28% from 23.7% in 1992 to 17% in 2007. Yet, nearly one out of five deaths in Oregon is tobacco-related and costs to Oregon exceed $2.2 billion annually.[9]

Treatment for tobacco dependence is effective and smokers can and do quit. An important focus of Oregon Tobacco Control has been to involve health plans in the development of coverage and services to help smokers quit. Oregon is a leader in providing coverage for tobacco cessation for Medicaid recipients

1 http://www.leg.state.or.us/09reg/measpdf/sb0700.dir/sb0734.en.pdf
2 Estimates based on BRFSS data and recommendations from members of HBOS Collaborative.
3 Fatal Behaviors: What's Really Killing Oregonians, 2005. Oregon Department of Human Services CD Summary 2005; vol. 54; no. 10. http://www.oregon.gov/DHS/ph/cdsummary/2005/ohd5410.pdf
4 Potential Costs and Benefits of Smoking Cessation for Oregon; American Lung Association report, Sept 2010 http://www.lungusa.org/stop-smoking/tobacco-control-advocacy/reports-resources/cessation-economic-benefits/
5 See preventive medicine provisions in health care reform legislation at: http://www.healthcare.gov/law/provisions/preventive/index.html
6 See www.ncqa.org
7 Fiore MC, Jaén CR, Baker TB; et al. *Treating Tobacco Use and Dependence: 2008 Update*. Rockville, MD: US Dept of Health and Human Services; May 2008.
8 Maciosek MV, Coffield AB, Flottemesch TJ et al. Greater Use Of Preventive Services In U.S. Health Care Could Save Lives At Little Or No Cost. 2010 Health Affairs 29(9):1659-1660.
9 Tobacco Prevention and Education Program. Oregon Tobacco Facts & Laws. Portland, Oregon: Oregon Department of Human Services, Oregon Public Health Division, 2009. Available at: http://www.oregon.gov/DHS/ph/tobacco/docs/facts09.pdf

through the Oregon Health Plan and to pioneer a cooperative system between health plans and the telephone quitline in 1998. With the passage of SB 734, Oregon joins only seven other states that are requiring commercial or private insurers to offer tobacco use cessation benefits and many states are supporting similar legislation. And a total of forty-eight Medicaid Programs, including Oregon, have added tobacco dependence treatment as part of the core coverage in their Medicaid benefit plans.[10]

Benefit Challenges

The challenge is in designing a benefit that is based on sound medical research evidence, is capable of reaching more smokers with effective and cost effective services, and can be implemented within Oregon's health plans. Smokers who are less dependent on nicotine, have good support and resources to quit, and are motivated to try and confident about their success are the smokers most likely to quit[11] with or without treatment support. These are also the "healthier" smokers with fewer risk factors for costly chronic diseases.

Smokers who meet the criteria for high nicotine dependence, have a history of psychiatric co-morbidities, and have stressful life events to manage (e.g. serious illness) need more treatment support to quit[12]. These "more expensive" smokers have much more difficulty quitting. Reaching these smokers with effective treatment is necessary to help reduce risk and curtail expenses. The HBOS recommended benefit design is aimed at improving quit rates, particularly among this population.

[10] MMWR State Medicaid Coverage for Tobacco-Dependence Treatments—United States, 2007. Available at: http://www.cdc.gov/tobacco/data_statistics/mmwrs/byyear/2009/mm5843a1/intro.htm
[11] Fiore MC, Jaén CR, Baker TB; et al. *Treating Tobacco Use and Dependence: 2008 Update*. Rockville, MD: US Dept of Health and Human Services; May 2008.
[12] Fiore MC, Jaén CR, Baker TB; et al. *Treating Tobacco Use and Dependence: 2008 Update*. Rockville, MD: US Dept of Health and Human Services; May 2008.

There are seven important elements of an effective benefit design.

1. Routine screening and referral to programs for tobacco use for members age 15 and older and outreach to prompt self referral
2. Evidence-based treatment approaches
3. Coverage of treatments separately and in combination
4. Annual access to extended treatment services
5. Low or no out-of-pocket expenses
6. Reimbursement for program-based treatment professionals
7. Measure outcomes

Rationale

1. Routine screening and referral for tobacco use by health care providers and outreach strategies to prompt self referral.

Tobacco users do not routinely access treatment for their tobacco use. In order to improve use of treatment to improve quit rates, health plans need to be able to identify smokers and target these identified smokers with information and access to treatment. The expected number of smokers in a health plan should roughly mirror the smoking prevalence rates in the surrounding community. Oregon has about a 17% adult smoking prevalence rate overall with a 13% prevalence rate among commercially insured adults and an overall smoking rate of 16% among Oregon 11th grade students.[13]

In the 2008 eValue8 data, health plans were identifying about 1out of 5 smokers (with wide variation among plans) using the following methods. *The recommendation is to use all available methods to increase the rate of identification.*

Table 1: Identification Methods Percentage of Plans Identified as Most Effective[14]

Method	% of Plans Identifying as most effective
Patient self-referral	47%
Health Risk Appraisal	37%
PCP referral	11%
Claims data	2%
Electronic Medical Record	1%
Survey/Disease Management	1%

Self-referral

Health plans can prompt members to enroll in tobacco cessation benefits through a variety of self-referral methods. Benefit reminders can be mailed to members in conjunction with regular news letters or special mailings and posters and reminders can be added to clinic offices and exam rooms.

[13] Tobacco Prevention and Education Program. Oregon Tobacco Facts & Laws. Portland, Oregon: Oregon Department of Human Services, Oregon Public Health Division, 2009. Available at: http://www.oregon.gov/DHS/ph/tobacco/docs/facts09.pdf
[14] National Business Coalition on Health. eValue8 Employer Report: Health Plan Tobacco Cessation Performance, Washington, DC, July 2009.

For example, ODS sent a mailing to members who were already using tobacco cessation pharmacotherapy and/or had a CPT code 305.1 diagnosis for tobacco dependence in their medical record. The mailing simply reminded members of their benefit and resulted in a four-fold increase in program enrollment. Targeted mailings to providers with information on the specific CPT codes to be used and how to treat patients using the 5A's also helped increase enrollment.

In another example, the January 2008 eligibility card mailing for Oregon Health Plan members included a "Help Is Here!" flyer to promote the cessation benefit and the Oregon Tobacco Quit Line. The flyer was sent in English, Spanish, Vietnamese, and Russian. The result was a doubling of Oregon Tobacco Quit Line call volume in January with sustained increases through March 2008.

Health Risk Appraisals

There is a growing trend among Oregon employers and health plans to increase use of health risk appraisals. The increased emphasis on health risk appraisals is a means for employers and health plans to more proactively reach members with the highest risk for disease and consequently, for increased health care costs. This proactive approach can help target services to those who need them the most thereby helping to dampen healthcare cost inflation.

While 37% of health plans cite the HRA as the most effective way to identify and potentially engage members, the average completion rate among health plan members is only 4%.[15] The 2008 eValue8 Employer Report recommends that while HRA's are an important strategy, health plans must also use education, information and incentives to encourage members to use the HRA and act on the results.

Both financial and non-financial incentives are used to increase completion rates. Non-financial incentives include gift cards, coupons, membership discounts and fitness items. For example, OHSU offers employees a chance to win a desirable prize (e.g. Apple iPod) for completing the HRA.

Referrals from providers

To improve referrals from primary care providers, every patient at every clinic visit should be asked if they use tobacco and should have their tobacco use status documented (in outpatient and inpatient health care visits, including home care and case management) and should be advised and assisted to quit. This step alone has been shown to improve quit rates. Documentation of tobacco use should be recorded as part of a patient's vital signs in the patient's electronic or paper medical record.[16]

Because the success of a tobacco cessation benefit relies on its effective use, the HBOS Collaborative strongly recommends using multiple outreach and promotion strategies for increasing the visibility of tobacco cessation benefits and facilitating enrollment.

2. Evidence-based treatment approaches

Tobacco use dependence itself is widely recognized as a chronic disease that manifests itself in a pattern of multiple quit attempts and relapses before successfully quitting. Nicotine dependence, the underlying disorder in tobacco dependence, is recognized in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM IV)[17] with typical patterns of use and withdrawal.

