

# *Managing COPD: The ACCP Tobacco Dependence Toolkit*

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## Disclosure

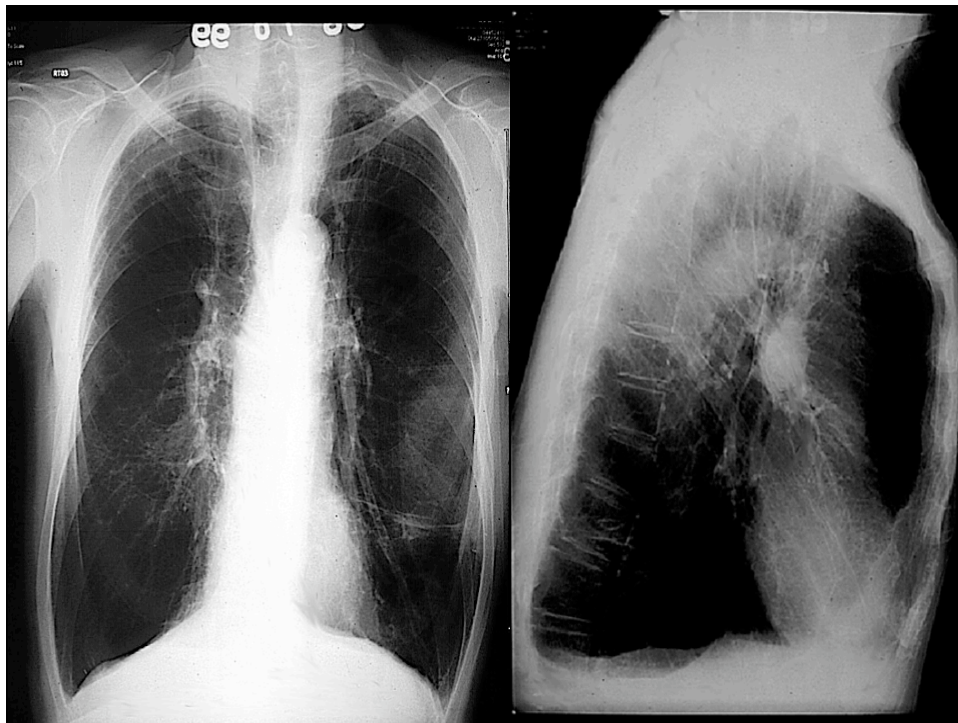
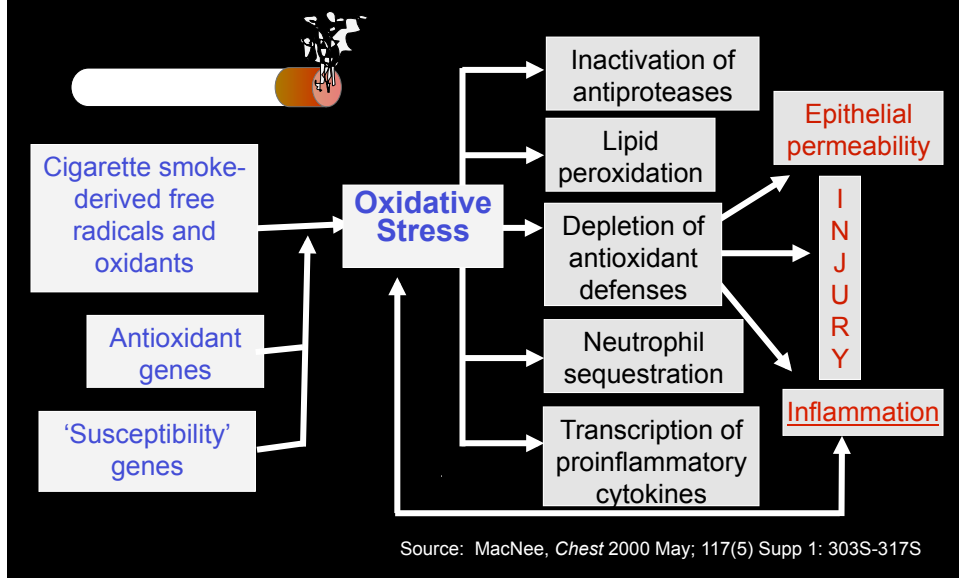
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| Employment:              | University of Pennsylvania  |
| Speakers' Bureau:        | None  |
| Other:                   | Pfizer, inc. (Transitions of Care)  |

