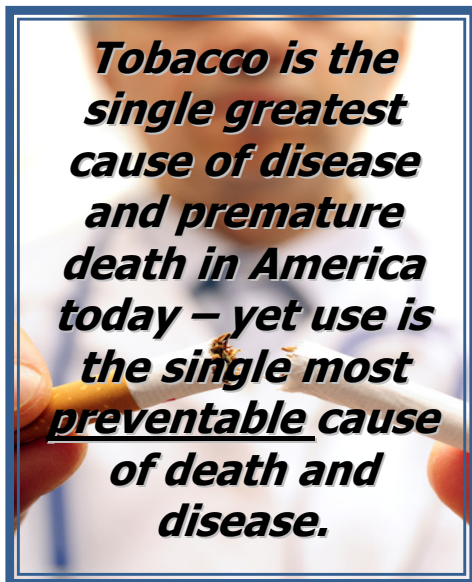


# CLINICAL SNAPSHOT - TOBACCO USE AND CESSATION

## WHAT IS TOBACCO USE?

Tobacco is a plant grown for its leaves, which are smoked, chewed, or sniffed for a variety of effects. It is considered an addictive substance because it contains the chemical nicotine. In addition to nicotine, tobacco contains over 19 known cancer-causing chemicals (most are collectively known as "tar") and more than 4,000 other chemicals. These include acetone, ammonia, carbon monoxide, cyanide, methane, propane, and butane.

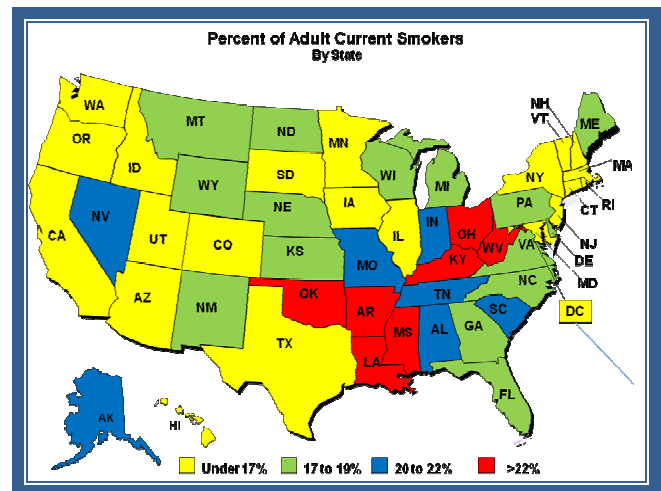
Tobacco use includes cigarette smoking, cigar smoking, pipe smoking, and smokeless tobacco. While the number of smokers in the United States has dropped over recent years, the number of smokeless tobacco users has steadily risen. Smokeless tobacco is also a health concern and carries many of the same health risks as cigarettes.



## PREVALENCE OF TOBACCO USE

Tobacco is the single greatest cause of disease and premature death in America today and is responsible for more than 435,000 deaths each year. Nearly 20% of adult Americans currently smoke, and 4,000 children and adolescents become regular users of tobacco every day.<sup>2</sup> Yet, tobacco use is the single most preventable cause of death and disease in the United States.

According to the 2009 Behavioral Risk Factor Surveillance System survey, 17.9% of adults are current smokers. The map that follows shows 2009 rates by state.<sup>3</sup>



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## COSTS OF TOBACCO USE

Not only is tobacco use the leading preventable cause of death in the United States, it exacts a heavy economic burden. For example, the National Institute on Drug Abuse reported that the total direct and indirect costs attributable to smoking annually amount to more than \$193 billion per year. An even higher estimate of costs came from the Centers for Disease Control and Prevention (CDC). For the years 2000-2004, the CDC estimated that smoking accounted for over \$96 billion in direct expenses annually for ambulatory care, hospitalizations, prescription drugs, nursing home and other care. The agency attributed another almost \$97 billion to lost productivity related to smoking. More than \$20 billion of Medicare expenditures are related to smoking each year.