---

[15] National Business Coalition on Health. eValue8 Employer Report: *Health Plan Tobacco Cessation Performance*, Washington, DC,
[16] Fiore MC, Jaén CR, Baker TB; et al. *Treating Tobacco Use and Dependence: 2008 Update*. Rockville, MD: US Dept of Health and Human Services; May 2008.
[17] American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision. Washington, DC, American Psychiatric Association, 2000.

Evidence-based treatment, summarized in the U.S. Public Health Service Clinical Practice Guideline Treating Tobacco Use and Dependence 2008 Update[18] (PHS Guideline) has been developed to address both nicotine dependence and the problems of chronic relapse. Nicotine dependence is addressed through the use of FDA approved cessation medications to manage withdrawal. These medications affect the nicotinic receptors in the brain and elsewhere, helping to ameliorate some of the effects of withdrawal. By reducing the severity of withdrawal, tobacco users are more able to make the necessary adjustments in their lives to remain abstinent. As recovery from tobacco dependence stabilizes, the medications are withdrawn until the former tobacco user is stable and tobacco free.

The PHS Guideline reports that the most effective and long lasting treatment is a combination of pharmacotherapy and behavioral counseling/coaching with a dose-response relationship between treatment intensity and quit rates. High intensity treatments yield higher quit rates.

Table 2: Program intensity and quit rates

Program Intensity	Quit Rates
Low Clinician advice + NRT	16%
High Clinician advice+ multiple counseling sessions+ variety of medication choices	32%

The PHS Guideline also reports a dose response relationship for the number of counseling/coaching treatment sessions, which helps boost abstinence and prevent relapse. More sessions lead to better results.

Table 3: Dose response relationship between number of sessions and results

Number of sessions	Odds Ratios	Quit Rates
0-1 session	1.0	12.4
2-3 sessions	1.4 (1.1-1.7)	16.3 (13.7-19.0)
4-8 sessions	1.9 (1.6-2.2)	20.9 (18.1-23.6)
>8 sessions	2.3 (2.1-3.0)	24.7 (21.0-28.4)

While more treatment yields better outcomes, the need for more verses less treatment depends on the on the history and circumstances of individual tobacco users. The amount and availability of treatment needs to be flexible to match a wide variation in treatment needs.

[18] Fiore MC, Jaén CR, Baker TB; et al. *Treating Tobacco Use and Dependence: 2008* Update. Rockville, MD: US Dept of Health and Human Services; May 2008.

For these reasons, the HBOS recommendation is to cover a menu of options for evidence-based, behavioral counseling/coaching through individual or group counseling programs and through the Oregon Tobacco Quit Line annually.[19] Further, the recommendation is that these options have the flexibility for longer coverage and/or re-registration for the proportion of tobacco users who need more extended treatment to successfully quit (estimated at 25-28%).

Evidence based treatment for children and adolescents

The U.S. Public Health Service Clinical Practice Guideline on Treating Tobacco Use and Dependence 2008 Update[20] reports that adolescents are very interested in quitting. Nationally, 82% of 11-19 year-old smokers were thinking about quitting and 77% made a serious quit attempt in the last year. Adolescent quit attempts are usually spontaneous and rarely with the benefit of any assistance, although those that receive assistance are twice as likely to quit.

There is a limited evidence-base for effective treatment of children and adolescents. The Guideline recommends the following:

1. Clinicians should screen pediatric and adolescent patients, and their parents, for tobacco use and provide a strong message regarding the importance of totally abstaining from tobacco use.
2. Counseling and behavioral interventions shown to be effective with adults should be considered for use with children and adolescents. The content of these interventions should be modified to be developmentally appropriate.
3. When treating adolescents, clinicians may consider prescriptions for bupropion SR or NRT when there is evidence of nicotine dependence and desire to quit tobacco use.
4. Clinicians in a pediatric setting should offer smoking cessation advice and interventions to parents to limit children's exposure to second-hand smoke.

The Oregon Tobacco Quit Line and the American Lung Association have programs that have been successful treating adolescents (see Appendix A).

Coverage of tobacco dependence treatment programs

The HBOS collaborative recommends that the health plan benefit have a menu of program options for coverage of tobacco dependence treatment services (e.g. quitlines, individual programs, and group programs). Many health plans already cover enrollment in tobacco cessation programs, especially tobacco quitlines, treating them as a preferred provider.

The professionals providing services through tobacco cessation programs are trained, and often certified, to provide these services making them more effective for the health plan and tobacco user. The HBOS collaborative recommends that the professionals providing these programs and services meet national standards, summarized in Appendix B.[21]

A tobacco dependence treatment program is defined as a multi-session program that is primarily focused on coping strategies and recovery issues specific to tobacco dependence. While other health related issues may be addressed, such as weight and stress management, the primary focus is on recovery from tobacco dependence.

---

[19] See Appendix A

[20] Fiore MC, Jaén CR, Baker TB; et al. *Treating Tobacco Use and Dependence: 2008 Update*. Rockville, MD: US Dept of Health and Human Services; May 2008.

[21] Association for the Treatment of Tobacco Use and Dependence, Core Competencies for Treatment of Tobacco Dependence, 2005. www.attud.org/docs/Standards.pdf

Specific Populations

There are a variety of factors that affect the acceptability, use and effectiveness of tobacco dependence treatments. Many of these are related to the individual characteristics of smokers, such as age, gender, co-morbid health status, ethnicity, and socioeconomic status. Some are related to context, such as hospitalization.

The evidence-based tobacco dependence treatment recommended by HBOS has been tested with diverse populations and is recommended for anyone using tobacco unless there is a specific contraindication to the medications or where medications have not been shown to be effective.

Among the four major ethnic populations in Oregon (African-American, American Indian and Alaska Native, Asia/Pacific Islander, Hispanic Latino) smoking rates are highest among African-Americans (29.9%) and American Indian and Alaska Natives (33.8%).[22] African-Americans have higher rates of cancer, cardiovascular disease, and infant death all related to tobacco use. American Indian and Alaska Natives have some of the highest rates of infant death caused by SIDS, which is affected by tobacco use and exposure to second hand smoke. These populations are more likely to lack access to primary care, tend to have lower SES, may be less aware of services that are available to them to help quit, may be less likely to receive advice to quit or use services, and may have a number of misconceptions about treatment. For these reasons, special efforts are needed to reach out and assist these underserved populations.[23]

Other specific populations that have unique needs are pregnant women, adolescents and young adults, older smokers, hospitalized patients, and smokers with co-morbid medical and/or psychiatric conditions. Clinical issues for these specific populations include addressing differences in language and culture and assessing the potential for medication interactions (e.g. psychiatric patients) or reduced effectiveness of medical treatments (e.g. transplant or HIV positive patients).

A discussion of the clinical issues for specific populations can be found in Appendix C.

3. **Coverage of treatments separately and in combination.**

The PHS Guideline reports that use of medications and use of behavioral counseling/coaching are effective separately. The most effective, and most strongly recommended treatment, is a combination of medications and behavioral counseling/coaching. However, these treatments should be covered separately – that is, so provision of medications is not linked to enrollment in behavioral counseling/coaching – to permit the most flexibility in patient care. Linking these treatments can improve patient outcomes, but can also lead to denying care if barriers are created by linking them together.

Table 4: Odds ratios and abstinence rates for single vs combination treatment

Treatment	Odds Ratios	Abstinence Rates
Medication alone	1.0	21.7
Medication and counseling	1.4 (1.2-1.6)	27.6 (25.0-30.3)
Counseling alone	1.0	14.6
Medication and counseling	1.7 (1.3-2.1)	22.1 (18.1-26.8)

[22] Tobacco Prevention and Education Program. Oregon Tobacco Facts & Laws. Portland, Oregon: Oregon Department of Human Services, Oregon Public Health Division, 2009. Available at: http://www.oregon.gov/DHS/ph/tobacco/docs/facts09.pdf
[23] Fiore MC, Jaén CR, Baker TB; et al. *Treating Tobacco Use and Dependence: 2008 Update*. Rockville, MD: US Dept of Health and Human Services; May 2008.

4. **Annual access to extended treatment**

Tobacco use dependence is a chronic, relapsing condition. When smokers are ready to make a serious quit attempt, there may be several periods of abstinence and relapses before quitting is stable and permanent. This on and off pattern is normal and may continue for a year or more. Other smokers may successfully quit but go on to use treatment for an extended time to maintain abstinence. The PHS Guideline finds that extended use of the nicotine patch combined with nicotine gum effectively increases quit rates. Among patients who are given free access to nicotine gum, 15% to 20% of successful abstainers continue to use the gum for a year or longer.[24]

For this reason, benefits should be sufficient to cover multiple quit attempts and/or extended treatment over a year with no lifetime limit. Based on national recommendations, the HBOS recommendation is that health plans cover a menu of treatment programs annually with the flexibility to re-enroll or sustain enrollment for the proportion of smokers (estimated at 25%-28%) who need longer treatment.