## Objectives

- Review biology of nicotine addiction
- Discuss the special circumstance of smoking in COPD
- Develop strategies for overcoming barriers to tobacco treatment in practice.
- Introduce the Tobacco Dependence Toolkit



## Mechanisms of Cigarette Smoke Induced Lung Damage



## So... Why *DO* People Smoke?



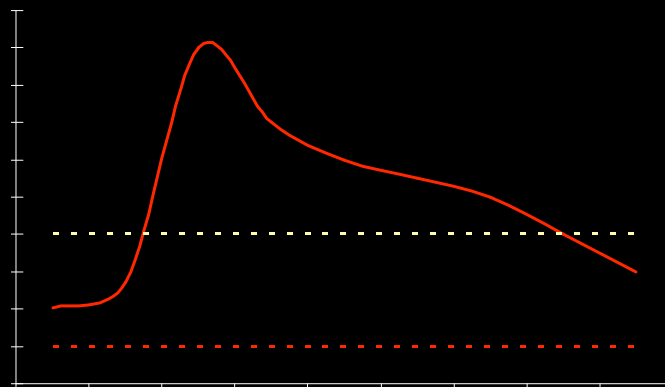
## Why is nicotine addictive?

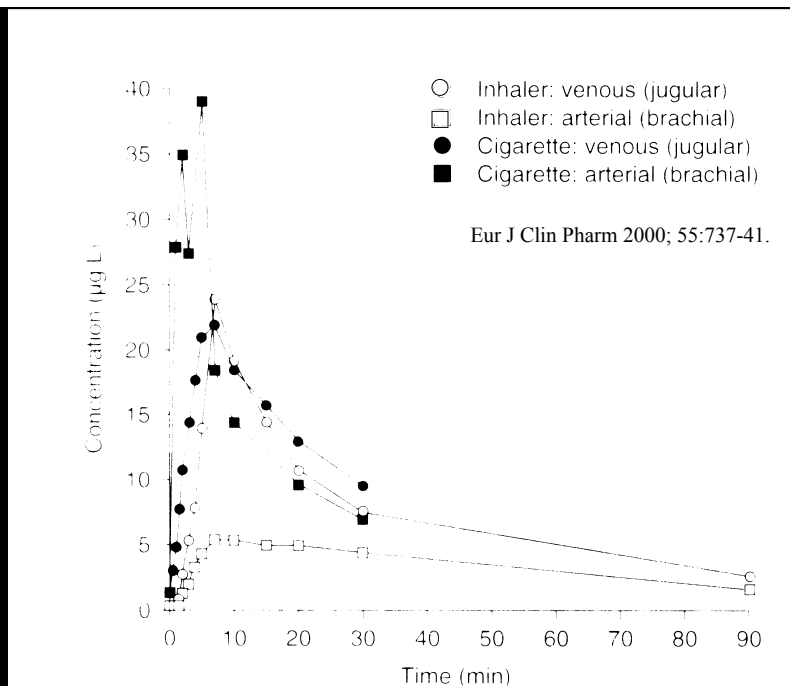
- Nicotine releases “gratification” producing chemicals in the brain.
- Long term use of nicotine produces changes in brain function and structure.
- Addictive properties related to rate of delivery to the brain.

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## Delivery of Nicotine





## Factors Affecting Cigarette Nicotine Yield

- Burn rate
- Tobacco per unit volume
- Porosity of cigarette paper
- Ventilation holes in filter wrap paper
- Temperature of smoke
- pH of smoke
- $\text{NH}_3$  content of smoke

The cigarette is... among the most awe-inspiring examples of the ingenuity of man... The cigarette should be conceived not as a product, but as a package. The product is nicotine.... Smoke is beyond question the most optimized vehicle of nicotine, and the cigarette the most optimized dispenser of smoke.