## COMPLICATIONS OF TOBACCO USE

When used over a long period, tobacco and related chemicals such as tar and nicotine can increase the risk of many health problems:<sup>1</sup>

- Blood clots and aneurysms in the brain, which can lead to strokes
- Blood clots in the legs, which may travel to the lungs
- Coronary artery disease, including angina and heart attacks
- High blood pressure
- Poor blood supply to the legs
- Problems with erections because of decreased blood flow into the penis
- Cancer (especially in the lung, mouth, larynx, esophagus, bladder, kidney, pancreas, and cervix)
- Poor wound healing, especially after surgery

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- Lung problems such as emphysema and chronic bronchitis, or asthma that is harder to control
- Problems during pregnancy, such as babies born at low birth weight, premature labor, miscarriage, and cleft lip
- Decreased ability to taste and smell
- Harm to sperm, which contributes to infertility
- Loss of sight due to an increased risk of macular degeneration
- Tooth and gum diseases
- Wrinkling of the skin

3. Sudden and severe reactions, including those involving the eye, nose, throat, and lower respiratory tract

Smokers who switch to smokeless tobacco instead of quitting tobacco completely still carry a number of health risks:

- Increased risk of mouth or nasal cancer
- Gum problems, tooth wear, and cavities
- Worsening high blood pressure and angina

## PREVENTION

### Public Health Service Guideline

This guideline, updated May 2008, identifies ten key findings clinicians should use concerning tobacco use and cessation.<sup>7</sup>

Those who are regularly around the smoke of others (secondhand smoke) have a higher risk of:<sup>1</sup>

1. Heart attacks and heart disease
2. Lung cancer

<b>Tobacco Cessation Summary Guideline Findings</b>	
1.	Tobacco dependence is a chronic disease that often requires repeated intervention and multiple attempts to quit. Effective treatments exist, however, that can significantly increase rates of long-term abstinence.
2.	It is essential that clinicians and health care delivery systems consistently identify and document tobacco use status and treat every tobacco user seen in a health care setting.
3.	Tobacco dependence treatments are effective across a broad range of populations. Clinicians should encourage every patient willing to make a quit attempt to use the counseling treatments and recommended medications.
4.	Brief tobacco dependence treatment is effective. Clinicians should offer every patient who uses tobacco at least the brief treatments shown to be effective in the Guideline.
5.	Individual, group, and telephone counseling are effective, and their effectiveness increases with treatment intensity. Two components of counseling are especially effective, and clinicians should use these when counseling patients making a quit attempt: <ul style="list-style-type: none"> <li>• Practical counseling (problem solving/skills training)</li> <li>• Social support delivered as part of treatment</li> </ul>
6.	Numerous effective medications are available for tobacco dependence, and clinicians should encourage their use by all patients attempting to quit smoking—except when medically contraindicated or with specific populations for which there is insufficient evidence of effectiveness (i.e., pregnant women, smokeless tobacco users, light smokers, and adolescents).
7.	Counseling and medication are effective when used by themselves for treating tobacco dependence. The combination of counseling and medication, however, is more effective than either alone. Thus, clinicians should encourage all individuals making a quit attempt to use both counseling and medication.
8.	Telephone quit line counseling is effective with diverse populations and has broad reach. Therefore, both clinicians and health care delivery systems should ensure patient access to quit lines and promote quit line use.
9.	If a tobacco user currently is unwilling to make a quit attempt, clinicians should use motivational treatments shown to be effective in increasing future quit attempts.
10.	Tobacco dependence treatments are both clinically effective and highly cost-effective relative to interventions for other clinical disorders. Providing coverage for these treatments increases quit rates. Insurers and purchasers should ensure that all insurance plans include the counseling and medication identified as effective as covered benefits.

# CLINICAL SNAPSHOT - TOBACCO USE AND CESSATION

The Public Health Service clinical practice guideline is based on the wealth of information available about tobacco cessation and the clinical trials and efforts aimed at different populations. Various meta-analysis of these studies indicated that self-help strategies alone generally are ineffective, but counseling and pharmacotherapy used either alone or in combination can improve cessation rates.<sup>7</sup>

The guideline was developed by a panel of experts convened by a consortium of Federal and non-Federal partners. Updated May 2008, the guideline contains evidence-based information on first-line pharmacologic therapies and counseling to help patients quit using tobacco. The guideline advocates that brief advice by medical providers can provide a successful intervention. Successful intervention begins with identifying users and appropriate interventions based upon the patient's willingness to quit. The guideline outlines five steps, called the "5 A's" that physicians can use for a brief intervention in treating tobacco use and dependence:

- **Ask:** Identify and document tobacco use status for every patient at every visit.
- **Advise:** In a clear, strong, and personalized manner, urge every tobacco user to quit.
- **Assess:** Is the tobacco user willing to make a quit attempt at this time?
- **Assist:** For the patient willing to make a quit attempt, offer medication and provide or refer for counseling or additional treatment to help the patient quit. For patients unwilling to quit at the time, provide interventions designed to increase future quit attempts.
- **Arrange:** For the patient willing to make a quit attempt, arrange for follow-up contacts, beginning within the first week after the quit date. For patients unwilling to make a quit attempt at the time, address tobacco dependence and willingness to quit at the next clinical visit.