For example, the Kaiser Permanente NW benefit covers treatment through one of four program options including single group session, multi-group sessions, telephone sessions, and online. Once enrolled, members have a 4-month window to use a medication for tobacco cessation at the health plan co-pay. If they continue past 4 months, or want to start again, they enroll again in a program (preferably a different one than what they chose before it they are restarting).

Benefits for tobacco dependence treatment are usually not abused. Each year, about half of Oregon tobacco users quit for at least 24 hours.[25] But, nationally, among tobacco users who try to quit, only 21% use any medications.[26] Only about 2% of Oregon smokers with coverage for telephone counseling call the quitline, the most widely available treatment.[27] But for those who need treatment to quit, ongoing access to benefits can help sustain quitting efforts over longer periods of time, which leads to increased quit rates.

5. **Low or no patient out-of-pocket expenses (e.g. co-pays, deductibles)**

Tobacco use is increasingly correlated with education level and income such that the highest rates of tobacco use are found in individuals with low socio-economic status, low education, among certain racial/ethnic groups (e.g., Alaska Natives/Native Americans), and among persons with mental illness and substance use disorders.[28] Research has demonstrated that the cost of treatment is a deterrent and that full treatment coverage increases quit attempts, quit rates, and use of pharmacotherapy when compared to no coverage.[29]

Before tobacco dependence treatment was included as a core benefit, health plans used a variety of payment and cost sharing systems. In general, as the amount the health plan members were asked to pay increased, even if some or all was reimbursed later on, members were significantly

---

[24] Fiore MC, Jaén CR, Baker TB; et al. Treating Tobacco Use and Dependence: 2008 Update. Rockville, MD: US Dept of Health and Human Services; May 2008.
[25] Tobacco Prevention and Education Program. Oregon Tobacco Facts & Laws. Portland, Oregon: Oregon Department of Human Services, Oregon Public Health Division, 2009. Available at: http://www.oregon.gov/DHS/ph/tobacco/docs/facts09.pdf
[26] Fiore MC, Jaén CR, Baker TB; et al. Treating Tobacco Use and Dependence: 2008 Update. Rockville, MD: US Dept of Health and Human Services; May 2008.
[27] Oregon Tobacco Prevention and Education Program, June 2010.
[28] Lasser K, Boyd JW, Woolhandler S, Himmelstein DU, McCormick D, Bor DH. Smoking and mental illness: A population-based prevalence study. JAMA 2000;284(20):2606-10.
[29] Reda AA, Kaper J, Fikretler H, Severens JL, van Schayck CP. Healthcare financing systems for increasing the use of tobacco dependence treatment. Cochrane Database of Systematic Reviews 2009, Issue 2. Art. No.: CD004305. DOI:10.1002/14651858.CD004305.pub3.

less likely to participate. When cost-sharing is eliminated, participation increases substantially. Increasingly, as treatment is covered as a core benefit and the usual medical co-pays are applied, the effect on participation is less clear. The new health care reform legislation requires health plans to provide tobacco dependence treatment as a preventive service without any co-pay in order to maximize access and use.[30]

Table 5: Rates of interventions, quit attempts and quit rates by benefit coverage

Treatment	Odds Ratios	Rate receiving interventions
No covered benefit	1.0	8.9%
Covered benefit	2.3 (1.8-2.9)	18.2 (14.8 – 22.3)
Treatment	**Odds Ratios**	**Rate of Quit Attempts**
No covered benefit	1.0	30.5%
Covered benefit	1.3 (1.01-1.5)	36.2% (32.3-40.2)
Treatment	**Odds Ratios**	**Quit Rates**
No covered benefit	1.0	6.7 %
Covered benefit	1.6 (1.2-2.2)	10.5% (8.1-13.5)

6. Reimbursement for program-based treatment professionals

Provider, clinic, heath plan and hospital reimbursement should be sufficient to cover reasonable costs for the delivery of tobacco use treatment services incurred by a range of covered providers and health systems.[31] The HBOS recommendation is that screening, assessment and referral for services be included in routine health care and that the primary reimbursement be directed at specialized programs and services by trained professionals and for pharmacotherapy. Average cost for services registered participant are shown in Table 6 (on page 10).

7. Measure Outcomes

A well designed benefit is only the first step. Ongoing measurement of utilization and outcomes together with quality improvement processes are needed to ensure that the benefit is working and is actually helping smokers to quit. Commonly used measures include HEDIS and CAHPS physician performance measures, required for accreditation through National Committee for Quality Assurance (NCQA), program and services participation rates, and quit rates.

Health plans accredited by the NCQA track overall performance in improving smoking cessation services. The HEDIS survey questions ask patients about physician performance on asking about tobacco use and providing advice and assistance to quit. Results reported in the 2008 eValue8 Employer Report show that 76% of smokers said that their physician advised them to stop smoking, but 24% do not recall any advice to quit. Half of survey respondents did not recall any discussion about smoking cessation strategies or medications.

[30] Preventive medicine provisions in the health care reform legislation at: http://www.healthcare.gov/law/provisions/preventive/index.html

[31] Fiore MC, Jaén CR, Baker TB; et al. Treating Tobacco Use and Dependence: 2008 Update. Rockville, MD: US Dept of Health and Human Services; May 2008.

The eValue8 report also asked health plans whether they track member quit rates to show the effectiveness of their programs and services.[32] Seventy-three percent reported that they track participation of members in tobacco cessation, but only 49% track quit rates up to 6 months and only 20% track quit rates through 1 year.

The HBOS recommendation is to track and regularly review physician performance, member participation rates, and member quit rates through 1 year to ensure that the benefit is working and achieving results.

Economics of Cessation Benefits

Smoking cessation programs are lower in cost and generate a positive return on investment. The relative costs and returns depend on the benefit design, utilization, and cost sharing. However the benefits are structured, they are consistently demonstrated across multiple studies to be cost-effective for both employers and health plans.[33]

The relative costs of counseling and medications alone and in combination for one course of treatment are shown in Table 6.

Table 6: Estimated Costs by Treatment Option*

Option	Odds ratio[33]	Estimated quit rates[33]	Estimated costs[34]
Counseling alone	1.5 (1.3-1.8)	16.2 (14.0-18.5)	$175
Medications alone NRT/Bupropion Varenicline	 1.9-2.0 (1.7-2.2) 3.1 (2.5-3.8)	 23.4-24.2 (21.3-26.4) 33.2 (28.9-37.8)	 $167 $246
All types counseling + medications (includes individual/groups)	1.4 (1.2-1.6) vs. meds. alone	27.6 (25.0-30.3)	$300-$400 individual $250-$300 group
Quitline counseling + medications	1.3 (1.1-1.6) vs. meds. alone	28.1 (24.5-32.0)	$350-$400

* The reach of treatment options is important. Group programs can be less expensive per person and are effective, but may only be able to reach small groups of people. Individual programs are the most effective but a trained professional may not be available. Quitlines are widely available and are effective, but some patients may not be willing or able to use telephones. The recommendation is to offer more than one option whenever possible to reach more smokers.

When a menu of benefit options is available, the actual amount of the benefit used will vary based on differences in treatment needs with some tobacco users using more and some less. This range in the use of the benefit makes even a generous benefit with multiple options a reasonable cost on average.

---

[32] The recommended definition of "quit" is based on the Centers for Disease Control definition as answering "yes" to whether or not respondents had stopped smoking for more than one day in the last 12 months because of trying to quit.
[33] Fiore MC, Jaén CR, Baker TB; et al. *Treating Tobacco Use and Dependence: 2008 Update*. Rockville, MD: US Dept of Health and Human Services; May 2008.
[34] Cost estimates provided by Oregon Tobacco Quit Line. Group rates provided by Oregon health plans. Individual rates based on Medicare reimbursement rates in Oregon. Medications costs provided by OHSU Pharmacy Information Service.

Table 7 illustrates a possible distribution of benefit use for employees who register for tobacco cessation services annually.