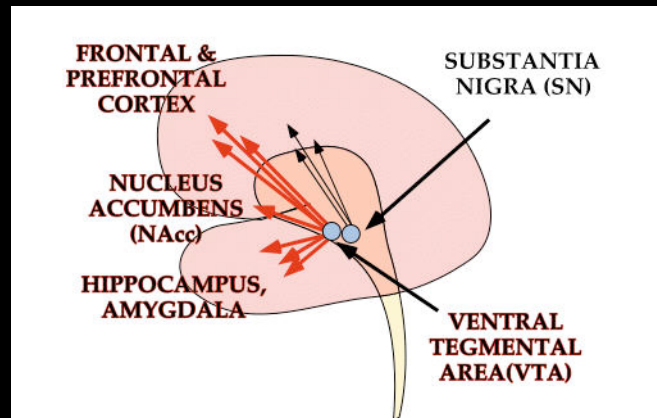
- William L. Dunn, Jr.  
Phillip Morris, 1972

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## Mesolimbic Dopaminergic system

Emotion  
Motivation  
Memory



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## Long term changes

- Increased neuronal arborization
- Increased density of nicotinic receptors
- Increased sensitivity of receptor ion channels
- Changes gene expression
  - Neuronal protein synthesis increases
  - Neurotransmitter synthesis increases



## Who wants to quit anyway?



*“But it’s my only vice!”*

## Still, we face *ambivalence*.

- Not exactly ready, or willing, or able.
- *Hesitant*
- Patients want change, but don't want change.
- "I desperately want to want to quit smoking"



*"Come back when you're ready"*

## A Sense of Helplessness



**FAILURE**

"You are only a Failure when you refuse to try again"

In a sample of PA physicians

- 57% (49-64%) of physicians feel that counseling "often falls on deaf ears."
- 46% (39-53%) are frustrated by smokers who do not readily want to quit.

Batra, et al. Soc Res Nic Tob. 2000

## A Sense of Helplessness



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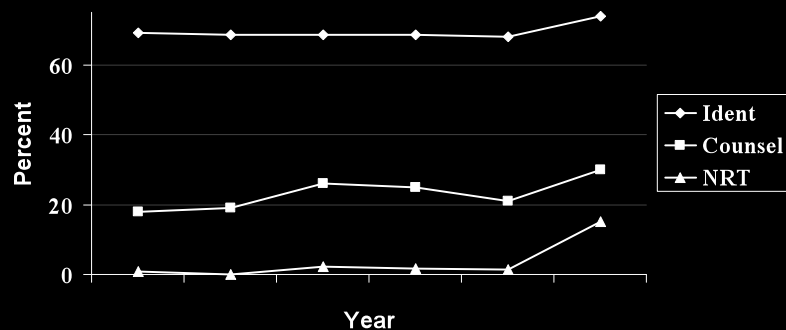
In a sample of PA physicians

- 30% (23-37%) felt cessation is financially prohibitive.
- 42% (35-49%) concerned that patients would be offended if their smoking habit were discussed too often.

Batra, et al. Soc Res Nic Tob. 2000

## Physician Behavior

Rates among physicians in primary care



<http://tobaccodependence.chestnet.org>

<http://tobaccodependence.chestnet.org>

### Objectives of the ACCP Tobacco Dependence Toolkit

- Help clinicians address tobacco dependence in a the manner of a chronic disease, characterized relapse and remission.
- Help physicians feel more comfortable providing brief counseling in the office environment
- Help physicians develop an aggressive prescribing philosophy for pharmacologic support
- Help develop efficiencies in practice.