## **Tobacco Cessation Pharmacotherapy**

The guideline lists a number of the first-line medications found to be safe and effective for tobacco dependence treatment which has been approved by the FDA:

- Bupropion SR
- Nicotine gum
- Nicotine lozenge
- Nicotine inhaler
- Nicotine nasal spray
- Nicotine patch

- Varenicline

Two second-line pharmacotherapies were also identified as efficacious and may be considered by clinicians if first-line pharmacotherapies are not effective:

- Clonidine
- Nortriptyline<sup>2,7</sup>

## **CMS QUALITY IMPROVEMENT PRIORITY: TOBACCO CESSATION AMONG ADULT PATIENTS WHO SMOKE**

Recently, there has been an increased focus on tobacco cessation at the federal level. Efforts to improve smoking cessation have been addressed in the Affordable Care Act of 2010. In November 2010, the Department of Health and Human Services (DHHS) wrote a strategic action plan for ending the tobacco epidemic that outlines their plans to implement policies covering tobacco cessation. Also, CDC plans to continue with tobacco use as one of their primary areas of focus for the Healthy People 2020 initiative.

The main objective of the current CMS tobacco cessation initiative is to ensure periodic screening of tobacco use and tobacco cessation counseling for all patients who smoke. Healthcare providers are targeted to increase the number of patients screened for tobacco use and for tobacco cessation counseling. In meeting these objectives, QIOs will need to incorporate quality improvement initiatives through physician offices that target the reduction of incidence of tobacco related illnesses. For those over the age of 65, smoking cessation in smokers can reduce the risk of myocardial infarction, death from coronary heart disease, COPD, and lung cancer and decrease their risk of osteoporosis

## **CURRENT CESSATION PERFORMANCE LEVELS**

The American Lung Association estimated in 2009 that approximately 49.9 million adults were former smokers. Of the 46.6 million current adult smokers, 46.7 percent stopped smoking at least 1 day in the preceding year because they were trying to quit smoking completely.<sup>9</sup>

Approximately 70 percent of smokers see a physician each year, creating the potential to reach large numbers of smokers. Thus, the healthcare system is recognized as a productive means of reaching smokers with a cessation message and promoting their successful quitting.<sup>10</sup>

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## EXPANDED MEDICARE COVERAGE

Under the Affordable Care Act, CMS is expanding Medicare coverage of evidence-based tobacco cessation since the beginning of 2011. This means all Medicare patients who use tobacco can receive tobacco cessation counseling from a qualified physician or other Medicare recognized practitioner. Previous Medicare policy covered tobacco counseling only for individuals diagnosed with a recognized tobacco-related disease.<sup>8</sup> The physician can bill for counseling that is more than three minutes and this can include up to eight sessions per patient per year, depending on how the counseling is constructed.<sup>11</sup>

## OTHER RESOURCES

A number of materials and resources are available to providers wanting to help smokers quit. One such resource is the National Network of Tobacco Cessation Quitlines with easy access to state quitline services through a toll-free number (1-800-QUIT-NOW). All 50 states, DC and the five territories offer some degree of quitline service. States should also have other available resources as part of the Master Settlement Agreement between the State Attorneys General and the tobacco industry. On a national level, other resource materials are available from such organizations as the American Cancer Society (ACS), the National Cancer Institute (NCI), the American Lung Association, the American Medical Association (AMA) and the Centers for Disease Control and Prevention (CDC).

## FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

(Insert your QIO Contact Information here)

Quality Measure	Criterion Met or Acceptable Alternative
Percentage of patients who were queried about tobacco use one or more times during the two-year measurement period.	<ol style="list-style-type: none"> <li>1. Adoption of care management process as assessed by practice system survey</li> <li>2. Ability to export data to QIO Data Warehouse on an ongoing basis*</li> </ol>
Percentage of patients identified as tobacco users who received cessation intervention during the two-year measurement period.	<ol style="list-style-type: none"> <li>3. Adoption of care management process as assessed by practice system survey</li> <li>4. Ability to export data to QIO Data Warehouse on an ongoing basis*</li> </ol>

\*Can be selected as one of the three PQRI/PQRS measures.

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