Table 7: Annual Estimated Use and Costs by Treatment Option for Health Plan Members who Register for Benefits*

Treatment Option	Percent Use	Estimated Average Costs[35]
Registered but do not use services	7%	$0
Counseling alone	20%	$175
Medications alone	23%	$200
Counseling + medications	22%	$375
Counseling + extended course of medications	28%	$575
Average Cost per Participant	100%	$325

* The reach of treatment options is important. Group programs can be less expensive per person and are effective, but may only be able to reach small groups of people. Individual programs are the most effective but a trained professional may not be available. Quitlines are widely available and are effective, but some patients may not be willing or able to use telephones. The recommendation is to offer more than one option whenever possible to reach more smokers.

Smoking cessation programs vary in comprehensiveness and intensity and the investment for health plans and employers will depend on the design of the program and any cost sharing by employees. As intensity increases, efficacy increases, and costs also increase – see Table 8.

Table 8: Estimated Outcomes and Costs by Program Intensity

Program Intensity	Quit Rates[36]	Enrollment rates [37a]	PMPM[37b]	ROI[38] Year 2	ROI[38] Year 5
Low	16%	6%	$.19	$.43	$1.96
High	32%	6%	$.45	$.23	$1.77

There are some differences in the net financial returns for health plans and employers. The higher intensity/higher cost interventions produce more quitters than lower-intensity/lower cost interventions, so are more beneficial for employers. But the health plan ROI PMPM is somewhat higher for the lower-intensity/lower cost interventions–see Table 8. For employers, more tobacco users quitting means more savings, so the higher intensity/higher cost interventions produce the best results (i.e., more smokers quitting).

---

[36] Fiore MC, Jaén CR, Baker TB; et al. *Treating Tobacco Use and Dependence: 2008 Update*. Rockville, MD: US Dept of Health and Human Services; May 2008.

[37 a & b] Covering Smoking Cessation as a Health Benefit: A Case for Employers. Milliman, Inc. 2006. http://www.legacyforhealth.org/PDFPublications/Milliman_report_ALF_-_3.15.07.pdf

[38] *A Good Investment in a Bad Economy: The ROI Case for Helping Your Members and Employees Quit Smoking*. America's Health Insurance Plans Virtual Seminar. 09/17/09 , Jeffrey L. Fellows, PhD, Center for Health Research , Kaiser Permanente NW.

[35] Cost estimates provided by Oregon Tobacco Quitline. Group rates provided by Oregon health plans. Individual rates based on Medicare reimbursement rates in Oregon. Excludes administrative costs.

Utilization of smoking cessation programs in any year is modest since there are a limited number of smokers who are ready to quit at any one time and even fewer who are ready to seek treatment.

By sustaining and promoting the benefit over time, more smokers quit over time, health outcomes improve, and the return on investment increases.

HBOS Recommendations for Effective Benefits

Summary

Screening, Referral, and Outreach:

Screening and referral for services for tobacco use should be part of routine clinical care beginning at age 15 (Screening for populations younger than 15 should be based on risk and need.). Screening should be to be conducted at every clinical encounter.

Use of Health Risk Appraisals, employee communication, incentives, and promotions should be used to prompt self referral to programs.

Behavioral Counseling/Coaching Programs

A menu of behavioral counseling or coaching programs should be available in multiple formats including individual and group programs and telephone quitlines (Note: The evidence base for online programs has not yet been established.).

The menu of options should include the flexibility for continued enrollment or re-enrollment for members who require repeated or longer treatment to achieve abstinence (estimated at 25%-28%).

Quitline or Group Programs eligible for reimbursement should be consistent with the evidence base summarized in the U.S. Public Health Services Clinical Practice Guideline Treating Tobacco Use and Dependence 2008 Update and meet the following criteria:

1. Provide 5 or more sessions per quit attempt.
2. Provide:
    a. Practical counseling including problem solving, skills training, stress management
    b. Accurate information and advice about pharmacotherapy and how to obtain pharmacotherapy through the health plan;
    c. Support from a trained specialist during treatment
3. Be provided by knowledgeable and trained professionals that meet professional standards for tobacco treatment specialists (See Appendix B).
4. Provide follow-up support and opportunities for re-enrollment.
5. Provide evidence of previous program effectiveness.
6. Provide evaluation reports:
    a. Enrollment rates that include all participants who have completed at least one session.
    b. Quit rates at 6 and 12 months where the denominator is all participants who have completed at least one session and the numerator is all participants who report not smoking within the last 7 days.

Individual counseling/coaching programs can be provided and reimbursed by a variety of licensed professionals able to bill for professional services who:

1. Offer 5 or more sessions per quit attempt
2. Provide:
    a. Practical counseling including problem solving, skills training, stress management.
    b. Accurate information and advice about pharmacotherapy and how to obtain pharmacotherapy through the health plan;
    c. Support during treatment sessions from trained specialists.
3. Meet professional standards for Tobacco Treatment Specialists.
4. Provide follow-up support and opportunities for re-enrollment.
5. Demonstrate effectiveness and outcomes.

Mental health professionals who are licensed and credentialed in the health plan and who provide services that are not carved out from the medical plan can bill for services.

Alcohol and substance use providers that provide program services outlined above and meet at least moderate proficiency standards should be reimbursed separately for these services.

Hypnosis or acupuncture sessions for treatment of tobacco dependence are not covered unless they are part of an evidence-based, preferred provider program.

Pharmacotherapy

A selection of FDA-approved nicotine replacement products and prescription tobacco cessation medications should be covered with the flexibility of additional refills and prescriptions for members who need longer treatment, combination treatments, or alternate treatment.

Cost-sharing

Cost-sharing should not exceed usual co-payments for other routine medical services and may be waived.

About Programs

Tobacco Quitlines

Quitlines provide evidence-based interventions for tobacco cessation via the telephone. Quitlines in the US collectively serve about 400,000 tobacco users each year. They represent a public health model of tobacco dependence treatment but also can bridge public health and clinical models. Trained quitline counselors and coaches help callers devise an individualized plan to prepare to quit and, in many cases, make proactive follow-up calls to support quitting.

Quitlines vary, but most are open early morning through late evening (M-F), with some weekend hours. First-time callers are taken through a brief set of questions to determine the appropriate service. Callers are typically given a choice of services: Self-help materials, referrals to face-to-face programs, and telephone counseling for tobacco cessation. Counseling/coaching occur on-the-spot when possible, otherwise an appointment is scheduled. Quitlines are geared toward the general tobacco using population, but significant numbers of tobacco users with co-morbidities call quitlines.

About the Oregon Tobacco Quit Line

The Oregon Tobacco Quitline is funded through contracts with the Oregon Tobacco Prevention and Education Program.

Accessing the Oregon and Washington Quit Line starts with a phone call: 1-800-QUIT-NOW

- Spanish: 1-877-2NO-FUME
- TTY: 1-877-777-6534

Interpretive Services are available in 170+ languages. Counseling is also available in American Sign Language. Web registration is available at: www.quitnow.net/oregon/.

Hours of operation are from 5 a.m. to midnight P.S.T.

How it Works

1. First point of contact is with a Registration Intake Specialist
    - Focus on customer service and warm welcoming
    - Description of services
    - Collect contact and demographic information
    - Route to services according to needs
    - Immediate transfer to a Quit Coach

2. Next is the Quit Coach
   The Quit Coach uses motivational interviewing and cognitive-behavioral therapy techniques to teach tobacco users problem solving, coping skills and behavioral strategies to quit:
    - Client talks with a professional tobacco treatment specialist
    - Together they create a personalized quit plan tailored to their specific tobacco-use behaviors, culture and social environment
    - Client also receives decision support and individual dosing information for medications including nicotine replacement therapy (NRT-patch or gum), Chantix® (Varenicline) or Zyban® (BupropionSR)
    - Counselor mails client the "Be Free" series of stage-appropriate Quit Guides designed to help callers stay on track with their quit plan between calls.

