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**Assessment, Diagnosis, and  
Pharmacotherapy:**

**Integrating Tobacco Use Interventions into  
Chemical Dependence Services**

**Participant Manual  
Module 2**



**PROFESSIONAL DEVELOPMENT PROGRAM**  
**ROCKEFELLER COLLEGE** UNIVERSITY AT ALBANY State University of New York

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## About This Training

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### **PDP Background**

Since its founding in 1976, the Professional Development Program (PDP) has been committed to making extended learning and public engagement a reality for the public service and not-for-profit workforces through its ongoing education and training programs. The mission of the Professional Development Program is to make a difference in a changing world by linking the learning, applied research, and evaluation resources of the university with the continuing professional education needs of the public service.

Over the past 30 years, PDP has had a wide variety of partners and has secured funding in excess of \$350 million to help organizations meet their workforce development needs. Programs and services offered by PDP include:

- Child Welfare Training
- Computer Training Services
- HIV/AIDS Training Center
- Instructional Technologies
- Temporary Assistance Training
- Tobacco Interventions Project
- Media Production Department

For further information on the programs and services offered by the Professional Development Program, contact us at:

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## About This Training, Continued

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### **About the New York Tobacco Control Program**

The New York Tobacco Control Program, located at the New York State Department of Health, envisions all New Yorkers living in a tobacco free society and works aggressively to reduce the morbidity and mortality, and alleviate the social and economic burden caused by tobacco use in New York State.

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### **About the Tobacco Interventions Project**

In August 2007, the New York Tobacco Control Program, in collaboration with the New York State Office of Alcoholism and Substance Abuse Services (OASAS), released a Request for Applications entitled *Integrating Tobacco Use Interventions into New York State Chemical Dependency Services*.

In January 2008, this contract was awarded to PDP to serve as the Development, Management, and Oversight Agency (DMOA). PDP oversaw the six Regional Technical Assistance and Training Centers (RTATC) across the state, and developed all classroom-based training curricula, web-based learning, technical assistance tools, and the Tobacco Recovery Resource Exchange website. Classroom training and technical assistance was completed in December 2009, and online training was continued.

The Tobacco Interventions Project provided training and technical assistance to all OASAS-funded and/or certified chemical dependence service providers to help integrate tobacco use interventions (tobacco-free environment policies, tobacco education, and tobacco dependence treatment) into existing treatment protocols.

Visit our web site [www.tobaccorecovery.org](http://www.tobaccorecovery.org) for online learning and other resources.

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## About This Training, Continued

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**Tobacco Use:  
A Serious  
Public Health  
Problem**

Tobacco use is a serious public health problem. Tobacco use is the most preventable cause of death in the United States. Over 440,000 Americans die each year from tobacco-related disease. Cigarette use alone results in 25,500 deaths in New York State.

People who breathe in secondhand smoke also suffer adverse health consequences. In June 2006, the US Surgeon General issued a comprehensive scientific report, which concluded that there is no safe level of exposure to secondhand smoke (US Surgeon General, 2006). In 1993 and 2006, the US Environmental Protection Agency (EPA) concluded that environmental tobacco smoke (ETS) is responsible for approximately 3,000 lung cancer deaths annually among adult U.S. nonsmokers, and contributes to the risk of heart disease. Furthermore, in infants and young children, ETS exposure causes:

- An increased risk of lower respiratory tract infections such as bronchitis and pneumonia. EPA estimates that 150,000 to 300,000 cases annually in infants and young children up to 18 months are attributable to ETS.
- An increased prevalence of fluid in the middle ear, symptoms of upper respiratory tract irritation, and small reductions in lung function.
- Additional episodes and increased severity of symptoms in children with asthma. EPA estimates that up to 1 million asthmatic children have their condition worsened by exposure to ETS.

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## About This Training, Continued

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### **The Cost of Tobacco Use**

Tobacco use is also a costly problem. Research has clearly shown that the annual health care costs in New York directly caused by smoking total \$8.17 billion, with \$5.41 billion covered by New York Medicaid funding (Centers for Disease Control and Prevention [CDC], 2008). The state and federal tax burden to New York State amounts to \$842 per household annually for government expenditures that are related to tobacco use (Campaign for Tobacco-Free Kids, 2008).

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### **Tobacco Use and Chemical Dependence**

Nationally, approximately 19.8% of all adults use tobacco (CDC, 2009). This is a decline over the past 5 years from a tobacco use rate of over 21%. People with substance use and co-occurring mental disorders, more than other populations, are likely to be addicted to tobacco. Historically, chemical dependence treatment agencies have not treated tobacco dependence concurrently with other chemical dependencies.

Among people with drug or alcohol problems, the rate of tobacco use ranges from 75% to 100% (Campbell et al., 1998).

People with substance use disorders who smoke are much more likely to die from their tobacco use than from their drug or alcohol addiction (Hurt et al., 1996; Hser, 2001).

Until recently, many chemical dependence treatment agencies have not addressed patient tobacco use. Some agencies have expressed concern that patients who are denied access to tobacco may choose to leave treatment. Other agencies have been unsure how to institute a tobacco use policy, or how staff would react.

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## About This Training, Continued

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### Addressing the Issue

Current research shows that many staff and patients are in favor of tobacco abstinence. Tobacco abstinence is also associated with improved treatment completion rates, and post-treatment alcohol and other drug abstinence (Prochaska et al., 2004). Tobacco relapse is shown to trigger relapse into alcohol and other drug use and vice versa (Stuyt, 1997; Sobell et al., 1995), an issue also noted by early pioneers of the treatment for alcohol and narcotic dependence (White, 1998).

Tobacco dependence is chemical dependence and addiction service providers already possess much of the essential knowledge and many of the skills necessary to incorporate tobacco use interventions into chemical dependence services.

This training and technical assistance initiative was designed to help agencies use a multidisciplinary approach to integrate tobacco interventions into chemical dependence agencies. PDP supported OASAS certified and/or funded agencies as they addressed tobacco dependence treatment and recovery.

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### Project Goals

- Create and maintain a tobacco-free environment in buildings, vehicles, and on the grounds of chemical dependence service programs
  - Integrate tobacco use interventions into chemical dependence services
-

## Overview of the Training Modules

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**Modules and  
Topics**

**Module 1 - The Foundation**

Attitudes and Beliefs  
History and Rationale  
Tobacco Dependence  
OASAS Regulation Part 856

**Module 2 - Assessment, Diagnosis, and Pharmacotherapy**

Assessment, Screening, and Diagnosis  
Stages of Change and Readiness to Change  
Pharmacotherapy  
Case-based Applications

**Module 3 - Behavioral Interventions**

Counseling Techniques  
Facilitating a Tobacco Awareness Group

**Module 4 - Treatment Planning**

Treatment Plan Components  
Writing a Treatment Plan and Case Study

**Module 5 - Co-occurring Disorders**

Attitudes and Beliefs, Challenges and Barriers  
Prevalence and Basic Neurobiology  
Treatment Strategy Review and Case Studies

**E-Learning - All Modules ([www.tobaccorecovery.org](http://www.tobaccorecovery.org))**

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## Module 2 Agenda and Objectives

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- Module 2  
Agenda**
- Screening and Assessment
  - Stage of Change and Readiness to Change
  - Diagnosing Tobacco Dependence and Nicotine Withdrawal
  - Tobacco Treatment Medications
  - Case Studies
- 

- Module 2  
Objectives**
- Identify two tobacco dependence screening tools
  - Identify three domains where tobacco-use assessment questions should be an integral part of the assessment process
  - Identify four Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) criteria that apply to the diagnosis of tobacco dependence and tobacco withdrawal
  - Identify the stages of the Transtheoretical Model (Stages of Change)
  - Explain how to measure patient carbon monoxide (CO) levels using a CO monitor
  - Identify three first-line nicotine replacement therapy (NRT) medications
  - Identify two first-line non-nicotine medications
  - Identify five populations for whom the use of tobacco treatment medications are effective
  - Identify two medical contraindications against using NRT
  - Identify tobacco dependence and nicotine withdrawal using a case study
  - Identify a patient's stage of change for stopping tobacco use by using a case study
  - Make tobacco treatment medication recommendations using a case study
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## Unit 1

### Assessment and Diagnosis

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**Purpose** Provides participants with an opportunity to examine several tobacco use screening and assessment tools that can easily be integrated into existing protocols for diagnosing tobacco dependence and identifying the stage of change readiness.

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- Objectives**
- Identify two tobacco dependence screening tools
  - Identify three domains where tobacco-use assessment questions should be an integral part of the assessment process
  - Identify four Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) criteria that apply to the diagnosis of tobacco dependence and tobacco withdrawal
  - Identify the stages of the Transtheoretical Model (Stages of Change)
  - Explain how to measure patient carbon monoxide (CO) levels using a CO monitor
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## The Basics of Tobacco Use Screening and Assessment

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### **Tobacco Dependence**

Tobacco dependence is a chronic, biopsychosocial disease characterized by persistent use, inability to limit or control use, withdrawal symptoms when use is stopped abruptly, frequent relapse after attempts at abstinence, and continued use despite knowledge of serious physical and psychological consequences.

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### **Importance of Tobacco Screening and Assessment**

Efficient, organized, and comprehensive assessment of all substance use disorders is essential for clinical diagnosis, treatment planning, and referral to supportive services. The initial assessment is completed as part of the intake process and revisited many times during the patient's involvement in treatment.

Regardless of the assessment tools that your program uses, OASAS Regulation Part 856 requires that all patients be screened and assessed for tobacco use and dependence in order for treatment to be made available to patients who use tobacco.

Assessment is not static; throughout your work with patients it is important to capture all tobacco-related information, and to tailor treatment interventions to specific problems and the patient's stage of change.

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## The Basics of Tobacco Use Screening and Assessment, Continued

### The 5 A's

Public health and primary care professionals use a brief intervention approach that uses the following strategy:

- Ask
- Advise
- Assess
- Assist
- Arrange

### Dose-Response to Interventions

Regardless of the intervention method that is used, there is a “dose-response” effect for patients receiving repeated interventions. The more clinicians ask about tobacco use and advise people to become abstinent, the more likely a patient will move towards making a change. Also, the more evidence-based treatment methods a clinician uses to help a patient become abstinent from tobacco, the more likely it is that the patient will succeed.

### Reframing Language

<u>Public Health/Primary Care Terminology</u>	<u>Addiction Treatment/Recovery Terminology</u>
smoking	tobacco use, dose
smoker	tobacco user
quit date	recovery start date
cessation	treatment / recovery

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## The Basics of Tobacco Use Screening and Assessment, Continued

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- Assessment Domains**
- Presenting Problem
  - Family/Living Environment/Social Functioning
  - Educational
  - Employment
  - Medical/Medications
  - Mental Health
  - Alcohol and Other Drug Use
  - Tobacco Use
  - Stage of Change
-

## Tobacco Screening Tools

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### Examples of Tobacco Use Screening Tools

The following are examples of reliable and valid tobacco dependence screening tools.

- Fagerström Test for Nicotine Dependence
- HONC (Hooked On Nicotine Checklist)
- Heaviness of Smoking Index (HSI - Question 1 and 4 of the Fagerström)

A screening tool is useful to quickly identify a potential problem, but cannot confirm or make a diagnosis when used alone. A diagnosis requires a formal assessment of the patient by the clinician, which can include the results of screening tools.

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## Tobacco Screening Tools, Continued

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### Fagerström Test for Nicotine Dependence

These questions can be asked directly by the clinician or given on paper for patient to answer.