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Tobacco Dependence Treatment Tool Kit

Executive Summary

Clinical Background

Treatment Algorithms

Patient Assessment

Patient Management

Communication and Education

Additional Resources

Physician Advocacy

ACCP's Role

TREATMENT TOPICS:

Select One

Introduction to Treatment Algorithms: How to Use Them in Clinical Practice

Stepwise Tobacco-Dependence Treatment Guide: Table 1

Stepwise Tobacco-Dependence Treatment Guide: Table 2

Recommended Visit Schedule for Diagnosing and Treating Tobacco Dependence

Assessment (Initial)

Assessment Specifics

Managing Patient Reluctance (i.e., Getting to "Yes")

Developing a Medication Treatment Plan: Logic Model

Long-Term Evaluation and Management

Managing Relapse

Tapering Pharmacologic Interventions

Management of the Child/Adolescent at Risk for Smoking

Management of the Smoke-Exposed Child

Algorithm Key

Source for

And

and be reimbursed,

contained in this

active online setting

ents, containing

using some educational materials and clinically relevant

instruments to facilitate a highly successful, proven approach to tobacco-dependence treatment.

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Tobacco-Dependence Treatment Tool Kit, 3<sup>rd</sup> Edition

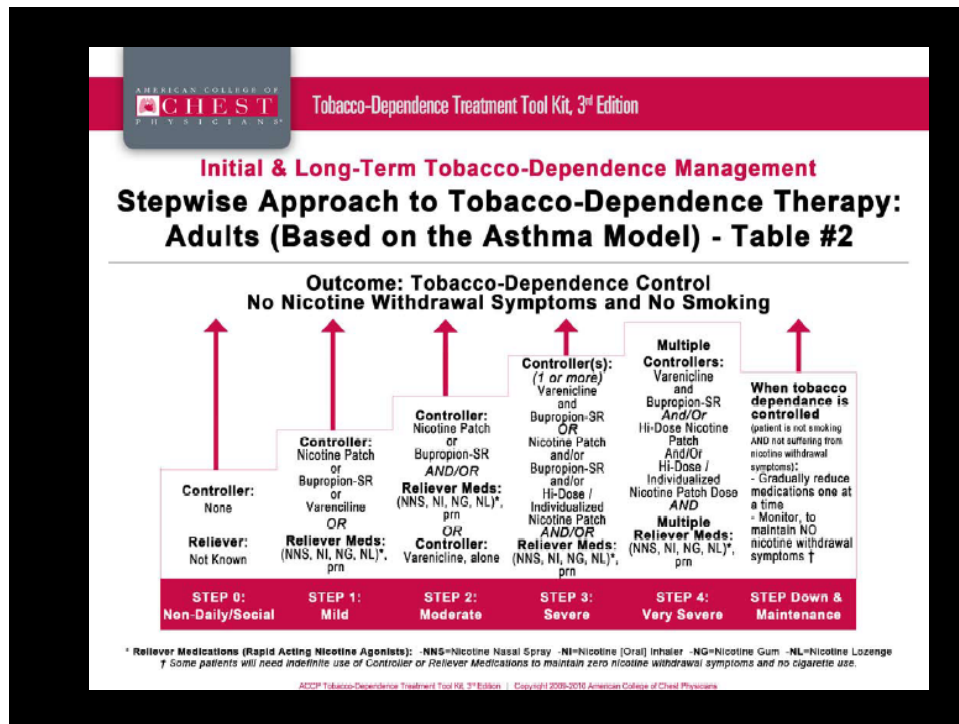
### Classification of Severity - Table #1