3. All registered callers receive:
    - In-depth coaching call, plus unlimited inbound calls

- Stage-appropriate Quit Guide -specialized materials for Latinos, Native Americans, LGBT callers, pregnant women, smokeless tobacco users, youth, and proxies
- Access to Web Coach –online support tools and social forum

4. Uninsured callers receive
   - Up to three additional coaching calls
   - 2-week NRT (patch or gum) starter kits

5. Callers with private insurance
   - 2-week NRT (patch or gum) starter kits
   - Help to link with insurance plan cessation benefits
   - Any additional coaching calls or pharmacotherapy is provided through insurance plan

6. Medicaid callers
   - Fee-For-Service members get three additional coaching calls through the Oregon Health Plan.
   - Managed Care Plan members get help to access plan benefits (about half the plans have contracts with Free & Clear that provide additional coaching calls)
   - NRT accessed through pharmacy benefit (need Rx from provider)

7. Adolescent callers
   - Counselors are sensitive to needs of adolescents
   - Review tobacco use patterns with caller and help identify stressful events and coping strategies
   - Develop personal, age appropriate quitting plan

About Group Counseling

A tobacco cessation group program is defined as a multi-session program that is primarily focused on coping strategies and recovery issues specific to tobacco dependence. Group counseling is unique in that it combines personalized attention with peer support. For more information about the effectiveness of group counseling, please see the 2008 Public Health Service Guideline Update.

Group Programs in Oregon

- *Lung Association: Freedom From Smoking (Adults)*
  - Format: 8 sessions (90-120 min. each) over 7 weeks
  - Delivered in a small group setting, up to 16 participants
  - Topics addressed:
    - Knowing if you're ready to quit smoking
    - Medicines to help you quit smoking
    - Lifestyle changes that make quitting easier
    - Preparing for Quit Day
    - Coping strategies
    - Managing stress
    - Avoiding weight gain
    - Developing a new self-image
    - How to stay smoke free for good

■ *Not On Tobacco (NOT): Adolescents*

Not On Tobacco (N-O-T) is the American Lung Association's (ALA's) voluntary program for teens who want to quit smoking.

- Allows teens to volunteer to participate without coercion
- Includes group activities, discussions, journaling, and role-playing
- Separate activities for boys and girls
- Offers advice on healthy behaviors, stress management, and life skills
- Consists of 10 sessions for school or community settings

■ *Kaiser Permanente NW: Group Programs*

6 Session Class

- Format: 6 sessions (90 minutes each) over 6 weeks
- Delivered in a small group setting
- Topics addressed:
  - Exploring behavior changes to help overcome cravings
  - Resisting temptations
  - Dealing with stress without relying on tobacco
  - Preparing for Quit Day during second session

Single Session Class

- Format: 1 session (2 hours)
- Delivered in a small group setting
- Topics addressed:
  - Process of change
  - Motivational tools
  - Barriers to quitting

■ Providence Health & Services

Providence Pharmacist –Assisted Classes in the Portland and Yamhill service areas)
Group program is based upon the American Lung Association's Freedom From Smoking program. Class participants learn about:

- A systematic approach to quitting through behavior modification techniques
- Coping skills
- Social support
- Weight management
- Stress management
- Pharmacist assessment of medication needs
- Eight weeks of free nicotine patches, Bupropion (Zyban®), or Varenicline (Chantix®), to participants who attend the classes (Must have a current Primary Care Physician in order to receive medications during class.).

Group Program Contact Information

■ Freedom From Smoking
American Lung Association in Oregon
Email: healthinfo@lungoregon.org
Phone: 503-924-4094
Contracts with businesses and health plans

■ Kaiser Permanente NW
Classes open to the public. Call 503-286-6816 or 1-866-301-3866 (toll free) to register.

■ Providence Health & Services
Providence Pharmacist –assisted classes in the Portland and Yamhill service areas
Call Providence Resource Line to register: 503-574-6595 or 800-562-8964

Association for the Treatment of Tobacco Use and Dependence (ATTUD)

Summary of Core Competencies for Treatment of Tobacco Dependence

The HBOS collaborative recommends proficiency in the following areas for professionals delivering tobacco dependence treatment:

1. Tobacco Dependence Knowledge and Education

Provide clear and accurate information about tobacco use, strategies for quitting, the scope of the health impact on the population, the causes and consequences of tobacco use.

Skill Set:

1. Describe the prevalence and patterns of tobacco use, dependence and cessation in the country and region in which the treatment is provided, and how rates vary across demographic, economic and cultural subgroups.
2. Explain the role of treatment for tobacco use and dependence within a comprehensive tobacco control program.
3. Utilize the findings of national reports, research studies and guidelines on tobacco treatment.
4. Explain the societal and environmental factors that promote and inhibit the spread of tobacco use and dependence.
5. Explain the health consequences of tobacco use and benefits of quitting, and the basic mechanisms of the more common tobacco induced disorders.
6. Describe how tobacco dependence develops and be able to explain the biological, psychological, and social causes of tobacco dependence.
7. Summarize and be able to apply valid and reliable diagnostic criteria for tobacco dependence.
8. Describe the chronic relapsing nature of tobacco dependence, including typical relapse patterns, and predisposing factors.
9. Provide information that is gender, age, and culturally sensitive and appropriate to learning style and abilities.
10. Identify evidence-based treatment strategies and the pros and cons for each strategy.
11. Be able to discuss alternative therapies such as harm reduction, hypnosis, acupuncture, cigarette tapering
12. Demonstrate ability to access information on the above topics.

2. Counseling Skills

Demonstrate effective application of counseling theories and strategies to establish a collaborative relationship, and to facilitate client involvement in treatment and commitment to change.

Skill Set:

1. Demonstrate effective counseling skills such as active listening and empathy that facilitate the treatment process.
2. Demonstrate establishing a warm, confidential and nonjudgmental counseling environment.
3. Describe and demonstrate use of an evidence-based method for brief interventions for treating tobacco use and dependence, as identified in current guidelines.
4. Describe the use of models of behavior change including motivational interviewing, cognitive therapy, and supportive counseling.
5. Demonstrate the effective use of clinically sound strategies to enhance motivation and encourage commitment to change.
6. Demonstrate competence in at least one of the empirically supported counseling modalities such as individual, group and telephone counseling.

3. Assessment Interview

Conduct an assessment interview to obtain comprehensive and accurate data needed for treatment planning.

Skill Set:

1. Demonstrate the ability to conduct an intake assessment interview including:
    a. tobacco use history
    b. validated measures of motivation to quit
    c. validated measures for assessing tobacco use and dependence
    d. current challenges and barriers to attaining permanent abstinence
    e. current strengths to support abstinence
    f. prior quit attempts including treatment experiences, successes and barriers
    g. availability of social support systems
    h. preferences for treatment
    i. cultural factors influencing making a quit attempt
2. Demonstrate the ability to gather basic medical history information and conduct a brief screening for psychiatric and substance abuse issues.
3. Describe when to consult with primary medical care providers and make appropriate referrals before treatment planning is implemented.
4. Describe the existing objective measures of tobacco use such as CO monitoring, and cotinine level assessments.

4. Treatment Planning

Demonstrate the ability to develop an individualized treatment plan using evidence-based treatment strategies.

Skill Set:

1. In collaboration with the client, identify specific and measurable treatment objectives.
2. Plan individualized treatments that account for patient assessment factors identified during the intake assessment and history gathering.
3. Collaboratively develop a treatment plan that uses evidence-based strategies to assist the client in moving toward a quit attempt, and/or continued abstinence from tobacco.
4. Describe a plan for follow up to address potential issues including negative outcomes.
5. Demonstrate the process to make referrals to other health care providers or to recommend additional care.

5. Pharmacotherapy

Provide clear and accurate information about pharmacotherapy options available and their therapeutic use.

Skill Set:

1. Describe the benefits of combining pharmacotherapy and counseling.
2. Provide information on correct use, efficacy, adverse events, contraindications, known side effects and exclusions for all tobacco dependence medications approved by national regulatory agencies.
3. Identify information relevant to a client's current and past medical, psychiatric, and smoking history, (including past treatments) that may impact pharmacotherapy decisions.
4. Provide appropriate patient education for therapeutic choices and dosing for a wide range of patient situations.
5. Communicate the symptoms, duration, incidence and magnitude of nicotine withdrawal.
6. Describe the use of combinations of medications and higher dose medications to enhance the probability of abstinence.
7. Identify second-line medications and be able to find information about them as needed.

8. Identify possible adverse reactions and complications related to the use of pharmacotherapy for tobacco dependence, making timely referrals to medical professionals/services. Demonstrate ability to address concerns about minor and/or temporary side effects of these pharmacotherapies.
9. Demonstrate ability to collaborate with other healthcare providers to coordinate the appropriate use of medications, especially in the presence of medical or psychiatric co-morbidities.
10. Provide information about alternative therapies based upon recognized reviews of effectiveness such as the Cochrane reviews and the U.S. Public Health Service Clinical Practice Guideline on Treating Tobacco Use and Dependence.