1. How soon after you wake up do you smoke your first cigarette?

- After 60 minutes (0)
- 31 - 60 minutes (1)
- 6 - 30 minutes (2)
- Within 5 minutes (3)

2. Do you find it difficult to refrain from smoking in places where it is forbidden?

- No (0)     Yes (1)

3. Which cigarette would you hate most to give up?

- The first in the morning (1)     Any other (0)

4. How many cigarettes per day do you smoke?

- 10 or less (0)
- 11 - 20 (1)
- 21 - 30 (2)
- 31 or more (3)

5. Do you smoke more frequently during the first hours after awakening than during the rest of the day?

- No (0)     Yes (1)

6. Do you smoke even if you are so ill that you are in bed most of the day?

- No (0)     Yes (1)

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## Tobacco Screening Tools, Continued

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### Scoring the Fagerström Test for Nicotine Dependence

#### **To Score**

Add together the points for each answer. Use the scale below to determine the level of dependence on nicotine:

Your level of dependence on nicotine is:

0-2: Very low dependence

3-4: Low dependence

5: Medium dependence

6-7: High dependence

8-10: Very high dependence

**Scores under 5:** “Your level of nicotine dependence is still low. You should act now before your level of dependence increases.”

**Score of 5:** “Your level of nicotine dependence is moderate. If you don’t quit soon, your level of dependence on nicotine will increase and you may become seriously addicted. Act now to end your dependence on nicotine.”

**Score over 7:** “Your level of dependence is high. You aren’t in control of your smoking - it is in control of you! When you make the decision to quit, you may want to talk with your doctor about nicotine replacement therapy or other medications to help you break your addiction.”

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## Tobacco Screening Tools, Continued

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### Heaviness of Smoking Index (HSI) and Scoring Instructions

Two measures from the Fagerström test, the time to first cigarette and the number of cigarettes smoked per day, are sometimes combined into a measure of nicotine dependence called the Heaviness of Smoking Index (HSI). The HSI, like the Fagerström, is a screening tool only, and should not be the ultimate measure of nicotine dependence. Nicotine dependence is diagnosed using the DSM-IV-TR criteria for substance dependence.

The following are Fagerström questions 1 and 4.

1. How soon after you wake up do you smoke your first cigarette?

\_\_\_ Within five minutes (3)

\_\_\_ 5-30 minutes (2)

\_\_\_ 31-60 minutes (1)

\_\_\_ After 60 minutes (0)

2. How many cigarettes a day do you smoke?

\_\_\_ 10 or less (0)

\_\_\_ 11 - 20 (1)

\_\_\_ 21 - 30 (2)

\_\_\_ 31 or more (3)

Add the scores from the two questions together. The level of nicotine dependence is determined as follows:

0-1: Low dependence

2-4: Moderate dependence

5-6: High dependence

If the patient reports both a high level of cigarettes per day usage (1 pack or more) and that he/she does not smoke a cigarette within the first hour of waking, ask the follow-up question:

*Do you sometimes wake up during the night and smoke? If the patient states "yes", follow-up with the question, "How many times a week?"*

If the patient answers "no" they do not wake up in the night to smoke, you may want to ask the patient to describe their morning routine. Oftentimes there is something or someone that prohibits the person from smoking in the first hour of the day (i.e., getting children ready for school and won't smoke in front of children. Or a spouse/partner won't allow them to smoke in the house and the first cigarette is not smoked until the person leaves the house.)

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**Tobacco Screening Tools, Continued**

**The Hooked on Nicotine Checklist**

	<b>NO</b>	<b>YES</b>
1. Have you ever tried to quit, but couldn't?		
2. Do you smoke <u>now</u> because it is really hard to quit?		
3. Have you ever felt like you were addicted to tobacco?		
4. Do you ever have strong cravings to smoke?		
5. Have you ever felt like you really needed a cigarette?		
6. Is it hard to keep from smoking in places where you are not supposed to?		
When you haven't used tobacco for a while ... OR When you tried to stop smoking ...		
7. Did you find it hard to concentrate because you couldn't smoke?		
8. Did you feel more irritable because you couldn't smoke?		
9. Did you feel a strong need or urge to smoke?		
10. Did you feel nervous, restless or anxious because you couldn't smoke?		

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## Tobacco Screening Tools, Continued

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### Hooked on Nicotine Checklist Scoring

The HONC is scored by counting the number of YES responses.

**Dichotomous Scoring** - The HONC is an indicator of diminished autonomy.

- Individuals who score a zero (0) on the HONC by answering “No” to all ten questions enjoy full autonomy over their use of tobacco.
- Because each of the ten symptoms measured by the HONC has face validity as an indicator of diminished autonomy, a smoker has lost full autonomy if any symptom is endorsed (checked).
- In schools and clinics, smokers who have scores above zero can be told that they are already hooked.

**Continuous Scoring**- The HONC is a measure of severity of diminished autonomy.

- The number of symptoms a person endorses serves as a measure of the extent to which autonomy has been lost.
-

## Using a Carbon Monoxide (CO) Monitor

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### **Carbon Dioxide and Carbon Monoxide**

Normally we breathe in air, which includes oxygen, and the oxygen attaches to the hemoglobin in our blood. The blood in our lungs also releases carbon dioxide (CO<sub>2</sub>), which we exhale.

Carbon monoxide is an odorless, colorless, tasteless and toxic gas. Carbon monoxide enters the blood from the lungs and attaches to hemoglobin, blocking the blood's ability to carry oxygen to body cells. Smoking tobacco (or cannabis) increases the CO content of your blood.

When the level of CO in your blood increases, the ability of your blood to carry oxygen is decreased. CO is harmful to your body and in large doses, it will cause death. Long-term exposure at lower levels leads to heart disease.

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### **CO Monitors**

A CO monitor measures the level of CO in the person's blood. When you measure a patient's CO level, you are giving them what is known as bio-marker feedback; similar to a blood pressure test or a cholesterol test.

Important Points:

- There are environmental sources that can also raise CO levels, such as prolonged exposure to incinerator smoke, car or gas furnaces exhaust, or prolonged exposure in an enclosed area to secondhand smoke.
  - CO levels will also be elevated for patients who use cannabis. They may have high elevations, even if they smoke only once a day or every other day, due to holding the smoke in their lungs for long periods.
  - CO levels tend to be elevated for people with COPD, emphysema, and medical conditions affecting oxygen levels, even if they do not smoke.
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## Using a Carbon Monoxide (CO) Monitor, Continued

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### **Benefits of CO Monitoring**

- CO monitoring provides immediate and direct feedback. Seeing positive results of behavior change is reinforcing. Just like a visual report of a lower blood pressure reading or a lower cholesterol reading is positive reinforcement for person who has taken steps to reduce cholesterol or blood pressure, a lower CO level reinforces reductions in tobacco use.
- CO monitoring provides an immediate measure of success. Other than saving money, there are not immediate benefits that the patient can see. Improved health and wellness will definitely appear over time, but giving your patient immediate, concrete feedback that they are experiencing the benefits of tobacco recovery is rewarding and reinforcing.
- Research indicates that many people underreport the level of their tobacco use. If a person reports that they use a pack a day and they really use two packs a day, the CO monitor will indicate a higher level of CO.
- CO levels can be interpreted as follows: 0-6 ppm, not smoking; 7-10 ppm light smoking; 11-20 ppm, medium smoking; 21+ ppm, heavy smoking. Patients can expect CO levels to drop up to 50 percent after each day of continuous abstinence.

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## Using a Carbon Monoxide (CO) Monitor, Continued

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### Attempting to “Beat” the CO Monitor

- CO leaves the body rapidly (6-hour half-life), and the monitor will only detect CO exposure from the last 24 to 48 hours. While it is possible to “beat the monitor” by smoking and offer some explanation for an elevated CO level or claim ignorance and lie about having smoked, most tobacco users cannot consistently beat the monitor.
  - Claiming an elevated CO level is from some other source could be true. The best way to address this is by asking lots of questions about the alleged exposure. For example, if secondhand smoke is the alleged cause, this type of exposure must be prolonged and intense to elevate CO levels. Standing next to a person who is smoking, even for many minutes is not likely to elevate CO levels. However, exposure in an enclosed environment, like a car or room, might elevate CO levels, if all the windows were closed.
  - A patient who purposefully fails to perform the test correctly (e.g., providing a poor breath sample, not providing a good seal on the mouthpiece, or blowing across and not through the mouth piece) can show low CO scores. Most CO monitor administrators can tell when a patient is not cooperating and can re-test. Clinicians can also usually tell when someone is not being truthful or not cooperating with the test.
  - Remember you are testing CO and not nicotine. This means that NRTs will not affect the test result. Cannabis smoke will provide an elevated CO level. Cannabis use often results in high CO levels because of the way it is smoked (inhaled deeply and held in the lungs).
  - (Bedfont USA Inc, [www.bedfontusa.com](http://www.bedfontusa.com))
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## Stages of Change

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### Stages of Change

The Transtheoretical Model of Change (TTM) or Stages of Change (SOC) suggests that people change their behavior gradually, from a stage of being uninterested, unaware, or unwilling to change (precontemplation), to considering or deciding on making a change (contemplation), to preparing to make a change (preparation), to making an effort to change (action), to maintaining the new behavior (maintenance). Relapses are common and are part of the process of working toward life-long change.

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### Benefits of Stage of Change Model

The Transtheoretical Model (TTM) or Stages of Change was developed in the early 1980's by Prochaska and DiClemente (1983, 1984) when they were studying how people who smoked were able to stop smoking. While it is not the only behavioral change model, the TTM:

- Incorporates useful aspects from other behavior change models including the Health Belief Model and the Locus of Control Model (see Appendix for additional details)
  - Is easily understood and applied
  - Incorporates many engagement recommendations for each stage
  - Enables clinicians to “start where the patient is”
  - Rests on the understanding that change is a gradual process that may require incremental efforts over time
  - Is used widely in the fields of HIV/AIDS, chemical dependence counseling, psychology, and social work
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## Stages of Change, Continued

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### Stages of Change and Smoking

In 1996, the American Psychiatric Association released the following statistics:

- Approximately 40% of people who smoke are in the precontemplation stage of change
  - Another 40% of people who smoke are in the contemplation stage of change
  - About 20% of people who smoke are in either the preparation or the early action stages of change
- 

### Pre-contemplation

During this stage, the patient is not thinking about changing, sees no need to change, and/or is not interested in any kind of help. People in this stage tend to defend their current behavior and do not feel it is a problem. They may be defensive in the face of other people's efforts to pressure them to quit.

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### Contemplation

In this stage, people weigh the pros and cons of stopping or modifying their problem behavior. They think about the negative aspects of their behavior and the positives associated with change (stopping use, reducing use, etc.). They may doubt that the long-term benefits associated with quitting will outweigh the short-term costs.

This stage is typically characterized by ambivalence (feeling equal about changing and not changing). It is the clinician's task to develop discrepancy; guiding the patient to explore their conflict, and moving the patient toward resolution of the ambivalence. Using motivational interviewing skills, the clinician can help the patient focus on the positive aspects of stopping tobacco use or any other substance of abuse or dependence.

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## Stages of Change, Continued

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**Preparation** The patient demonstrates intention to change and is identifying and evaluating appropriate change strategies. They are gathering information about what they will need to do to change their behavior. At this stage, the patient has the opportunity to identify possible obstacles, and with the help of the clinician, consider alternative strategies, if needed.

The positive momentum that characterizes the preparation stage will increase the patient's commitment to change. Developing a solid plan for change enhances the patient's self-efficacy.

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**Action** The patient is actively working to make the change and consciously changing behavior patterns associated with tobacco use. The patient may still identify with tobacco use, but can draw upon the information and education he/she has learned as supportive tools.

The role of the addiction professional is to be supportive, continually seeking commitment to specific behavior changes, to help the patient identify triggers, and to make a plan for dealing with each one identified. It is appropriate for the clinician to make referrals for additional support if necessary.