CLASSIFY TOBACCO-DEPENDENCE SEVERITY  
Clinical Features Before Treatment\*

|  | Cigarette Use   | Nicotine Withdrawal Symptoms  | Quantitative                                | Health Status  |
|--|---|-------------------------------|---|--|
| <b>STEP 4</b><br><b>Very Severe</b>      | - >40 CPD<br>- Daily use<br>- Time to 1st Cig < 5 min                             | - Constant<br>- NWS > 40      | - FTND 8-10<br>- Se Cotinine > 400 ng/mL    | - ≥1 Chronic Medical Dis. AND / OR<br>- ≥1 Psychiatric Disease |
| <b>STEP 3</b><br><b>Severe</b>           | - 20-40 CPD<br>- Daily use<br>- Time to 1st Cig 5-30 min                          | - Constant<br>- NWS 31-40     | - FTND 6-7<br>- Se Cotinine 250 - 400 ng/mL | - ≥1 Chronic Medical Dis. OR<br>- ≥1 Psychiatric Disease       |
| <b>STEP 2</b><br><b>Moderate</b>         | - 6-19 CPD<br>- Daily use<br>- Time to 1st Cig 31-60 min                          | - Frequent<br>- NWS 21-30     | - FTND 4-5<br>- Se Cotinine 151-250 ng/mL   | - Healthy medically<br>- Healthy psychiatrically               |
| <b>STEP 1</b><br><b>Mild</b>             | - 1-5 CPD<br>- Intermittent Use<br>- Time to 1st Cig > 60 min                     | - Intermittent<br>- NWS 11-20 | - FTND 2-3<br>- Se Cotinine 51-150 ng/mL    | - Healthy medically<br>- Healthy psychiatrically               |
| <b>STEP 0</b><br><b>Non-Daily/Social</b> | - Non-daily cigarette use<br>- Social setting only<br>- Time to 1st Cig >> 60 min | - None<br>- NWS < 10          | - FTND 0-1<br>- Se Cotinine < 50 ng/mL      | - Healthy medically<br>- Healthy psychiatrically               |

\*The presence of one feature of severity is sufficient to place patient in that category.  
 -CPD=Cigarettes Per Day -Time to 1st Cig=Time to First Cigarette after Awakening in the Morning  
 -NWS=Nicotine Withdrawal Symptom Score -FTND=Fagerström Test for Nicotine Dependence Score  
 -Se=Serum -Cotinine=First-pass, hepatic metabolite of nicotine; physiologically inactive

ACCP Tobacco-Dependence Treatment Tool Kit, 3<sup>rd</sup> Edition | Copyright 2009-2016 American College of Chest Physicians



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Management of the Smoke-Exposed Child

Algorithm Key

Using some educational materials and clinically relevant instruments to facilitate a highly successful, proven approach to tobacco-dependence treatment.