6. Relapse Prevention

Offer methods to reduce relapse and provide ongoing support for tobacco-dependent persons.

Skill Set:

1. Identify personal risk factors and incorporate into the treatment plan.
2. Describe strategies and coping skills that can reduce relapse risk.
3. Provide guidance in modifying the treatment plan to reduce the risk of relapse throughout the course of treatment.
4. Describe a plan for continued aftercare following initial treatment.
5. Describe how to make referrals to additional resources to reduce risk of relapse.
6. Implement treatment strategies for someone who has lapsed or relapsed.

7. Diversity and Specific Health Issues

Demonstrate competence in working with population subgroups and those who have specific health issues.

Skill Set:

1. Provide culturally competent counseling
2. Describe specific treatment indications for special population groups (i.e. pregnant women, adolescents, young adults, elderly, hospitalized patients, those with co-morbid psychiatric conditions).
3. Demonstrate an ability to respond to high-risk client situations.
4. Make effective treatment recommendations for non-cigarette tobacco users.
5. Describe recommendations for those exposed to environmental tobacco smoke pollution.

8. Documentation and Evaluation

Describe and use methods for tracking individual progress, record keeping, program documentation, outcome measurement and reporting.

Skill Set:

1. Maintain accurate records utilizing accepted coding practices that are appropriate to the setting in which services are provided.
2. Develop and implement a protocol for tracking client follow-up and progress.
3. Describe standardized methods of measuring recognized outcomes of tobacco dependence treatment for individuals and programs.

9. Professional Resources

Utilize resources available for client support and for professional education or consultation.

Skill Set:

1. Describe resources (web based, community, quitlines) available for continued support for tobacco abstinence for clients.
2. Identify community resources for referral for medical, psychiatric or psychosocial problems.
3. Name and use peer-reviewed journals, professional societies, websites, and newsletters, related to tobacco dependence treatment and/or research.
4. Describe how patients can explore reimbursement for treatments.

10. **Law and Ethics**

Consistently use a code of ethics and adhere to government regulations specific to the health care or work site setting.

Skill Set:

1. Describe and use a code of ethics established by your professional discipline for tobacco dependence treatment specialists if available.
2. Describe the implications and utilize the regulations that apply to the tobacco treatment setting (confidentiality, HIPAA, work site specific regulations).

11. Professional Development

Assume responsibility for continued professional development and contributing to the development of others.

1. Maintain professional standards as required by professional license or certification.
2. Utilize the literature and other formal sources of inquiry to remain current in tobacco dependence treatment.
3. Describe the implications of current research to the practice of tobacco dependence treatment.
4. Disseminate knowledge and findings about tobacco treatment with others through formal and informal channels.

Association for the Treatment of Tobacco Use and Dependence, Core Competencies for Treatment of Tobacco Dependence, 2005. www.attud.org/docs/Standards.pdf

Summary of Clinical Issues for Specific Populations Adapted From the Public Health Service Clinical Practice Guideline 2008 Update

Treating Tobacco Use and Dependence

There are population-specific concerns and clinical issues regarding prevalence and treatment of tobacco dependence. Following are ways to address these concerns and issues:

Issue	Approach
Language	• Ensure that interventions are provided in a language the patient understands. Most quitlines provide counseling in Spanish, and some provide counseling in other languages. • All textual materials used (e.g., self-help brochures) should be written at an appropriate reading level. This is particularly important given epidemiological data showing that tobacco use rates are markedly higher among individuals of lower educational attainment.
Culture	• Interventions should be culturally appropriate to be relevant and acceptable to the patient. The extent to which cultural tailoring enhances intervention dffectiveness requires further research. • Clinicians should remain sensitive to individual differences and spiritual and health beliefs that may affect treatment acceptance, use, and success in all populations.
Medical comorbidity	• Examine the possibility of medication interactions. • Address how exposure to tobacco can alter the liver's ability to metabolize different medications (HIV-positive patients).

Summary of Issues for Specific Populations

HIV-Positive Smokers

HIV-positive individuals are more likely to smoke than the general population. Currently, HIV-positive individuals are living longer, due to treatment advances, making the issue of cigarette smoking in this population a significant clinical concern. HIV-positive smokers have higher mortality rates and report lower quality of life than HIV-positive nonsmokers. In addition, HIV-positive smokers appear to be at greater risk for developing invasive pneumococcal diseases and) central nervous system infections compared with non-HIV infected individuals. Also, compared to nonsmoking HIV-positive individuals, smoking among HIV-positive persons is associated with increased risk of several opportunistic infections and spontaneous pneumothorax. Data suggest that HIV-positive smokers underestimate the effects of smoking on their health, and some state that they will not live long enough for the health effects of smoking to matter. In addition, some HIV-positive smokers report that smoking is an effective way to cope with the stress of their illness.

Hospitalized Smokers

It is vital that hospitalized patients attempt to quit using tobacco because tobacco use may interfere with their recovery and overall health. Among cardiac patients, second heart attacks are more common

in those who continue to smoke. Lung, head, and neck cancer patients who are successfully treated for their cancer but who continue to smoke are at elevated risk for a second cancer. Additionally, smoking negatively affects COPD as well as bone and wound healing. Hospitalized patients may be particularly motivated to make a quit attempt for two reasons. First, the illness resulting in hospitalization may have been caused or exacerbated by tobacco use, highlighting the patient's perceived vulnerability to the health risks of smoking and making the hospitalization a "teachable moment." Second, every hospital in the United States must now be smoke-free if it is to be accredited by The Joint Commission. As a result, every hospitalized smoker is temporarily housed in a smoke-free environment. In addition, more hospitals are adopting policies establishing tobacco-free campuses, thus extending smoke-free space from indoor facilities to surrounding outdoor environments. For these reasons, clinicians should use hospitalization as an opportunity to promote smoking cessation. This is also an opportunity for clinicians to prescribe medications to alleviate withdrawal symptoms. If patients have positive experiences with the alleviation of their withdrawal symptoms, they may be more likely to use intensive treatments in a future quit attempt or maintain their hospital-enforced abstinence. Patients in long-term care facilities also should receive tobacco dependence interventions identified as effective in (which?earlier Guideline is referring to the Treating Tobacco guideline) PHS Guideline.

The importance of post hospitalization follow up has been demonstrated by research. However, there are systems-level issues that may complicate the ability of hospital-based clinicians to follow up with smoking patients. The development of fax-to-quit links with quitline services may be an effective and efficient way for hospitals to refer patients for smoking cessation follow-up.

Lesbian/Gay/Bisexual/Transgender (LGBT) Smokers

LGBT individuals, both adolescents and adults, are more likely to smoke than the general population, and tobacco marketing targets these communities. LGBT individuals are more likely to have other risk factors for smoking, including daily stress related to prejudice and stigma. Future Research??????

Low SES/Limited Formal Education

Individuals with low SES and/or limited formal education, including the homeless, bear a disproportionate burden from tobacco. Addressing this particular disparity is an important part of improving the overall health of the American public. These patients are more likely to: smoke, have limited access to effective treatment, be misinformed about smoking cessation medications, be exposed to more permissive environmental and workplace smoking policies, and be targeted by tobacco companies. They are less likely to receive cessation assistance. Moreover, smokers with low SES/limited formal education are more likely to be uninsured or on Medicaid than are other smokers. Only 25 percent of smokers on Medicaid reported receiving any practical assistance with quitting. However, low SES smokers or those with limited formal education express significant interest in quitting and appear to benefit from treatment. Due to the prevalence of smoking in this population, it is vital that clinicians intervene with such individuals. It is important that interventions, particularly written materials, be delivered in a manner that is understandable to the patient.

Medical Comorbid Conditions, Including Cancer, Cardiac Disease, COPD, Diabetes, and Asthma

Smokers with comorbid medical conditions such as cancer, cardiac disease, COPD, diabetes, and asthma are important to target for tobacco use treatments, given the role that smoking plays in exacerbating these conditions. Clinicians treating smokers with these conditions have an ideal "teachable moment" in that they are treating a disease that may have been caused or exacerbated by smoking and that can be ameliorated by quitting but not by cutting down. Using chronic disease management programs to inte-

grate tobacco dependence interventions into treatment may be an effective and efficient way to deliver tobacco use interventions to these populations.