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**Maintenance** This stage is characterized by successful behavior change over time, and incorporating the change into a sense of self. At this stage, the patient is able to be comfortably abstinent from tobacco use. The role of the addiction professional is to continually help the patient identify, anticipate, and develop coping strategies to deal with relapse triggers.

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## Assessing Readiness, Willingness, and Ability to Change

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### **Stages Vary from Problem to Problem**

A patient's stage of change for their alcohol and other drug use may often be at a different level than their stage of change for their tobacco use.

When you assess tobacco use status, you will obtain information to determine your patient's willingness and readiness to engage in:

- Abstinence
- Reduced use
- Managing withdrawal
- Taking steps to prevent relapse and changing their lifestyle (people, places, and things)

This information helps provide a more complete picture of the patient's readiness to make a change regarding tobacco use.

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## Assessing Readiness, Willingness, and Ability to Change, Continued

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### Willingness, Readiness, and Ability to Change

While assessing the stage of change, it is important to recognize that willingness, readiness, and ability are not the same thing.

- Willingness indicates a desire to change or the recognition of a problem
- Readiness indicates that making a change is important and it is a priority
- Ability indicates confidence, and that the person knows what to do and how to make it happen (self-efficacy)

Each component may vary in intensity. Patients can be willing to make a change, but not ready and/or not able to make a change.

---

### Assessing Tobacco Use and Readiness to Change

Assessing a patient's tobacco use status provides a more complete history of their drug use behavior. Assessing for current or past tobacco use will generally result in six possible responses, and will help the clinician to determine the appropriate treatment methods and interventions to be used.

1. The patient uses tobacco and is not willing to stop using at this time
  2. Uses tobacco and is willing to stop, but is not ready to stop (not a priority) using tobacco at this time
  3. The patient is willing and/or ready, but is not able (lacks confidence, does not know what to do or how to do it, fears failure, etc.)
  4. The patient uses tobacco, and is willing, ready, and able to stop using tobacco at this time
  5. The patient once used tobacco but does not use currently
  6. The patient never used or never regularly used tobacco
- 

### Matching Tobacco Use with Stage of Change

The 2008 Clinical Practice Guideline (Fiore et al., 2008) provides the clinician with simple but effective interventions for all patient groups.

Using the stages of change model to its fullest involves matching intervention approaches to a person's current stage readiness (Prochaska, DiClemente, and Norcross, 1992).

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## DSM-IV-TR Criteria Applied to Tobacco Dependence

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**DSM-IV-TR  
Criteria for  
Substance  
Dependence**

1. Presents with at least three (3) of the following seven (7) criteria:
  2. Tolerance
  3. Withdrawal
  4. Substance used in larger amount or longer than intended
  5. Persistent desire or unsuccessful efforts to cut down or control substance use
  6. Great deal of time spent in substance related activities
  7. Important social, educational, occupational, or recreational activities given up or reduced due to substance use
  8. Substance use continues despite knowledge of physical and psychological consequences related to the use
  9. (American Psychiatric Association, 2000)
- 

**DSM-IV-TR  
Criteria for  
Nicotine  
Dependence  
(Tobacco  
Dependence)**

The seven DSM-IV-TR symptoms for substance dependence are used to diagnose dependence to all substances, including tobacco. There are no additional or special criteria for diagnosing tobacco dependence.

While the DSM-IV-TR uses the term nicotine dependence, tobacco dependence is a better descriptor due to the intense behavioral and psychological patterns that characterize tobacco use. In addition, while nicotine is the addictive substance in tobacco, tobacco smoke is the main cause of tobacco-related diseases.

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## DSM-IV-TR Criteria Applied to Nicotine Withdrawal

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**DSM-IV-TR  
Criteria for  
Nicotine  
Withdrawal  
(292.0)**

The presence of a characteristic syndrome that develops after abrupt cessation of, or reduction in, the use of nicotine-containing products following a prolonged period (at least several weeks) of daily use.

- A. Daily use of nicotine for at least several weeks.
- B. Abrupt cessation of nicotine use, or reduction in the amount of nicotine used, followed within 24 hours by four (or more) of the following signs:
  - 1. dysphoric or depressed mood
  - 2. insomnia
  - 3. irritability, frustration, anger
  - 4. anxiety
  - 5. difficulty concentrating
  - 6. restlessness
  - 7. decreased heart rate
  - 8. increased appetite or weight gain
- C. Symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The symptoms are not due to a general medical condition and are not better accounted for by another mental disorder.

(American Psychiatric Association, 2000)

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## DSM-IV-TR Criteria Applied to Nicotine Withdrawal, Continued

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### **Withdrawal and Cravings**

While “craving” is not identified as a withdrawal symptom in the DSM-IV-TR, many patients describe various aspects of craving when they stop using tobacco or are forced to be abstinent.

Withdrawal management, including cravings, is crucial to engage and retain patients in treatment, and to prevent relapse.

A useful tool for diagnosing nicotine withdrawal is the Minnesota Nicotine Withdrawal Scale (See Appendix). This tool includes a patient’s self-report rating their symptoms using a five-point scale, and an observer’s daily report. The tool allows one to measure observable withdrawal severity over time.

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### **Why No Diagnosis for Nicotine Abuse or Nicotine Intoxication?**

It is important for clinicians to know that there is no DSM-IV-TR code for nicotine abuse. The reasons for this are:

- DSM-IV-TR cites a lack of clinically relevant data
- It is difficult to apply the substance abuse diagnostic criteria to nicotine
- Nicotine has a high dependence potential

There also is no diagnosis for nicotine intoxication. The reason is that nicotine causes pleasure but not significant euphoria or intoxication. This is also a rationalization often used by tobacco users when defending their desire to continue using tobacco, while stopping use of alcohol and other drugs.

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## Unit Summary

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### Summary

It is important to screen and assess all patients for tobacco use. Screening tools only identify a potential problem, but cannot make a diagnosis. The most commonly used tobacco screening tools are the Fagerström, HONC, and HSI. Understanding the stages of change helps to determine how to intervene, as 40% of tobacco users entering chemical dependence treatment are in precontemplation and about 40% are in contemplation. Many patients are in a different stage of change for their other substance use disorders as compared to their tobacco use. Willingness, readiness, and ability to change are not the same thing and the intensity of each component may vary. The DSM-IV-TR criteria for substance dependence can generally be applied to nicotine dependence (tobacco dependence) and the criteria for nicotine withdrawal readily applies but it does not mention cravings. There is no diagnosis for nicotine abuse or nicotine intoxication.

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## Unit 2

### Tobacco Treatment Medications

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**Purpose**

Familiarize participants with the recommendations for evidence-based tobacco treatment medications and interventions as contained in *Treating Tobacco Use and Dependence, 2008 Update* (Fiore et al., 2008) referred to here as the Clinical Practice Guideline, 2008 Update (CPG).

A copy of this source can be viewed online or is available for free at <http://www.surgeongeneral.gov/tobacco>.

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**Objectives**

- Identify five first-line nicotine replacement therapy (NRT) medications
  - Identify two first-line non-nicotine medications for the treatment of tobacco dependence
  - Identify five specific populations with whom the use of tobacco treatment medications is effective
  - Identify two medical contraindications to NRT medications
- 

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## Evidence-Based Treatment Practices

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**Tobacco  
Dependence  
Treatment:  
Evidence-  
based Practice**

- Nicotine replacement therapy (NRT)
- Non-nicotine medications
- Supportive counseling, specifically, Motivational Interviewing, Cognitive Behavioral Therapy, and Relapse Prevention Therapy have been shown to be effective

The CPG 2008 Update explains that either medicine or counseling is effective, and the combination of counseling and medicine is more effective than either used alone (Fiore et al., 2008).

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**Importance of  
Medication to  
Treat Tobacco  
Dependence**

According to the CPG 2008 Update, clinicians should advise all patients attempting to stop tobacco to use medications that have been shown to be effective for tobacco dependence treatment, and use combinations of medication where possible. The exceptions are when medication is contraindicated, or if there is insufficient evidence of medicine effectiveness for a given population (Fiore et al., 2008).

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## First-Line Nicotine Replacement Therapy (NRT)

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### First-line Medications

- FDA approved for this use
  - High margin of safety for tobacco dependence treatment
  - Established empirical record of effectiveness as compared to placebo and “going cold turkey”
- 

### Five Nicotine Medications

Over the Counter (OTC)

- Nicotine patch
- Nicotine gum
- Nicotine lozenge

Prescription

- Nicotine nasal spray
  - Nicotine inhaler
- 

*Continued on next page*

**First-Line Nicotine Replacement Therapy (NRT), Continued**

<b>Nicotine Patch</b>	Considerations	Primary side effects: local skin reaction, insomnia, vivid dreams
	Precautions	Pregnancy Category D (See Appendix)
	Suggested Dosage & Duration	21 mg/24 hours for 4 weeks; then 14 mg/24 hours for 2 weeks; then 7 mg/24 hours for 2 weeks
	High Dose Therapy	Can be used in higher dosages (such as 42 mg using two 21 mg patches) and tapered off over a longer period for patients with severe dependence or severe withdrawal Severely dependent patients often have Fagerström scores of 7 points or more, use 25 or more cigarettes per day (cpd), have CO level of 20 or higher, smoked for 20 or more years, and have at least 4-5 quit attempts
	Availability	OTC
		<ul style="list-style-type: none"> <li>• If patch produces insomnia or unpleasant dreams, it can be removed just before sleep, and replaced in morning</li> <li>• Skin irritations can be addressed by placing a new patch on a different location each day</li> <li>• Can be combined with gum, lozenge, spray, inhaler to control “break-through” symptoms/ cravings. Can also be combined with bupropion</li> </ul>

*Continued on next page*

## First-Line Nicotine Replacement Therapy (NRT), Continued

### Nicotine Gum

Considerations	Primary side effects: mouth soreness, dyspepsia. Patients often do not use enough to control breakthrough cravings and withdrawal symptoms
Precautions	Pregnancy Category D (See Appendix)
Suggested Dosage & Duration	2 mg and 4 mg, up to 24 pieces/day Up to 12 weeks Can be used for longer periods based on the patient's dependence and withdrawal severity
Availability	OTC
<ul style="list-style-type: none"> <li>• Tailor dosage and duration to fit needs of patient</li> <li>• Not chewed like regular gum</li> <li>• Bite/chew till feel tingling or peppery taste, then “park in cheek”, on a fixed schedule and as needed (prn)</li> <li>• Avoid eating or drinking anything except water for 15 minutes before and after chewing, avoid acidic foods which impede absorption of nicotine</li> </ul>	

*Continued on next page*

**First-Line Nicotine Replacement Therapy (NRT), Continued**

<b>Nicotine Lozenge</b>	Considerations	Primary side effects: nausea, mouth soreness, dyspepsia. Patients often do not use enough to control breakthrough cravings and withdrawal symptoms
	Precautions	Pregnancy Category D (See Appendix)
	Suggested Dosage & Duration	2 mg and 4 mg, up to 20 per day Up to 12 weeks Can be used for longer periods based on the patient's dependence and withdrawal severity
	Availability	OTC
		<ul style="list-style-type: none"> <li>• Provides about 25% more nicotine than gum, and is easier and more discrete to use than gum</li> <li>• Tailor dosage and duration to fit the needs of the patient</li> <li>• Not chewed, but dissolved slowly in cheek pouch or under tongue</li> <li>• Use on a fixed schedule and as needed (prn)</li> <li>• Avoid eating or drinking anything except water for 15 minutes before and after using the lozenge, avoid acidic foods which impede absorption of nicotine</li> </ul>