**SOURCE FOR**

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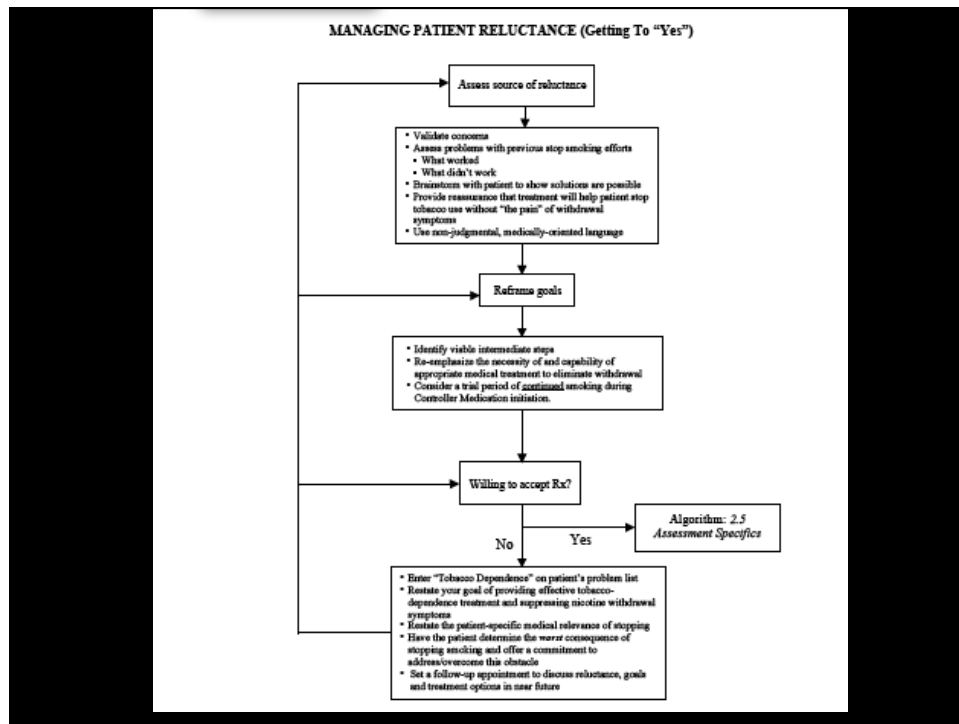
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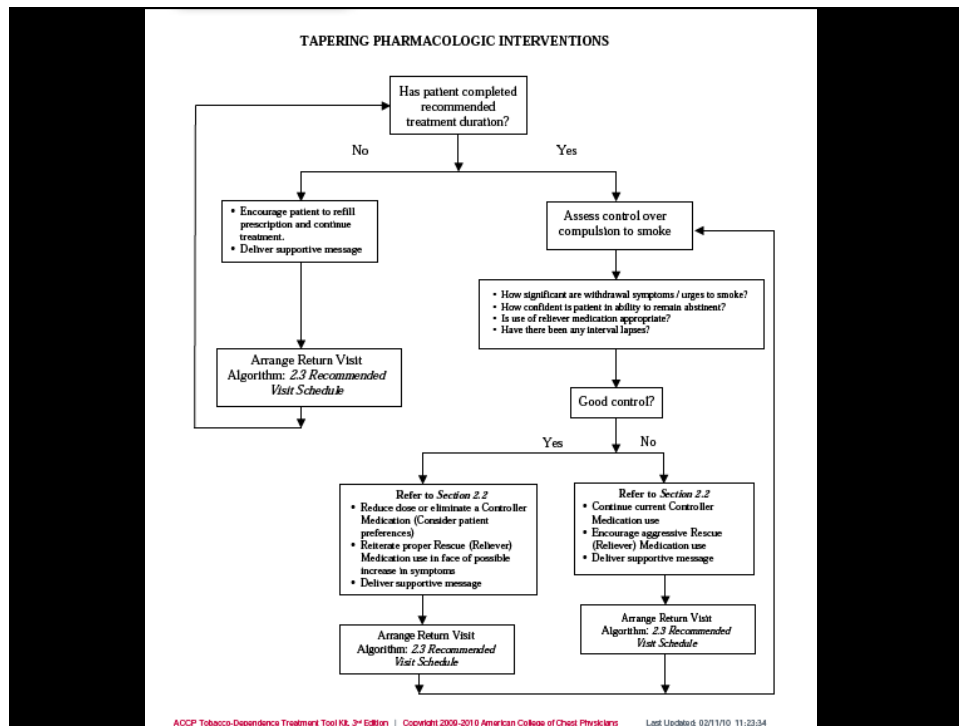
## Tobacco Dependence Treatment Toolkit

|                             |  |
|-----------------------------|--|
| Executive Summary           | Introduction to Treatment Algorithms: How to Use Them in Clinical Practice |
| Clinical Background         | Stepwise Tobacco-Dependence Treatment Guide: Table 1                       |
| Treatment Algorithms        | Stepwise Tobacco-Dependence Treatment Guide: Table 2                       |
| Patient Assessment          | Recommended Visit Schedule for Diagnosing and Treating Tobacco Dependence  |
| Patient Management          | Assessment (Initial)   |
| Communication and Education | Assessment Specifics   |
| Additional Resources        | Managing Patient Reluctance (i.e., Getting to "Yes")                       |
| Physician Advocacy          | Developing a Medication Treatment Plan: Logic Model                        |
| ACCP's Role                 | Long-Term Evaluation and Management  |
| TREATMENT TOPICS:           | Managing Relapse   |
|                             | Tapering Pharmacologic Interventions                                       |
|                             | Management of the Child/Adolescent at Risk for Smoking                     |
|                             | Management of the Smoke-Exposed Child                                      |
|                             | Algorithm Key  |

Select One ▼

and be reimbursed, contained in this interactive online setting, containing instruments to facilitate a highly successful, proven approach to tobacco-dependence treatment.