Older Smokers

It is estimated that more than 18 million Americans age 45 and older smoke cigarettes, accounting for 41 percent of all adult smokers in the United States; 4.5 million adults over age 65 smoke cigarettes. Even smokers over the age of 65 can benefit greatly from abstinence. Older smokers who quit can reduce their risk of death from coronary heart disease, COPD, and lung cancer and decrease their risk of osteoporosis. Moreover, abstinence can promote more rapid recovery from illnesses that are exacerbated by smoking and can improve cerebral circulation. In fact, age does not appear to diminish the desire to quit or the benefits of quitting smoking, and treatments shown to be effective in the PHS Guideline have been shown to be effective in older smokers. However, smokers over the age of 65 may be less likely to receive smoking cessation medications identified as effective in the PHS Guideline. Issues particular to this population (e.g., mobility, medications) make the use of proactive telephone counseling appear particularly promising.

Importantly, Medicare has expanded benefits for tobacco cessation counseling to all Medicare recipients and prescription medications (through Medicare Part D) for tobacco dependence treatment.

Psychiatric Disorders, Including Substance Use Disorders

Psychiatric disorders are more common among smokers than in the general population. For instance, as many as 30 to 60 percent of patients seeking tobacco dependence treatment may have a past history of depression, and 20 percent or more may have a past history of alcohol abuse or dependence. Smoking occurs at rates well above the population average among abusers of alcohol and drugs (i.e., greater than 70 percent), and one study found that these individuals have increased mortality from tobacco-related diseases. These individuals may present themselves less frequently for tobacco dependence treatment. However, such treatments could be conveniently delivered within the context of chemical dependence or mental health clinics. Smokers currently experiencing a psychiatric disorder are at heightened risk for relapse to smoking after a cessation attempt. All smokers with psychiatric disorders, including substance use disorders, should be offered tobacco dependence treatment, and clinicians must overcome their reluctance to treat this population. However, the clinician may wish to offer the tobacco dependence treatment when psychiatric symptoms are not severe. Although patients in inpatient psychiatric units are able to stop smoking with few adverse effects (e.g., little increase in aggression), stopping smoking or nicotine withdrawal may exacerbate a patient's comorbid condition. For instance, stopping smoking may elicit or exacerbate depression among patients with a prior history of affective disorder. One study suggests that alcohol treatment should precede tobacco dependence treatment to maximize the effect of the alcohol treatment. Considerable research, however, also indicates that tobacco dependence treatment does not interfere with patients' recovery from the abuse of other substances. Treating tobacco dependence in individuals with psychiatric disorders is made more complex by the potential for multiple psychiatric diagnoses and multiple psychiatric medications. Stopping tobacco use may affect the pharmacokinetics of certain psychiatric medications. Therefore, clinicians should closely monitor the level or effects of psychiatric medications in smokers making a quit attempt.

Racial and Ethnic Minority Populations

Some racial and ethnic minority populations in the United States—African Americans, American Indians and Alaska Natives, Asians and Pacific Islanders, Hispanics—experience higher mortality in a number of disease categories compared with others. For example, African Americans experience substantial excess mortality from cancer, cardiovascular disease, and infant death, all of which are directly affected by tobacco use. Moreover, they experience greater exposure to tobacco advertising. American Indian and

Alaska Natives have some of the highest documented rates of infant mortality caused by SIDS, which also is affected by tobacco use and exposure to secondhand smoke. Therefore, the need to deliver effective tobacco dependence interventions to ethnic and racial minority smokers is critical. Unfortunately, evidence indicates that large proportions of some racial/ethnic groups lack adequate access to primary care providers and are more likely to have low SES. These populations may be less aware of Medicaid or other available benefits and more likely to harbor misconceptions about tobacco dependence treatments. Finally, these populations may be less likely to receive advice to stop smoking or use tobacco dependence treatment than are other individuals. This suggests that special efforts and resources should be provided to meet the treatment needs of these underserved populations. The differences between racial and ethnic minorities and whites in smoking prevalence, smoking patterns, pharmacokinetics of nicotine, and quitting behavior in the United States are well documented. In addition, smoking prevalence and patterns vary substantially across and within minority subgroups (e.g., gender, level of acculturation, tribal communities). Racial and ethnic minority groups also differ from whites in awareness of the health effects of smoking and awareness of the benefits of proven treatments, and some racial and ethnic minority populations report a greater sense of fatalism that may affect disease prevention efforts. On the other hand, both tobacco dependence and desire to quit appear to be prevalent across varied racial and ethnic groups. In fact, smokers in several racial and ethnic groups attempt to quit as often as or more often than nonminority smokers, but use effective treatments less often and have lower success rates.

Women

Data suggest that women are more likely to seek assistance in their quit attempts than are men. Research suggests that women benefit from the same interventions as do men, although the data are mixed on whether they benefit as much as men. Women may face different stressors and barriers to quitting that may be addressed in treatment. These include greater likelihood of depression, greater weight control concerns, hormonal cycles, greater nonpharmacologic motives for smoking (e.g., for socialization), educational differences, and others. This suggests that women may benefit from tobacco dependence treatments that address these issues, although few studies have examined programs targeted at one gender.

Reference:

Fiore MC, Jaén CR, Baker TB; et al. T*reating Tobacco Use and Dependence: 2008 Updat*e. Rockville, MD: US Dept of Health and Human Services; May 2008

Helping Benefit Oregon Smokers Collaborative

Aetna Inc.
Thomas Bookman
Senior Sales Executive

Debbie Porter
Account Manager

American Lung Association
Tiffany Danielson
Natalie Chau
Programs Intern

Colleen Hermann-Franzen
Tobacco Program Manager

Beverly Stewart, CHES, AE-C
Lung Health Manager

CIGNA Healthcare
Bennett Kong
Director, Provider Network Management

Free & Clear, Inc.
Melanie Davis
Client Services Manager

Kara Nielsen
Client Services Manager

Kaiser Permanente Northwest
Julia W. Causey, MPH
Health Promotion Manager

Thomas Syltebo, MD
Internal Medicine Physician

Jeffrey Fellows, PhD
Investigator, Kaiser Permanente Center for Health Research

LifeWise Health Plan of Oregon
Liz Stewart, RN, CPHQ
Manager, Quality Program

Metropolitan Group
Lee Collinge
Jennifer Messenger Heilbronner

The ODS Companies
Charity Kreider, MPH
Health Promotion & Quality Improvement Specialist

Csaba Mera, MD
Vice President and Medical Director

Oregon Coalition of Health Care Purchasers
Barbara Prowe
Executive Director

Oregon Division of Medical Assistance Programs
Susan E. Good, BS, RN
Disease Management/Prevention Coordinator
Division of Medical Assistance Programs

Oregon Health Authority
Katrina Hedberg, MD, MPH
Interim State Epidemiologist
Administrator, Office of Disease Prevention and Epidemiology

Oregon Health & Science University
Dan Forbes
Director, Total Rewards
Oregon Health & Science University

David Gonzales, PhD
Co-Director, Smoking Cessation Center

Oregon Tobacco Prevention & Education Program
Sarah Bartelmann, MPH
Quitline Coordinator

Karen Girard, MPA
Health Promotion Manager

PacificSource Health Plans
Lauren Whyte
Wellness Specialist

PAC/WEST
Jonathan Eames
Senior Vice President of Government Affairs

Pfizer, Inc.
Leslie Fox
Alliance Development Manager

Providence Health Plans
Tracy Scharn, MPH
QI Project Manager, Quality Medical Management

Regence BlueCross BlueShield of Oregon
Jim M Shaub
Regence Wellness, Health Care Services

Tobacco-Free Coalition of Oregon
Brett Hamilton, MPA
Executive Director

Chuck Tauman
President

UnitedHealthcare
Roger Muller, MD, FACEP
Market Medical Director, Pacific NW Region
(OR, WA, AK)

USI Northwest
Ty Oliver

HBOS Benefit Recommendations
Endorsements

Tobacco Cessation Pharmacology 2010

Nicotine Replacement Therapy (NRT) and Non-Nicotine Therapies

Nicotine Replacement Therapies

General NRT recommendations: 1) Use sufficient amount to control withdrawal (overdosing is very unlikely; under-dosing is common; 2) Use one patch daily or flexible dosing NRT every few hours to maintain steady state; discontinue smoking before NRT; 3) Combination therapy may be necessary for heavier smokers to control withdrawal. A comprehensive treatment strategy including behavioral modification increases smoking