*Continued on next page*

## First-Line Nicotine Replacement Therapy (NRT), Continued

### Nicotine Nasal Spray

Considerations	Primary side effects: nasal irritation.
Precautions	Pregnancy Category D (See Appendix)
Recommended Dosage & Duration	8 - 40 doses/day 3 - 6 months Poses some risk of dependence
Availability	Prescription only
<ul style="list-style-type: none"> <li>• Most effective for highly dependent smokers (see characteristics of severely dependent users in the nicotine patch table)</li> <li>• Provides most rapid absorption and fastest symptom relief as compared to other nicotine medications</li> <li>• Use in conjunction with patch, gum, lozenge, and can be used with bupropion</li> <li>• Use as a “rescue medication” for strong cravings and withdrawal relief</li> <li>• Some patients with schizophrenia report a preference for use, due to rapid onset of effect and symptom relief</li> <li>• May need to limit use to reduce risk of developing dependence</li> </ul>	

*Continued on next page*

## First-Line Nicotine Replacement Therapy (NRT), Continued

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**Nicotine  
Inhaler  
(Misnomer,  
actually an  
Oral Puffer)**

Considerations	Primary side effects: irritation of mouth and throat; coughing, and rhinitis (nasal irritation)
Precautions	Pregnancy Category D (See Appendix)
Recommended Dosage & Duration	6 - 16 cartridges/day Up to 6 months; taper dosage in final 3 months
Availability	Prescription only
<ul style="list-style-type: none"><li>• Nicotine is not inhaled into the lungs, rather it is puffed into the mouth and absorbed through the mucosal tissue</li><li>• Use in conjunction with patch, gum, lozenge, and can be used with bupropion</li><li>• Use as a “rescue medication” for strong cravings and withdrawal relief</li><li>• Best effects are achieved with frequent puffing</li></ul>	

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## First-Line Non-Nicotine Medications

### Bupropion

Considerations	Primary side effects: insomnia, dry mouth, and weight loss.
Precautions	Contraindicated for history of seizure, eating disorder, and recent alcohol or benzodiazepine cessation/withdrawal; may increase anxiety. Pregnancy Category C (See Appendix)
Recommended Dosage & Duration	Begin 1 - 2 weeks <u>before stopping</u> tobacco use 150 mg every morning x 3 days; then 150 mg 2 x days for 7 - 12 weeks, up to 6 months
Availability	Prescription only
<ul style="list-style-type: none"> <li>• Approved by FDA for the treatment of tobacco dependence under trade names Zyban and Wellbutrin SR (sustained release).</li> <li>• Monocyclic antidepressant that selectively acts as a dopamine and norepinephrine reuptake inhibitor, yet doesn't induce reinforcement or dependency in humans</li> <li>• Doubles abstinence rates vs. placebo, and can be used along with nicotine medications or Chantix</li> <li>• Reduces nicotine withdrawal and cravings; the effect on smoking abstinence is independent of relieving depression</li> <li>• Short-term treatment often leads to weight loss</li> <li>• Often effective when nicotine medication alone does not work and for people who experience depression when stopping tobacco use</li> <li>• With all antidepressants, the FDA requires a Black Box warning that advises stopping use if there are unusual or adverse changes in mood, behavior, or onset of suicidal ideation</li> </ul>	

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**First-Line Non-Nicotine Medications,** Continued

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<b>Varenicline</b>	Considerations	History of psychiatric illness. Side effects: nausea, insomnia, vivid dreams
	Precautions	History of kidney disease, Pregnancy Category C (See Appendix)
	Dosage & Duration	0.5 mg 1 x/day for 3 days 0.5 mg 2 x/day for 4 days 1.0 mg 2 x/day for 3 months Stop tobacco use on day 8 Continue use for up to 6 months
	Availability	Prescription only
		<ul style="list-style-type: none"> <li>• Non-nicotine medication approved by FDA in July 2006 for the treatment of tobacco dependence under the trade name Chantix</li> <li>• Mechanism of action: partial agonist/antagonist of specific nicotinic acetylcholine receptors - results in lower amount of dopamine release, and also blocks nicotine activation of receptors</li> <li>• Reduces craving and withdrawal</li> <li>• Has no drug-to-drug interaction; 93% of the drug is excreted in the urine; use with caution if patient has kidney disease</li> <li>• Can be used with bupropion and other psychiatric medications</li> <li>• The FDA requires a Black Box warning that advises stopping use if there are unusual or adverse changes in mood, behavior, or onset of suicidal ideation</li> </ul>

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## Second-Line Non-Nicotine Medications

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- Second-Line Medications**
- Are not FDA approved for the treatment of tobacco dependence
  - Have shown some evidence of effectiveness in tobacco dependence treatment in small studies
  - Greater risks and concerns with side effects
- 

- Nortriptyline and Clonidine**
- Nortriptyline
- Tricyclic antidepressant
  - Potential cardiac effects
  - 4% - 9% drop out rate in trials
  - Dry mouth, drowsy, lightheaded, constipation, weight gain are common side effects
  - Some recent small studies indicate it is as effective as bupropion
- Clonidine
- Antihypertensive
  - Sedation, low blood pressure, light-headedness are common side effects
-

## Tobacco Treatment Considerations

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### **Combination Medications**

According to the CPG 2008 Update clinicians should consider using combination of medications. Some examples:

- Long-term (more than 14 weeks) nicotine patch plus other NRT (gum, lozenge, and/or nasal spray)
- Nicotine patch plus nicotine inhaler
- Nicotine patch plus nasal spray
- Nicotine patch plus bupropion SR  
(Fiore et al., 2008)

According to a recent study at the Mayo Clinic, bupropion and varenicline can be used in combination.

- Bupropion may be effective and helpful for patients using varenicline, if they became depressed when stopping tobacco use (Ebbert et al., 2009).

Note: Varenicline is excreted 93% unchanged in the urine and has no drug-to-drug interactions.

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## Tobacco Treatment Considerations, Continued

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**Tobacco  
Abstinence  
and Other  
Medication  
Blood Levels**

The tar (not the nicotine) in tobacco smoke increases the metabolism of many drugs and medications, including caffeine, theophylline, acetaminophen, some antidepressants, and some antipsychotic medications.

When an individual stops using tobacco, metabolic changes in the liver can sometimes require lower dosages of other medications that he/she may be taking. Some patients, who stop smoking tobacco, may need a 20% to 30% reduction in dose to avoid having more side effects or drug-induced toxicity.

For more information on Smoking and Drug Interactions you can go to:  
[www.oshp.net/pdf\\_forms/druginteractionswithsmokingtable.pdf](http://www.oshp.net/pdf_forms/druginteractionswithsmokingtable.pdf)

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**Some  
Examples of  
Drugs  
Affected by  
Smoking**

Smoking increases the metabolism of these drugs and lowers the blood levels of these drugs:

- OCD Medications: Anafranil (Clomipramine) and Luvox (Fluvoxamine)
  - Caffeine found in coffee, cola, soft drinks, some OTC medications, tea
  - Antidepressants: Elavil (Amitriptyline), Pamelor/Aventyl (Nortriptyline) Tofranil (Imipramine)
  - Asthma, Bronchial, and Emphysema Medication: Theo-24, Theo-Dur, Theobid, Theovent (Theophylline). Theophylline is also found in tea.
  - Antipsychotics: Clozaril (Clozapine), Haldol (Haloperidol), Prolixin (Fluphenazine), Thorazine (Chlorpromazine), Zyprexa (Olanzapine)
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## Tobacco Treatment Considerations, Continued

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**Effectiveness  
of Medication  
for Specific  
Populations**

According to the CPG 2008 Update, tobacco treatment medications have proven to be effective in the following populations:

- HIV positive
- Hospitalized
- Lesbian/gay/bisexual/transgender (LGBT)
- Low socio-economic status (SES)
- Limited formal education
- Medical co-morbid conditions
- Older individuals
- Psychiatric disorders and substance use disorders
- Racial and ethnic minority populations
- Women and men

(Fiore et al., 2008)

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## Tobacco Treatment Considerations, Continued

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### **Insufficient Evidence of Effectiveness**

According to the CPG 2008 Update (Fiore et al., 2008), there is insufficient evidence for the effectiveness of NRT medications for these populations:

- Pregnant women
- Smokeless tobacco users
- Light smokers
- Adolescents

While there is insufficient evidence for medication effectiveness, this does not mean these medications cannot or should never be used. Prescribing health care providers for these groups should weigh the risks and benefits of using tobacco treatment medications on a case-by-case basis, and discuss this with their patients.

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### **Medical Contraindications of NRT**

- Myocardial infarction or stroke (within 2 weeks)
- Serious arrhythmias
- Serious or worsening angina pectoris
- Uncontrolled hypertension

(Also see the package inserts for complete list of contraindications.)

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## Accessing Tobacco Treatment Medications

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### Access to Medications

To obtain No-Cost Nicotine Replacement Therapy (NRT) contact:

#### **NYS Smoker's Quit Line**

Free starter kits of nicotine patches, gum, or lozenges

1-866-NYS-QUITS

1-866-697-8487

#### **Partners in Corporate Health BeBetter Networks**

<http://www.nrtdistribution.com/Welcome.aspx>

Through a contract with the NYSDOH, Partners in Corporate Health is able to provide nicotine replacement therapy (NRT) to OASAS-certified facilities at no cost. To order NRT, you must first become a registered user. Once you've done so, you'll be able to order nicotine patches, gum, and lozenges for your program. To obtain more information about obtaining NRT go to:

<http://www.oasas.state.ny.us/tobacco/index.cfm>

#### **Private Health Insurance**

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## Accessing Tobacco Treatment Medications, Continued

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- NYS Medicaid Coverage**
- Nicotine patch, nicotine gum, nicotine nasal spray, or nicotine inhaler are covered
  - Bupropion and varenicline are covered
  - Requires a prescription from a health care provider (or an order for OTC NRT)
  - Two courses of treatment per year - each course is continuous treatment for three months. Total is six months of treatment per year
  - Combinations allowed as long as not with same agent (dosage form and strength)
- 

- Medicare Coverage**
- One initial evaluation and up to eight counseling sessions in a 12-month period:
- Services must be provided by a qualified physician who is a Medicare - certified provider
  - Covers those who take prescription medications that interact with tobacco, OR who have a tobacco-related disease or health condition
  - Covers counseling and medications
-

## Unit Summary

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### Summary

The overwhelming clinical evidence is that use of tobacco treatment medications is much more effective than trying to stop “cold turkey.” The risk of abusing nicotine medications is very small. Nicotine medications have a wide margin of safety, and non-nicotine medications are relatively safe when used under medical supervision. Patients should be given access to these medications, receive accurate knowledge about these drugs, and be told that medications are not “magic bullets.” The combination of tobacco treatment medications works better than single medications. Use of medications plus supportive counseling provides the best outcomes. Tobacco treatment medications have been shown to be effective with a wide range of populations, with only a few exceptions. There are a small number of contraindications for medication use.

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## Unit 3

### Case Studies

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**Purpose** Provide an opportunity for participants to use newly learned knowledge, tools, and skills in a practical application.

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- Objectives**
- Using a case study, determine if tobacco dependence and tobacco withdrawal are present
  - Assess stage of change for the patient in the case study
  - Using the case study, make appropriate recommendations for tobacco treatment medications
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## Case Studies, Continued

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**Case Studies** Case Study Number 1 - Bill J.  
Case Study Number 2 - Barbara G.  
Case Study Number 3 - Jorge G.  
Case Study Number 4 - Alvin C.  
Case Study Number 5 - Maryann P.

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**Case Study Directions**

1. Read the case study and address the following questions:
  1. Use the Fagerström screening tool and decide if there is enough information to suggest tobacco dependence for this patient
  2. Using the DSM-IV-TR diagnostic criteria, determine whether the patient has a tobacco dependency and if the patient is currently showing signs of tobacco withdrawal
  3. What is the patient's stage of change regarding his/her tobacco use? Is this different from the stage for other substance use problems?
  4. Identify any key issues about his/her tobacco use that may need immediate attention
  5. Identify what tobacco treatment medications you would recommend for this patient and why

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## Case Study 1- Bill J.