**SOURCE FOR  
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Executive Summary

Clinical Background ▶

Treatment Algorithms ▶

Patient Assessment ▶

Patient Management ▶

Communication and Education ▶

Additional Resources ▶

Physician Advocacy ▶

ACCP's Role ▶

**TREATMENT TOPICS:**

Select One ▼

**INFORMATION FOR:**

Select One ▼

**A COMPREHENSIVE RESOURCE FOR HEALTHCARE PROVIDERS AND TOBACCO-DEPENDENCE PROFESSIONALS**

Now you can help your patients stop smoking and be reimbursed, using the protocols and coding information contained in this comprehensive tool kit. The user-friendly interactive online setting is a complete resource for you and your patients, containing background educational materials and clinically relevant instruments to facilitate a highly successful, proven approach to tobacco-dependence treatment.

**Coding Principles**

[Need Reimbursement Advice?](#)

Although not well recognized, physicians can be reimbursed for treating their patient's tobacco dependence. This tool kit provides a general framework for the relevant coding and billing principles.

**Statistics**

**Is tobacco use harmful?**

Tobacco dependence is a fatal disease. As many as 90% of tobacco-dependent people identify tobacco use as harmful and want to reduce or stop using it.

**Video**

**Management of the Tobacco Dependent Patient: Introductory Video**

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reset Log Out

## Tobacco Dependence Treatment Tool

|                             |  |
|-----------------------------|--|
| Executive Summary           | How To Use The ACCP Tool Kit   |
| Clinical Background         | Introduction and Goals   |
| Treatment Algorithms        | Correct Coding Principles For Tobacco-Dependence Treatment   |
| Patient Assessment          | The Scientific & Clinical Basis for the Tool Kit Recommendations   |
| Patient Management          | The Biological Basis for Tobacco Use   |
| Communication and Education | Tobacco-Dependence Treatment Process and Approach  |
| Additional Resources        | Pharmacologic Treatment  |
| Physician Advocacy          | Quick Reference Guide to Pharmacotherapy   |
| ACCP's Role                 | Smoking and Tobacco-Dependence Treatment for Pregnant Women and Women of Childbearing Age                              |
|                             | The Role of the Pediatric Health-Care Provider in Tobacco-Dependence Treatment and Secondhand Smoke Exposure Reduction |
|                             | Intermittent, Nondaily, & Social Smoking   |
|                             | The Stages of Behavior Change for Stopping Smoking   |

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## What this group has done...



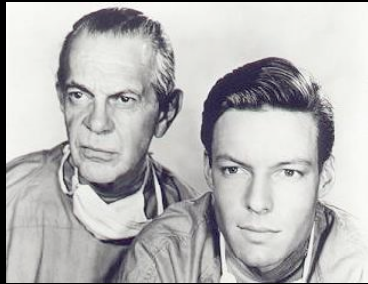
2010 CHEST conference  
Vancouver, BC

Total 5 sessions on tobacco treatment

4 sessions included detailed  
information on toolkit

Over 350 physician attendees

## What this group has done...



2010 National Cancer Institute  
(Katrina Armstrong, PI)  
University of Pennsylvania

Prospective, Randomized, Cohort-  
allocated clinical trial

Links system-wide EMR to toolkit

Over 100 physicians / 3 practice sites

Evaluate 3000 patients over 6 mos

## What this group has done...



Philadelphia Dept of Public Health  
*COPD Initiative*

Academic Detailing model of  
physician education

Focuses COPD recommendations on  
smoking, medications, nutrition/  
exercise

400 physician sample set planned  
over next year

Thank You!

Thank You!

Thank You!

*“If we always do what we’ve  
always done, we’ll always get what  
we’ve always gotten.”*

- Anonymous

The Comprehensive Smoking  
Treatment Program

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