Therapy Efficacy	**TRANSDERMAL PATCH** (OR = 1.9)* Nicoderm CQ®, Generic	**GUM** (OR = 1.5)* Nicorette®, Generic	**LOZENGE** (OR = 1.95 (2 mg); 2.76 (4mg)*) Commit®, Generic	**INHALER** (OR = 2.5)* Nicotrol® Inhaler	**NASAL SPRAY** (OR = 2.7)* Nicotrol® NS
Length of Treatment	8-10 weeks	Up to 12 weeks	12 weeks	3-6 months	3-6 months
Dosing	• More than 10 cigs/day start on 21 mg. patch. • Less than 10 cigs/day, start on 14 mg. patch. • Apply once daily in am on hairless skin on upper body. Rotate sites. • Peak level in 2-8 hr. • 21 mg. x 4-6 wks. • 14 mg. x 2 wks. (or 4-6 wks. if starting dose). • 7 mg. x 2 wks.	• 25 or more cigs/day = 4 mg. • Less than 25 cigs/day = 2 mg. • 1 every 1-2 hrs. x 6 wks. • 1 every 2-4 hrs. x 3wks. • 1 every 4-8 hrs. x 3 wks.. • Peak level in 15-20 min. • Use "chew and park" technique; rotate to different sites in mouth. • Use enough to control symptoms, up to 24 per day.	• 1st cig less than 30 min after waking = 4 mg. • 1st cig more than 30 min after waking = 2mg. • 1 every 1-2 hrs. x 6 wks. • 1 every 2-4 hrs. x 3 wks. • 1 every 4-8 hrs. x 3 wks. • Peak level in 15-20 min. • Dissolve slowly, rotate sites in mouth, DO NOT CHEW. • Use enough to control symptoms, < to 5 in 6 hrs. up to 20 per day.	• 6-16 cartridges per day/ individualized dosing; start at least six per day initially Use enough to control symptoms. • Peak level in 15-20 min. • Puff continuously for 20 minutes. • Inhale into back of throat or puff in short breaths; DO NOT inhale into lungs. • Can use part of cartridge and save rest for later (within 24 hours).	• Dose = one squirt to each nostril. • Peak level in 11-13 min. • Dose 1-2 times each hour as needed. Use enough to control symptoms. • No more than 10 sprays per hour. • Min dose = 8/day. • Max = 40/day. • Use correctly. DO NOT sniff, swallow, or inhale.
Precautions	• Severe uncontrolled eczema or psoriasis. • Recent (< 2 wks) MI. • Serious underlying arrhythmias. • Uncontrolled hypertension. • Serious or worsening angina. • Pregnancy (Category D). • Remove Prior to MRI.	• Recent (< 2 wks) MI. • Serious underlying arrhythmias. • Serious or worsening angina. • TMJ disease. • Pregnancy (Category D). • Do not eat or drink 15 min. prior to use.	• Recent (< 2 wks) MI. • Serious underlying arrhythmias. • Serious or worsening angina. • Pregnancy (Category D). • Do not use more than one at a time or one after the other. • Do not eat or drink 15 min. prior to use.	• Recent (< 2 wks) MI. • Serious underlying arrhythmias. • Serious or worsening angina. • Severe reactive airway disease. • Pregnancy (Category D). • Do not eat or drink 15 min. prior to use. • Do not drive until 5 min after use.	• Recent (< 2 wks) MI. • Serious underlying arrhythmias. • Uncontrolled hypertension. • Serious or worsening angina. • Pregnancy (Category D). • Severe reactive airway disease. • Severe nasal disorder.
Advantages	• Easy to use; better compliance. • Steady dose (even when sleeping). • Can combine with flexible dosing NRT.	• Flexible dosing. • Helps with predictable urges (e.g. after meals). • Keeps mouth busy. • Use in combination with patch and for relapse prevention.	• Flexible dosing. • Helps with predictable urges (e.g. after meals). • Keeps mouth busy. • Use in combination with patch and for relapse prevention	• Flexible dosing. • Helps with predictable urges (e.g. after meals.) • Keeps hands and mouth busy. • Use in combination with patch and for relapse prevention.	• Flexible dosing. • Helps with predictable urges (e.g. after meals). • Use in combination with patch and for relapse prevention.
Adverse Effects	• May irritate skin. • May disturb sleep (remove at night if needed). • Can't adjust dose.	• May cause nausea, hiccups, coughing, heartburn, headache, flatulence. • May stick to dental work.	• May cause insomnia. • May cause some nausea, hiccups, heartburn, coughing, headache, flatulence.	• May irritate mouth and throat (improves with use). • Does not work well below 40 degrees.	• Need to use correctly (DO NOT INHALE). • Nasal irritation is common. • May cause dependence. • Keep off eyes, skin, mouth.
Availability	Over-the-counter	Over-the-counter original, cinnamon, fruit, mint, orange	Over-the-counter (orig, cherry, mint)	Prescription	Prescription
Cost per day Av. wholesale	42 $2.13 (generic)	$3.60 (8 pieces/day) $2.64 (8 pieces/day generic)	$4.00 (8 pieces/day)	$7.04 (6 per day)	$15.77 (8 per day)

* Odds ratio (OR) = odds of remaining abstinent after 6 months compared to placebo

OHSU Smoking

Non-Nicotine Medications

Therapy Efficacy	**BUPROPION SR 150 mg.** (OR = 2.1)* Zyban®/Wellbutrin®	**VARENICLINE** (OR = 3.68)* Chantix®	**For all medications**
Length of Treatment	• 7-12 weeks. • May take up to 6 months of total therapy to prevent relapse.	• 12 weeks. • If quit at 12 weeks may take for additional 12 weeks to prevent relapse.	• Patients should continue on bupropion or varenicline even if not successfully quit at first. Research shows that up to 8 weeks may be needed to fully quit. • NRT patients should discontinue therapy if not quit after 4 weeks, but may attempt NRT again for subsequent quit attempts. • Symptoms or history of substance use and/or depression reduce success in quitting. Recommend treating these conditions first whenever possible before beginning tobacco dependence treatment. • Women metabolize nicotine more rapidly than men especially when pregnant women and on birth control. NRT dose may need to be adjusted upward to increase efficacy. • For complete prescribing instructions, please refer to the manufacturers' package inserts.
Dosing	• 7-day up titration prior to quitting. • Days 1-3; 150 mg tablet each am. • Days 4-end; 150 mg tablet am and pm. • Doses should be > 8 hours apart. • Dose not adjusted by # cigs smoked per day. • May be combined with NRT.	• 7-day up titration prior to quitting. • Days 1-3; .5 mg. white tablet per day. • Days 4-7; .5 mg. white tablet twice per day, am and pm. • Days 8 to end of treatment; 1.0 mg light blue tablet twice per day. • Take after eating with full glass of water. • Doses should be > 8 hrs apart. • Dose not adjusted by # cigs smoked per day.	
Precautions	• Can cause including changes in behavior, hostility, agitation, depressed mood, suicidal thoughts and behavior, and attempted suicide (Black Box Warning). • Seizure disorder. • Severe hepatic cirrhosis or heavy drinking. • Anorexia or bulimia (current or prior). • Monoamine oxidase inhibitor previous 14 days.	• Can cause including changes in behavior, hostility, agitation, depressed mood, suicidal thoughts and behavior, and attempted suicide (Black Box Warning). • Dosage adjustment necessary for patients with severe renal impairment. • Not recommended for combination therapy with NRT. • Not tested in children or pregnant women.	
Advantages	• Easy to use. • Reduces urge to smoke.	• Easy to use. • Reduces urge to smoke + satisfaction from smoking.	
Adverse Effects	• May disturb sleep. • May cause dry mouth. • Nervousness. • Difficulty concentrating. • Sleep disturbances. May take second dose earlier in the day.	• Nausea in up to 1/3 of patients. May reduce dose to 0.5 mg twice per day. • Sleep disturbances and abnormal dreams. May take second dose earlier in the day. • Flatulence.	
Availability	Prescription	Prescription	
Cost per day (Average wholesale)	$7.10 (Zyban®) $7.11 (Wellbutrin®) $3.87 (generic)	$4.39	

* Odds ratio (OR) = odds of remaining abstinent after 6 months compared to placebo

OHSU Smoking

Inside back cover

Address and logo?
here