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Bill J. is a 36-year-old white male who is presenting for the first time at your outpatient clinic. He is accompanied to the intake appointment by his wife Amy. Bill states in a rather annoyed fashion that the only reason he is there is because Amy made him come. You can detect a great deal of tension between Bill and Amy. Bill is employed full-time as a medical technician at a local hospital, and Amy works full-time as a medical office manager. At this point, there are no job-related problems. Bill and Amy were married a year ago and have recently bought a small house. Amy's son by her first marriage, John, who is nine years old, lives with them. This is Bill's first marriage.

When you ask the couple what brings them to your office, Bill states that he doesn't have a clue, and if his wife wasn't such a nag, everything would be fine. Amy counters by saying that if Bill didn't "drink so much and stink of cigarettes", she wouldn't "nag" him. Bill replies that if Amy lost some weight, maybe he wouldn't be so depressed all the time and drink so much.

Amy shares that she is worried because Bill drinks at least a six-pack of beer and two mixed drinks every day. She has noticed that he has been increasing the amount he has been drinking over the last few weeks, and it never used to be a daily thing. Bill stated that he needs to do this to get a good buzz. Bill has also increased his tobacco use from about 10 cigarettes per day to almost a pack and a half per day, and has developed a chronic cough. Bill attributes the cough to seasonal allergies. Amy reports that Bill has to have a cigarette immediately when he wakes up in the morning, and it's the last thing he does before going to bed. Although he smokes outside on the porch, smoke drifts into the house and Amy is concerned about the health effects on John, who has mild asthma.

Bill sees no reason to stop drinking or smoking. He states that it's the only thing that relaxes him and makes him feel better. He used to work out at a local gym and play golf, but he has given those activities up as he'd rather have a few cold ones at the house. Amy is upset because they never go out socially anymore, and Bill never does anything with John. Bill refuses to go anywhere where he can't smoke.

When you speak to Bill about the health effects of his drinking and smoking, he replies that everybody should just leave him alone because he's not hurting anybody but himself. He also states that he has tried to stop smoking a bunch of times but just gave up finally, so stop bugging him. Amy asked Bill to think about what would happen if he killed somebody driving drunk. Bill replied that maybe "everybody would be better off" if he wasn't around anymore.

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## Case Study 1- Bill J., Continued

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### Case Study Analysis Form

1. Using the Fagerström screening tool, decide if there is enough information to suggest tobacco dependence for this patient.
    - 1.
    - 2.
    - 3.
  2. Using the DSM-IV-TR diagnostic criteria, determine whether the patient has a tobacco dependency and if the patient is currently in tobacco withdrawal.
    - 1.
    - 2.
    - 3.
  3. What is the patient's stage of change regarding his/her tobacco use? Is this different from the stage for other substance use problems?
    - 1.
  4. Identify any key patient issues about his/her tobacco use that need immediate attention.
    - 1.
    - 2.
    - 3.
  5. Identify what tobacco treatment medications you would recommend for this patient and why.
    - 1.
    - 2.
- 3.

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*Continued on next page*

## Case Study Number 2 - Barbara G.

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Barbara G. is 29-year-old single white female who is referred by her probation officer to your therapeutic community (TC) for women. Barbara was arrested when she tried to buy three grams of cocaine from an undercover police officer. Barbara currently lives with her parents. Her father is an engineer and her mother is a nurse. Barbara had been working part-time in a clothing store. She was fired a week ago after she was caught on the surveillance camera stealing money from the cash register.

Barbara has been on probation for a prior drug-related crime. She was caught with a gram of cocaine after police observed her driving erratically. Her probation officer is trying to get her into a TC in lieu of a jail sentence.

At the start of your intake assessment, Barbara asks you if it's OK to smoke in the office. When you tell her no, she asks if she can go outside for just a minute to get a few drags. She stated that she gets really shaky and nervous if she can't smoke, and really had a problem when she had to spend a few days in jail after she was arrested. She denies any suicidal ideation. You agree to let her go outside, and she is much calmer when she comes back in.

When you inquire about her current living arrangements, Barbara states that she lives with her parents because she can't afford to keep her apartment since she spends most of her money on cocaine. She also admits that she trades sex for drugs and not always with protection. Barbara states that she uses cocaine four to five times per week, about one gram per day, or as much as she can get her hands on. She states that the only reason she doesn't use every day is lack of money. She's also in trouble with her dealer, who she owes several hundred dollars. She traded the used car her parents bought her for cocaine.

Barbara states that she has tried to stop using cocaine several times without success. She has never tried to stop smoking as that would be too stressful for her, even though she knows that smoking is harmful. She gets very anxious and nervous if she runs low on cigarettes, and even hitchhiked once at 3:00 AM to get more. The only time she has been completely drug free has been in rehab (twice, once as an adolescent), and jail. She states that she has never had a stable relationship, as she always attaches herself to losers and dealers.

Barbara states that her life is a mess. She has no friends, no social life, no job, and no prospects. She is willing to come into the program, but is extremely scared that she may not be able to smoke while there.

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## Case Study 1- Bill J., Continued

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### Case Study Analysis Form

1. Using the Fagerström screening tool, decide if there is enough information to suggest tobacco dependence for this patient.
  - 1.
  - 2.
  - 3.
2. Using the DSM-IV-TR diagnostic criteria, determine whether the patient has a tobacco dependency and if the patient is currently in tobacco withdrawal.
  - 1.
  - 2.
  - 3.
3. What is the patient's stage of change regarding his/her tobacco use? Is this different from the stage for other substance use problems?
  - 1.
4. Identify any key patient issues about his/her tobacco use that need immediate attention.
  - 1.
  - 2.
  - 3.
5. Identify what tobacco treatment medications you would recommend for this patient and why.
  - 1.
  - 2.
  - 3.

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*Continued on next page*

## Case Study Number 3 - Jorge R.

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Jorge R. is a 27-year-old Hispanic/Latino male who is referred to your outpatient clinic from the emergency room of the local hospital. According to the referent, Jorge was brought by ambulance to the emergency room at about 1:00 AM after his girlfriend Carmen, who had just returned to their apartment after her shift as a waitress, discovered him passed out on the bathroom floor. She reported that there was an empty liquor bottle and a prescription bottle containing hydrocodone pills on the floor, although it appeared that most of the pills were still in the bottle. Jorge's BAC at the emergency room was .16%, and he seemed disoriented and confused. Jorge was stabilized and sent home.

Carmen accompanied Jorge to the appointment. Jorge presented as very open to talking about his "problem" and indicated that he was at the point that he was thinking about getting some help. He stated that this had been on his mind for a while now. He stated that he valued his relationship with Carmen and didn't want to ruin it with his drinking. Jorge and Carmen have a strong tobacco odor, and Jorge has a pack of cigarettes in his shirt.

Jorge talks openly about his alcohol use, indicating that he is a daily drinker. He stated that the amount of use varied, but sometimes he loses track of how much he is drinking and ends up passing out. He thinks this is what happened during this last incident, although he states he really can't remember anything except waking up in the ER. Carmen stated that she has been worried because Jorge seems to be drinking more over the last few months, and lately he has been sneaking a couple of beers in the morning. Jorge stated that he didn't think she knew about that. When you ask Jorge about the hydrocodone pills, he stated that he got them when he had a tooth pulled but really didn't use them. Carmen confirmed this. He doesn't remember taking any the night he passed out.

Jorge is surprised when you ask him about his tobacco use. He stated that he really wants to address his drinking and that his tobacco use really helps him to relax. He states that when he doesn't smoke, he is very anxious and "jittery." He reported that when he was in the ER for several hours, he was really "jonesing" for a cigarette. He reports being a daily smoker, using two packs per day and sometimes more when he drinks. He acknowledges that tobacco use is harmful but can't imagine stopping alcohol and tobacco use at once.

Carmen does not seem concerned about Jorge's tobacco use. She stated that she smokes herself, and that it's the only time the two of them can be at ease with each other. Her real concern is that Jorge stop his alcohol use. She is worried that Jorge's job as a computer technician may be in jeopardy as he has missed several Monday's after drinking heavily on the weekends, and has already received a verbal warning.

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## Case Study 1- Bill J., Continued

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### Case Study Analysis Form

1. Using the Fagerström screening tool, decide if there is enough information to suggest tobacco dependence for this patient.
    - 1.
    - 2.
    - 3.
  2. Using the DSM-IV-TR diagnostic criteria, determine whether the patient has a tobacco dependency and if the patient is currently in tobacco withdrawal.
    - 1.
    - 2.
    - 3.
  3. What is the patient's stage of change regarding his/her tobacco use? Is this different from the stage for other substance use problems?
    - 1.
  4. Identify any key patient issues about his/her tobacco use that need immediate attention.
    - 1.
    - 2.
    - 3.
  5. Identify what tobacco treatment medications you would recommend for this patient and why.
    - 1.
    - 2.
- 3.

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## Case Study Number 4 - Alvin C.

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Alvin C. is a 44-year-old African-American male who presents at your outpatient clinic along with his wife Adrienne. Alvin was referred by his primary care physician due to Alvin's admitting that he was a daily marijuana user. His doctor was concerned about Alvin's declining physical health, weight gain, low energy level, and lack of good personal hygiene. Alvin seems friendly and engaging, even though he admits that his wife was the driving force in getting him to come to the appointment.

Adrienne stated that she has been very frustrated with Alvin. She stated that its like "pulling teeth" to get him to do anything, like taking almost a year before he finally went to see his doctor. She thinks it's a miracle he actually came to this appointment. Adrienne stated that she is concerned that Alvin's current lifestyle is very unhealthy and she's worried that his "habits" are going to kill him.

Alvin admits that he is not an ambitious person and doesn't see what all the fuss is about. He enjoys his job at the local home improvement center and has no aspirations to "move up the ladder" to a management position. He stated that his supervisor likes him and he's always on time for work, although he has been spoken to about taking too many smoke breaks. Alvin stated that he has never smoked marijuana at work.

Alvin stated that he has been a marijuana user since he was about 15 years old. He and Adrienne have been married for 18 years and have no children. They used to use together, but Adrienne stopped about 10 years ago. Alvin has also been using tobacco since age 13, and uses tobacco and marijuana daily. He denies any other drug use, except an occasional beer, which Adrienne confirmed.

Adrienne described Alvin's routine as revolving around his tobacco and marijuana use. She stated that he smokes a cigarette the first thing in the morning, then several more before he goes to work at 9:00 AM. Alvin doesn't admit to it but Adrienne suspects he smokes marijuana on the way to work, since she has found drug paraphernalia in his car. When he gets home from work at about 6:00 PM, he sits in front of the TV smoking marijuana for several hours, and then smokes a cigarette before bed. She stated that they have no friends and haven't been on a vacation or done anything "fun" in years. Adrienne states they are rarely intimate anymore because the smell of him really disgusts her. Although he has never had any legal problems, she is worried that sooner or later he will get "busted" buying marijuana or get pulled over for driving under the influence.

Alvin states that Adrienne is making too big a deal out of everything. He knows that his marijuana and tobacco use isn't really good for him but is one of his only pleasures lately, and he's not hurting anyone else. He just wants to be left alone.

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*Continued on next page*

## Case Study 1- Bill J., Continued

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### Case Study Analysis Form

1. Using the Fagerström screening tool, decide if there is enough information to suggest tobacco dependence for this patient.
  - 1.
  - 2.
  - 3.
2. Using the DSM-IV-TR diagnostic criteria, determine whether the patient has a tobacco dependency and if the patient is currently in tobacco withdrawal.
  - 1.
  - 2.
  - 3.
3. What is the patient's stage of change regarding his/her tobacco use? Is this different from the stage for other substance use problems?
  - 1.
4. Identify any key patient issues about his/her tobacco use that need immediate attention.
  - 1.
  - 2.
  - 3.
5. Identify what tobacco treatment medications you would recommend for this patient and why.
  - 1.
  - 2.
  - 3.

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*Continued on next page*

## Case Study Number 5 - Maryann P.

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Maryann P. is a 30-year-old white female who is referred to your hospital-based outpatient clinic by her private therapist, a social worker she has been seeing for about two years. Maryann lives with her two children ages four and three, in a subsidized apartment in an urban area. She is separated from her husband, Len, the children's father; however he does have regular contact with the children. She has a boyfriend, but doesn't talk much about him, and he's somewhat of a shady character. Nobody even knows his name.

Maryann first went to see the social worker at the urging of her mother, Anita, who was concerned about the effects of Maryann's use of prescription painkillers on her two small children. Maryann was prescribed the painkillers after the birth of her last child for back pain, and shared with her therapist that she was doing the "doctor thing," seeing multiple physicians to obtain prescriptions for the medication. Anita is also concerned about Maryann's chain smoking in the apartment and how that may harm the children.

Maryann does not work and is on public assistance. Len pays a small amount of child support, as much as he can afford. Anita has been visiting the apartment three or four times per week to check up on them, and has become increasingly concerned about Maryann's physical appearance and the seeming lack of effective parenting. Sometimes there is no food in the apartment when Anita visits so she goes out and stocks up Maryann with groceries and necessities, including a supply of cigarettes. Len has called Anita to express his concern also, and has even mentioned possibly calling child protective services. Anita discouraged this and suggested they both express their concerns to the social worker, who called Maryann and asked if she could come see her, resulting in a referral to your clinic.

Maryann tells you she is feeling out of control and is scared that the children will be taken away from her. She has not told her therapist, but she shares with you that she has been injecting heroin for several months, apparently supplied from her boyfriend. This has increased from a few times per week to practically daily use. She states that if she doesn't have her drugs and tobacco, she just can't function. Maryann also shared that she is about two months pregnant by the boyfriend, and is worrying about the effects on the baby, but she can't stop using.

Maryann states she is feeling powerless and hopeless. She tells you she has thought about "ending it all," but is worried what will happen to the children. She states she has tried to stop tobacco use so many times she can't remember how many, and is frustrated and discouraged.

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*Continued on next page*

## Case Study 1- Bill J., Continued

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### Case Study Analysis Form

1. Using the Fagerström screening tool, decide if there is enough information to suggest tobacco dependence for this patient.
    - 1.
    - 2.
    - 3.
  2. Using the DSM-IV-TR diagnostic criteria, determine whether the patient has a tobacco dependency and if the patient is currently in tobacco withdrawal.
    - 1.
    - 2.
    - 3.
  3. What is the patient's stage of change regarding his/her tobacco use? Is this different from the stage for other substance use problems?
    - 1.
  4. Identify any key patient issues about his/her tobacco use that need immediate attention.
    - 1.
    - 2.
    - 3.
  5. Identify what tobacco treatment medications you would recommend for this patient and why.
    - 1.
    - 2.
    - 3.
-

## Module Summary

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### Summary

When clinicians are applying their knowledge and skills to working with a patient who is using tobacco, it is best practice to have a complete assessment. The use of screening tools and CO monitors can be helpful to provide key information about the patient and can be used to educate the patient. A useful assessment includes tobacco dependence history, other substance use history, prior attempts to abstain from tobacco, withdrawal symptoms and severity, prior use of tobacco treatment medications, medical issues, psychiatric issues, stage of change for tobacco use ( including willingness, readiness, and ability), a reasonable understanding of tobacco-treatment medications, and considerations and contraindications.

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## Module Closure

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### **Recap of Learning**

What did you discover (or re-discover) about tobacco dependence?

What did you become aware of (or re-learn) about the tobacco dependence and nicotine withdrawal criteria?

What did you discover (or re-discover) about tobacco treatment medications?

What did you discover about your own professional skills and knowledge?

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## Resources

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**Resource  
Directory**

**Tobacco Recovery Resource Exchange**

(<http://www.tobaccorecovery.org>) can be used to access e-learning opportunities, resources, and web tools.

**New York State Office of Alcoholism and Substance Abuse  
Services Tobacco Independence**

<http://www.oasas.state.ny.us/tobacco/index.cfm>

**New York State Tobacco Dependence Resource Center**

<http://www.tobaccodependence.org>. A wealth of resources including sample policies, research articles, and more.

**Treating Tobacco Use and Dependence: Clinical Practice**

**Guideline 2008 Update:** call to order a copy at 1-800-358-9295 or go to <http://www.surgeongeneral.gov/tobacco/default.htm>.

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## Resources, Continued

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**Resource  
Directory,  
cont'd**

### **NYS Medicaid Smoking Cessation Policy**

- Smoking cessation therapy consists of prescription and non-prescription agents. Covered agents include nasal sprays, inhalers, Zyban (bupropion), Chantix (varenicline), over-the-counter nicotine patches and gum.
- Two courses of smoking cessation therapy per recipient, per year are allowed. A course of therapy is defined as no more than a 90-day supply (an original order and two refills, even if less than a 30 day supply is dispensed in any fill).
- If a course of smoking cessation therapy is interrupted, it will be considered one complete course of therapy. Any subsequent prescriptions would then be considered the second course of therapy.
- Some smoking cessation therapies may be used together. Professional judgment should be exercised when dispensing multiple smoking cessation products.
- Duplicative use of any one agent is not allowed (i.e., same drug and same dosage form and same strength).
- For all smoking cessation products, the recipient must have an order. A prescription is the terminology for an order of a prescription product. A fiscal order refers to an order, which looks just like a prescription - written on a prescription blank, for an over-the-counter product.
- NYS Medicaid reimburses for over-the counter nicotine patches. Prescription nicotine patches are not reimbursed.
- Name brand Zyban requires a prior authorization, but generic bupropion does not.

NYS Smokers Quitline (866) NY-QUITS (866-697-8487)

American Cancer Society 1-800-227-2345

American Lung Association 1-800-586-4872

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## Glossary

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**Agonist:** A medication that stimulates an action on a given receptor

**Ambivalence:** Uncertainty or inability to make choices caused by having thoughts or feelings that oppose or contradict each other

**Antagonist:** A medication that acts against or blocks an action on a given receptor

**AOD:** Alcohol and Other Drugs

**Articulate:** Clearly explain, describe, or talk about

**ASAP:** Alcoholism and Substance Abuse Providers of New York State ([www.asapnys.org](http://www.asapnys.org))

**ATC:** New York State Office of Alcoholism and Substance Abuse Services (OASAS) Addiction Treatment Centers (<http://www.oasas.state.ny.us/atc/index.cfm>)

**ATOD:** Alcohol, Tobacco, and Other Drugs

**Autonomy:** Personal capacity to consider alternatives, make choices, and act without undue influence or interference from others

**Blended Learning:** The combination of multiple approaches to learning, for example, a combination of technology-based materials and classroom sessions to deliver instruction

**Bupropion (Zyban® or Wellbutrin ®):** A first-line non-nicotine medication used in the treatment of tobacco dependence

**CASAC:** New York State Credentialed Alcoholism and Substance Abuse Counselor (<http://www.oasas.state.ny.us/sqa/credentialing/CASACCover.cfm>)

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## Glossary, Continued

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**CBT:** Cognitive-Behavioral Therapy. CBT is a form of counseling that emphasizes the important role of thinking in how we feel and what we do

**CDC:** Centers for Disease Control, U.S. Department of Health and Human Services

**Cessation Centers:** NYS Department of Health -funded contractors that provide technical assistance, training, and follow-up to health care institutions in their catchment areas in implementing the Clinical Practice Guideline, 2008 Update (CPG). The main task is to help screen patients for tobacco use and prompt health care providers to offer brief interventions for stopping tobacco use  
([http://www.health.state.ny.us/prevention/tobacco\\_control/community\\_partners/tobacco\\_cessation\\_centers.htm](http://www.health.state.ny.us/prevention/tobacco_control/community_partners/tobacco_cessation_centers.htm))

**Change Talk:** Patient statements (e.g., desire, ability, reasons, and need to change) that indicate a patient's beginning to commit to change

**CIAA:** NYS Clean Indoor Air Act, in effect July 24, 2003  
([http://www.health.state.ny.us/nysdoh/clean\\_indoor\\_air\\_act/general.htm](http://www.health.state.ny.us/nysdoh/clean_indoor_air_act/general.htm))

**Cognitive:** The use of mental activities such as perception, thinking, remembering, reasoning, mental images, and taking information to create new ideas

**CO Monitor:** A carbon monoxide (CO) monitor is a non-invasive device that estimates the amount of carbon monoxide in a person's blood, providing evidence of one of the harmful consequences of smoking

**Co-morbid Condition:** Two or more disorders or illnesses occurring in the same person, simultaneously or sequentially (example: opiate dependence and HIV)

**Co-morbidity:** Describes the negative interaction between the two or more illnesses, which affects the progression and prognosis of each disorder

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## Glossary, Continued

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**Competency:** The required knowledge, skills, and attitudes of addiction professional practice. (See Technical Assistance Publication (TAP) Series 21, which is available online at <http://www.kap.samhsa.gov/products/manuals/pdfs/TAP21.pdf>)

**Co-occurring Disorders:** Co-occurring substance use (abuse or dependence) and mental health disorders (example: alcoholism and depression)

**CPD:** Cigarettes Per Day

**CPG:** Clinical Practice Guideline, *Treating Tobacco Use and Dependence*, U.S. Department of Health and Human Services, Public Health Service, 2008 Update ([http://www.surgeongeneral.gov/tobacco/treating\\_tobacco\\_use08.pdf](http://www.surgeongeneral.gov/tobacco/treating_tobacco_use08.pdf))

**CPP:** New York State Credentialed Prevention Professional

**CPS:** New York State Credentialed Prevention Specialist

**Craving:** An urgent, seemingly overpowering desire to use a substance, which often is associated with tension, anxiety, or other dysphoric, depressive, or negative affective states

**DARN-C:** An acronym for how to increase change talk. Used to encourage patients to make statements that tell about their **D**esire, **A**bility, **R**easons, and **N**eed to change, which leads to stronger language for making a **C**ommitment to change

**Discrepancy:** A variance or difference between present behavior and a desired goal, or the difference between what is happening now and how one wants things to be. The larger the discrepancy, the greater the importance of change

**DMOA:** Development, Management, and Oversight Agency

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## Glossary, Continued

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**DOH:** NYS Department of Health ([www.health.state.ny.us](http://www.health.state.ny.us))

**Dopamine:** An important neurotransmitter (messenger) in the brain that can trigger feelings of pleasure

**DSM-IV-TR:** Diagnostic and Statistical Manual of the American Psychiatric Association, Fourth Edition, Text Revision

**Effectiveness:** The outcome achieved from a treatment that is provided in a “real-world setting” (in a clinic or community)

**Efficacy:** The power to produce a desired effect. Efficacy is the outcome achieved from a treatment provided under near-ideal circumstances of control (for example treatment provided during a controlled research study)

**E-Learning:** Self-paced instruction or professional development activities provided over the internet

**Empathy:** Nonjudgmental understanding, compassion, and acceptance of the patient's experience. Empathy requires understanding another person’s experience and effectively communicating that understanding

**ETS:** Environmental Tobacco Smoke, also known as second hand smoke

**Evidence-Based Practice:** Interventions that have been repeatedly documented in the scientific literature as effective in treating tobacco dependence

**Expectancy:** A learned anticipation of an effect from a cause

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## Glossary, Continued

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**FDA:** U.S. Food and Drug Administration ([www.fda.gov](http://www.fda.gov))

**First-Line Medications:** Medications approved by the FDA for a specific use and which have an established empirical record of effectiveness

**Functional Analysis:** A behavior analysis (or assessment) problem-solving process that identifies why a person behaves in a certain manner. It identifies triggers for the behavior, patterns of the behavior, and the consequences or benefits from the behavior

**Individualized Intervention:** Tailoring an intervention to fit the needs of a particular patient. For example, relapse prevention can be individualized based on information obtained about problems the patient has encountered in maintaining abstinence

**Intervention:** An action or program that aims to bring about identifiable outcomes. In tobacco dependence treatment, the intervention generally is clinical in nature and may consist of counseling and the use of medications. Also referred to as "treatment"

**LCSW:** Licensed Clinical Social Worker

**LGBT:** Lesbian/Gay/Bisexual/Transgender

**Medication Assisted Treatment:** The use of medications, in combination with counseling and behavioral therapies, to provide a whole-patient approach to the treatment of substance use disorders

**Metabolism:** The chemical processes occurring within a living cell or organism that are necessary for the maintenance of life

**MI:** Motivational Interviewing. Motivational interviewing is an effective evidence-based approach to overcoming the ambivalence that keeps people from making desired changes in their lives (<http://motivationalinterview.org>)

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## Glossary, Continued

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**Modality:** A treatment modality is any specific treatment method or procedure used to relieve symptoms or motivate behaviors that lead to recovery

**Modulate:** To alter the function or status of something in response to a drug effect

**Module:** A self-contained component of an instructional system. PDP instruction is broken into modules to make the instruction easy to access and deliver

**Negative Reinforcement:** A behavior is reinforced when a negative condition is stopped or avoided as a consequence of the behavior (example: use of tobacco to avoid withdrawal symptoms). Negative reinforcement should not be confused with punishment, which weakens a behavior when a negative condition is introduced

**Neuron:** A cell specialized to conduct and generate electrical impulses and to carry information from one part of the brain to another

**Neurotransmitter:** A natural chemical in the body released by one neuron to influence or communicate with another. Examples include dopamine, serotonin, norepinephrine, and acetylcholine, GABA, glutamate, beta-endorphin, and others

**New York State Clean Indoor Air Act:** Effective July 24, 2003, the New York State Clean Indoor Air Act (Public Health Law, Article 13-E) prohibits smoking in virtually all workplaces, including restaurants and bars

**Nicotine:** The psychoactive and highly addictive substance found in tobacco products

**NIDA:** The National Institute on Drug Abuse (NIDA), part of the National Institutes of Health (NIH) organized within the U.S. Department of Health and Human Services

**NRT:** Nicotine Replacement Therapy, including the nicotine patch, gum, lozenge, inhaler, and nasal spray

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## Glossary, Continued

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**NYS Smoker's Quitline:** A free statewide helpline through which tobacco users can obtain information, services, and nicotine medication to support an attempt at tobacco abstinence ([www.nysmokefree.com](http://www.nysmokefree.com))

**OARS:** An acronym from Motivational Interviewing that refers to the counseling micro-skills of Open Questions, Affirmations, Reflective Listening, and Summarizing

**OASAS:** NYS Office of Alcoholism and Substance Abuse Services ([www.oasas.state.ny.us](http://www.oasas.state.ny.us))

**OASAS Regulation Part 856:** Requires all New York State OASAS funded and/or certified providers of prevention, treatment, or recovery services for chemical dependence and/or gambling to implement tobacco-free policies as of July 24, 2008 (<http://www.oasas.state.ny.us/tobacco/providers/reg856.cfm>)

**OTC:** Over-the-Counter, a medication for which a prescription is not needed

**Partial Agonist:** Bind and activate a given receptor, but have only partial efficacy at the receptor relative to a full agonist

**PDP:** Professional Development Program, Rockefeller College, University at Albany ([www.pdp.albany.edu](http://www.pdp.albany.edu))

**Pharmacotherapy:** The treatment of disease using medications

**Positive Reinforcement:** A behavior is reinforced as a consequence of experiencing a positive response from the behavior (example: use of tobacco provides a pleasurable effect, increasing the likelihood that the behavior will be repeated)

**PPD:** Packs Per Day (of cigarettes)

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## Glossary, Continued

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**Promising Interventions Partners:** Funded community partners who worked to demonstrate the effectiveness of promising, but not yet established, tobacco control interventions

**Rapport:** The degree to which trust and openness are present in the relationship between counselor and patient; an essential element of the therapeutic relationship

**Readiness:** A person's stage of awareness of the need and willingness to change. Can be influenced by external pressure (family, legal system, employer) or internal pressure (physical health concerns)

**Receptor:** A structure on the surface of a neuron (or inside a neuron) that selectively receives and binds a specific substance

**Recovery:** Achieving and sustaining a state of health or actively working to regain a state of health (i.e., stopping tobacco use and non-medical psychoactive drug use), and establishing a lifestyle that embraces healthy behaviors.

**Relapse Prevention Therapy (RPT):** A clinical approach that helps patients to anticipate obstacles and high-risk situations when working to maintain a change, and when such obstacles or situations occur, to use effective coping strategies

**Route of Administration:** The path by which a substance is taken into the body (i.e., by mouth, injection, inhalation, rectum, or by topical application)

**RPT:** An acronym for Relapse Prevention Therapy, which is a clinical approach that helps patients to anticipate obstacles and high-risk situations when working to maintain a change, and when such obstacles or situations occur, to use effective coping strategies

**RTATC:** An acronym for Regional Technical Assistance and Training Center

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## Glossary, Continued

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**SAMHSA:** Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services (<http://www.samhsa.gov>)

**Screening:** Gathering and sorting of information to determine if a person may have a problem with substance use ( i.e., Fagerström Test for Nicotine Dependence) and, if so, whether a more detailed clinical assessment is appropriate

**Second-Line Medications:** Medications that have not been approved by the FDA for a specific purpose but which health practitioners prescribe as “off- label” drugs to treat a disease or condition (i.e., nortriptyline, an antidepressant, is sometimes used for helping some people stop tobacco use, but is not FDA approved for this purpose)

**Self-efficacy:** One’s beliefs about his or her capability to successfully act to achieve specific goals or influence events that affect one’s life

**SES:** Socioeconomic Status

**SOC:** an acronym for Stages of Change (i.e., precontemplation, contemplation, preparation, action, and maintenance)

**Stages of Change:** The Transtheoretical Model of Change or Stages of Change (SOC) is a theory developed by James Prochaska and Carlo DiClemente, which suggests that most people progress through five different stages on their way to successful change. The stages are precontemplation, contemplation, preparation, action, and maintenance

**TAG:** Tobacco Awareness Group

**Tailored Interventions:** Treatments based on a dimension or a subset of dimensions of the patient (e.g., weight concerns, dependency). See also Individualized Interventions

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## Glossary, Continued

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**TC:** Therapeutic Community, a drug-free residential setting where the community (treatment staff and patients in recovery) interact in structured and unstructured ways to influence attitudes, perceptions, and behaviors associated with drug use. This approach is often referred to as “community as method”

**TCP:** Tobacco Control Program, within the NYS Department of Health  
([http://www.health.state.ny.us/prevention/tobacco\\_control](http://www.health.state.ny.us/prevention/tobacco_control))

**Technical Assistance:** Help, resources, practical advice, problem-solving, and guidance to establish, strengthen, or enhance a program’s capacity to implement tobacco use interventions provided by Regional Technical Assistance and Training Centers (RTATCs)

**Titration:** The process of gradually adjusting the dose of a medication until the desired effect is achieved

**Tobacco Awareness Group:** A treatment modality primarily helpful for patients in the precontemplation and contemplation stages of change. The goal of the group is to help patients resolve their ambivalence about their tobacco use and move on to the next stage of change. The tobacco awareness group develops interest, elevates importance, and enhances motivation

**Tobacco dependence:** A chronic biopsychosocial disease characterized by persistent use, inability to limit or control use, withdrawal symptoms when use is stopped abruptly, frequent relapse after attempts at abstinence, and continued use despite knowledge of serious physical and psychological consequences

**Tobacco Interventions Project:** NYS Department of Health Tobacco Control Program, state-wide, Technical Assistance and Training grant awarded to the Professional Development Program (PDP) to support NYS addiction service providers to integrate tobacco interventions into chemical dependence and gambling programs

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## Glossary, Continued

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**Tobacco Recovery Group:** A treatment modality primarily helpful for patients in the preparation, action, and maintenance stages of change. The goal of the group is to define tobacco recovery and teach recovery tools in the physical, behavioral, and emotional arenas. The tobacco recovery group helps patients develop skills, elevate confidence, and embrace lifestyle change

**Tolerance:** There are different forms of tolerance, and in this manual the term refers to metabolic tolerance, a need for increased amounts of a substance to achieve the desired effect

**Treatment:** An action or program that aims to bring about identifiable outcomes. For tobacco dependence, the treatment generally is clinical in nature and may consist of counseling and the use of medications. Also may be referred to as "intervention"

**UMDNJ:** University of Medicine and Dentistry of New Jersey (<http://www.umdnj.edu/>)

**Varenicline (Chantix®):** A first-line non-nicotine medication used in the treatment of tobacco dependence

**Withdrawal:** Symptoms of discomfort and distress when use of a substance is abruptly stopped, and may include intense craving for the substance

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## **Appendix**

### **Sample Screening Tools**

Fagerström Test for Nicotine Dependence

Heaviness of Smoking Index (HSI) and HSI Scoring Instructions

Hooked on Nicotine Checklist (HONC) and HONC Scoring Instructions

### **Sample Nicotine Withdrawal Assessment Tool**

Minnesota Withdrawal Scale - Behavior Rating Scale -Self Report

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### **Supplemental Handouts**

FDA Pregnancy Categories

Health Belief Model (HBM)

Locus of Control

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### **Fagerström Test for Nicotine Dependence \***

\* Heatherton TF, Kozlowski LT, Frecker RC, Fagerström KO. The Fagerström Test for Nicotine Dependence: A revision of the Fagerström Tolerance Questionnaire. *British Journal of Addictions* 1991;86:1119-27

Take this test and find out your level of dependence on nicotine.

1. How soon after you wake up do you smoke your first cigarette?

- After 60 minutes (0)
- 31 - 60 minutes (1)
- 6 - 30 minutes (2)
- Within 5 minutes (3)

2. Do you find it difficult to refrain from smoking in places where it is forbidden?

- No (0)      Yes (1)

3. Which cigarette would you hate most to give up?

- The first in the morning (1)      Any other (0)

4. How many cigarettes per day do you smoke?

- 10 or less (0)
- 11 - 20 (1)
- 21 - 30 (2)
- 31 or more (3)

5. Do you smoke more frequently during the first hours after awakening than during the rest of the day?

- No (0)      Yes (1)

6. Do you smoke even if you are so ill that you are in bed most of the day?

- No (0)      Yes (1)

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### **Fagerström Test Scoring**

#### **To Score**

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Add together the points for each answer above. Use the scale below to determine the level of dependence on nicotine:

Your level of dependence on nicotine is:

0-2: Very low dependence

3-4: Low dependence

5: Medium dependence

6-7: High dependence

8-10: Very high dependence

**Scores under 5:** “Your level of nicotine dependence is still low. You should act now before your level of dependence increases. “

**Score of 5:** “Your level of nicotine dependence is moderate. If you don’t quit soon, your level of dependence on nicotine will increase until you may be seriously addicted. Act now to end your dependence on nicotine.”

**Score over 7:** “Your level of dependence is high. You aren’t in control of your smoking - it is in control of you! When you make the decision to quit, you may want to talk with your doctor about nicotine replacement therapy or other medications to help you break your addiction.”

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## Heaviness of Smoking Index (HSI) and Scoring Instructions

Two measures from the Fagerström test, the time to first cigarette and the number of cigarettes smoked per day, are sometimes combined into a measure of nicotine dependence called the Heaviness of Smoking Index (HSI). The HSI, like the Fagerström, is a screening tool only, and should not be the ultimate measure of nicotine dependence. Nicotine dependence is diagnosed using the DSM-IV-TR criteria for substance dependence.

The following are Fagerström questions 1 and 4.

1. How soon after you wake up do you smoke your first cigarette?

\_\_\_ Within five minutes (3)

\_\_\_ 5-30 minutes (2)

\_\_\_ 31-60 minutes (1)

\_\_\_ After 60 minutes (0)

2. How many cigarettes a day do you smoke?

\_\_\_ 10 or less (0)

\_\_\_ 11 - 20 (1)

\_\_\_ 21 - 30 (2)

\_\_\_ 31 or more (3)

Add the scores from the two questions together. The level of nicotine dependence is determined as follows:

0-1: Low dependence

2-4: Moderate dependence

5-6: High dependence

If the patient reports both a high level of cigarettes per day usage (1 pack or more) and that he/she does not smoke a cigarette within the first hour of waking, ask the follow-up question:

*Do you sometimes wake up during the night and smoke? If the patient states "yes", follow-up with the question, "How many times a week?"*

If the patient answers "no" they do not wake up in the night to smoke, you may want to ask the patient to describe their morning routine. Oftentimes there is something or someone that prohibits the person from smoking in the first hour of the day (i.e., getting children ready for school and won't smoke in front of children. Or a spouse/partner won't allow them to smoke in the house and the first cigarette is not smoked until the person leaves the house.)

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## The Hooked on Nicotine Checklist (HONC)

*This handout is from: <http://fmchapps.umassmed.edu/honc/TOC.htm>*

	NO	YES
1. Have you ever tried to quit, but couldn't?		
2. Do you smoke <u>now</u> because it is really hard to quit?		
3. Have you ever felt like you were addicted to tobacco?		
4. Do you ever have strong cravings to smoke?		
5. Have you ever felt like you really needed a cigarette?		
6. Is it hard to keep from smoking in places where you are not supposed to?		
When you haven't used tobacco for a while ... OR When you tried to stop smoking...		
7. Did you find it hard to concentrate because you couldn't smoke?		
8. Did you feel more irritable because you couldn't smoke?		
9. Did you feel a strong need or urge to smoke?		
10. Did you feel nervous, restless or anxious because you couldn't smoke?		

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## HONC Scoring Instructions

The HONC is scored by counting the number of YES responses.

**Dichotomous Scoring** - The HONC is an indicator of diminished autonomy.

- Individuals who score a zero on the HONC by answering NO to all ten questions enjoy full autonomy over their use of tobacco.
- Because each of the ten symptoms measured by the HONC has face validity as an indicator of diminished autonomy, a smoker has lost full autonomy if any symptom is endorsed.
- In schools and clinics, smokers who have scores above zero can be told that they are already hooked.

**Continuous Scoring**- The HONC is a measure of severity of diminished autonomy.

- The number of symptoms a person endorses serves as a measure of the extent to which autonomy has been lost.

Some researchers prefer to provide multiple response options for questionnaire items, e.g., *never, sometimes, most of the time, always*. In certain situations, this can improve the statistical properties of a survey. ***When this has been done with the HONC, its performance was not improved*** (O’Loughlin et al., 2002). Having more response options complicates the scoring because the total score does not coincide with the number of individual symptoms. Therefore, we recommend the Yes/No response format.

Researchers who wish to measure frequency or severity of symptoms may do so by adding to the yes/no format additional questions about any item endorsed by a smoker. Here is an example: *Have you ever felt like you were addicted to tobacco?* A smoker who checked “yes” would then respond to:

- How often have you felt addicted?

*Rarely, Occasionally, Often, Very Often*

- On a scale from 1 (*hardly at all*) to 10 (*extremely*), how addicted have you felt?

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Minnesota Nicotine Withdrawal Scale

Behavior Rating Scale

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**Self-Report**  
**09/05**

**Please rate yourself for the period for the last \_\_\_\_\_**

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0 = none, 1 = slight, 2 = mild, 3 = moderate, 4 = severe

1. Angry, irritable, frustrated	0	1	2	3	4
2. Anxious, nervous	0	1	2	3	4
3. Depressed mood, sad	0	1	2	3	4
4. Desire or craving to smoke	0	1	2	3	4
5. Difficulty concentrating	0	1	2	3	4
6. Increased appetite, hungry, weight gain	0	1	2	3	4
7. Insomnia, sleep problems, awakening at night	0	1	2	3	4
8. Restless	0	1	2	3	4
9. Impatient	0	1	2	3	4
10. Constipation	0	1	2	3	4
11. Dizziness	0	1	2	3	4
12. Coughing	0	1	2	3	4
13. Dreaming/nightmares	0	1	2	3	4
14. Nausea	0	1	2	3	4
15. Sore throat	0	1	2	3	4

Heart rate \_\_\_\_\_ bpm

Weight \_\_\_\_\_ kg

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Minnesota Nicotine Withdrawal Scale  
Behavioral Rating Scale  
Observer Rating  
09/05

Rate the subject on the following symptoms according to whether you observed the symptom in the subject in the last \_\_\_\_\_. It does not matter whether the subject complained of the symptom. We want to know whether you noticed the symptom.

0 = not at all, 1 = slight, 2 = mild, 3 = moderate, 4 = severe

a. Angry/irritable/frustrated	0	1	2	3	4
b. Anxious/tense	0	1	2	3	4
c. Depressed	0	1	2	3	4
d. Restless/Impatient	0	1	2	3	4

**1. How confident are you that this rating is accurate?**

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0 = not at all

1 = somewhat confident

2 = moderately confident

3 = very confident

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## **Instructions For Use of the Minnesota Withdrawal Scale - Revised**

1. There are two scales: a self-report and an observer scale. Several items do not appear in the observer scale as observers cannot reliably rate them.
2. On the self-report scale, the first nine items are the well-validated items and are the ones to be used if calculating a total withdrawal discomfort score. The other six are promising candidate items.
3. See the attached table to further compare the content of the scales with the criteria for DSM-IV and ICD-10 nicotine/tobacco withdrawal and the contents of other withdrawal scales.
4. We have participants complete the scale before as well as after quitting.
5. We have participants rate over the last 24 hours and observers rate over the last week. We usually require observers to see the participant on average 2 hr/day.
6. We use the 0-4 response option so that we can have verbal anchors for each response. Larger response options (e.g., 0-100) are likely more sensitive but may be more difficult to interpret.
7. The scale is not labeled a withdrawal scale because subjects 1) are confused by filling out a “withdrawal” scale prior to cessation, and 2) will sometimes not report a symptom during abstinence if they do not believe it is due to withdrawal.
8. We encourage readers to read recent reviews of methodological issues in measuring tobacco withdrawal.

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## FDA Pregnancy Category

### Supplemental Handout

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In 1979, the United States Food and Drug Administration (FDA) introduced a classification of fetal risks due to pharmaceuticals. This was based on a similar system that was introduced in Sweden just one year earlier.

The United States FDA has the following definitions for the pregnancy categories:

<b>United States FDA Pharmaceutical Pregnancy Categories</b>	
<b>Pregnancy Category A</b>	Adequate and well-controlled studies have failed to demonstrate a risk to the fetus in the first trimester of pregnancy (and there is no evidence of risk in later trimesters).
<b>Pregnancy Category B</b>	Animal reproduction studies have failed to demonstrate a risk to the fetus and there are no adequate and well-controlled studies in pregnant women OR Animal studies which have shown an adverse effect, but adequate and well-controlled studies in pregnant women have failed to demonstrate a risk to the fetus in any trimester.
<b>Pregnancy Category C</b>	Animal reproduction studies have shown an adverse effect on the fetus and there are no adequate and well-controlled studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.
<b>Pregnancy Category D</b>	There is positive evidence of human fetal risk based on adverse reaction data from investigational or marketing experience or studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.
<b>Pregnancy Category X</b>	Studies in animals or humans have demonstrated fetal abnormalities and/or there is positive evidence of human fetal risk based on adverse reaction data from investigational or marketing experience, and the risks involved in use of the drug in pregnant women clearly outweigh potential benefits.

One characteristic of the FDA definitions of the pregnancy categories is that the FDA requires a relatively large amount of high-quality data on a pharmaceutical for it to be defined as Pregnancy Category A. As a result of this, many drugs that would be considered Pregnancy Category A in other countries are allocated to Category C by the FDA

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## Health Belief Model Supplemental Handout

Source:

[http://www.cw.utwente.nl/theorieenoverzicht/Theory%20clusters/Health%20Communication/Health Belief Model.doc/](http://www.cw.utwente.nl/theorieenoverzicht/Theory%20clusters/Health%20Communication/Health%20Belief%20Model.doc/)

### History and Orientation

The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors. This is done by focusing on the attitudes and beliefs of individuals. The HBM was first developed in the 1950s by social psychologists Hochbaum, Rosenstock, and Kegels working in the U.S. Public Health Services. The model was developed in response to the failure of a free tuberculosis (TB) health screening program. Since then, the HBM has been adapted to explore a variety of long- and short-term health behaviors, including sexual risk behaviors and the transmission of HIV/AIDS.

### Core Assumptions and Statements

The HBM is based on the understanding that a person will take a health-related action (i.e., use condoms) if that person:

1. Feels that a negative health condition (i.e., HIV) can be avoided
2. Has a positive expectation that by taking a recommended action, he/she will avoid a negative health condition (i.e., using condoms will be effective at preventing HIV)
3. Believes that he/she can successfully take a recommended health action (i.e., he/she can use condoms comfortably and with confidence)

The HBM was spelled out in terms of four constructs representing the perceived threat and net benefits: perceived *susceptibility*, perceived *severity*, perceived *benefits*, and perceived *barriers*. These concepts were proposed as accounting for people's "readiness to act." An added concept, *cues to action*, would activate that readiness and stimulate overt behavior. A recent addition to the HBM is the concept of *self-efficacy*, or one's confidence in the ability to successfully perform an action. This concept was added by Rosenstock and others in 1988 to help the HBM better fit the challenges of changing habitual unhealthy behaviors, such as being sedentary, smoking, or overeating.

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## What is Locus of Control?

### Supplemental Handout

Source: <http://wilderdom.com/psychology/loc/LocusOfControlWhatIs.html>

Within psychology, Locus of Control is considered to be an important aspect of personality. The concept was developed originally by Julian Rotter in the 1950s (Rotter, 1966).

Locus of Control refers to an individual's perception about the underlying main causes of events in his/her life. Or, more simply: Do you believe that your destiny is controlled by *yourself* or by *external forces* (such as fate, god, or powerful others)?

The full name Rotter gave the construct was Locus of Control of Reinforcement. In giving it this name, Rotter was bridging behavioral and cognitive psychology. Rotter's view was that behavior was largely guided by "reinforcements" (rewards and punishments) and that through contingencies such as rewards and punishments, individuals come to hold beliefs about what causes their actions. These beliefs, in turn, guide what kinds of attitudes and behaviors people adopt. This understanding of Locus of Control is consistent, for example, with Philip Zimbardo's (a famous social psychologist) theory:

"A locus of control orientation is a belief about whether the outcomes of our actions are contingent on what we do (internal control orientation) or on events outside our personal control (external control orientation)." (Zimbardo, 1985, p. 275)

Thus, locus of control is conceptualized as referring to a one-dimensional continuum, ranging from *external* to *internal*:

<b>External Locus of Control</b>	<b>Internal Locus of Control</b>
Individual believes that his/her behavior is guided by fate, luck, or other external circumstances	Individual believes that his/her behavior is guided by his/her personal decisions and efforts.



Citation: Zimbardo, P.G. (1985). Psychology and Life. Glenview, IL: Scott Foreman and Company.

