

2008 Clinical Practice Guideline Update: Treating Tobacco Use and Dependence

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Center for Tobacco
Research & Intervention

Key Guideline Weblinks

- Guideline Materials
 - <http://www.surgeongeneral.gov/tobacco/>
- List of over 50 endorsing organizations at
 - http://www.ctri.wisc.edu/Researchers/researchers_CPGupdate2008_endorse.htm
- May 7th webcast
 - <http://www.ctri.wisc.edu/>
 - then click on [View the Webcast](#)

Clinical Practice Guideline: Treating Tobacco Use and Dependence Update

History:

1. 1996 – Initial Guideline; literature from 1975 -1995; approximately 3,000 articles
2. 2000 – Revised Guideline; literature from 1995 -1999; approximately 3,000 articles
3. 2008 - Updated Guideline; literature from 1999 – 2007; approximately 2,700 articles (approximately 8,700 total articles)

Clinical Practice Guideline: Treating Tobacco Use and Dependence Update

- Update started 7-1-06
- Scope remains the treatment of tobacco use and dependence
- Update rather than a full revision
- Used very similar development process

Funded by

- Agency for Healthcare Research and Quality
- National Cancer Institute
- National Heart, Lung & Blood Institute,
- National Institute on Drug Abuse
- Centers for Disease Control and Prevention
- The Robert Wood Johnson Foundation
- American Legacy Foundation
- University of Wisconsin-CTRI

Panel Members

- Michael C. Fiore, MD, MPH, Chair
- Carlos Roberto Jaén, MD, PhD, FAAFP, Vice-Chair
- Timothy Baker, PhD, Senior Scientist
- William C. Bailey, MD, FACP, FCCP
- Neal Benowitz, MD
- Susan J. Curry, PhD
- Sally Faith Dorfman, MD, MSHSA
- Erika S. Froelicher, RN, MA, MPH, PhD
- Michael G. Goldstein, MD
- Cheryl Healton, DrPH
- Patricia Nez Henderson, MD, MPH
- Richard B. Heyman, MD
- Howard Koh, MD, MPH, FACP
- Thomas E. Kottke, MD, MSPH
- Harry A. Lando, PhD
- Robert Mecklenburg, DDS, MPH
- Robin Mermelstein, PhD
- Patricia Mullen, Dr PH
- C. Tracy Orleans, PhD
- Lawrence Robinson, MD, MPH
- Maxine Stitzer, PhD
- Anthony Tommasello, Pharm BS, PhD
- Louise Villejo, MPH, CHES
- Mary Ellen Wewers, PhD, RN, MPH

PHS Liaisons

- Ernestine (Tina) Murray, RN, MAS, AHRQ (Project Officer)
- Sandra Cummings, AHRQ
- Christine Williams, AHRQ
- Glen Bennett, NHLBI
- Stephen Heishman, NIDA
- Corrine Husten, CDC
- Glen Morgan, NCI

Guideline Update Development Phases

1. Identify update topics
2. Meta-analysis of topics
3. Panel/liaisons workgroups
4. Establish recommendations and other content
5. Draft text
6. Peer review/public comment
7. Released – May 7, 2008

Final Selected Topics

- proactive quitlines
- combining counseling and medication relative to either counseling or medication alone
- varenicline
- various medication combinations
- long-term medication use
- tobacco use interventions for individuals with low socio-economic status/limited formal education
- tobacco use interventions for adolescent smokers
- tobacco use interventions for pregnant smokers
- tobacco use interventions for individuals with psychiatric disorders, including substance abuse disorders
- providing cessation interventions as a health benefit
- systems interventions, including provider training and the combination of training and systems interventions

Peer Review/Public Comment

- Over 90 independent tobacco treatment experts served as peer reviewers
- Federal Register notice announced availability of guideline for public comment

Some Key Results

Combinations: Medication and Counseling

Effectiveness of and estimated abstinence rates for the combination of counseling and medication versus medication alone (n = 18 studies)

Treatment	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
Medication alone	8	1.0	21.7
Medication and counseling	39	1.4 (1.2, 1.6)	27.6 (25.0, 30.3)

Combinations: Medication and Counseling

Effectiveness of and estimated abstinence rates for the combination of counseling and medication versus counseling alone (n = 9 studies)

Treatment	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
Counseling alone	11	1.0	14.6
Medication and counseling	13	1.7 (1.3, 2.1)	22.1 (18.1, 26.8)

Pro-active Quitlines

Effectiveness of and estimated abstinence rates for quitline counseling compared to minimal interventions, self-help or no counseling (n = 9 studies)

Intervention	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
Minimal or no counseling or self-help	11	1.0	8.5
Quitline counseling	11	1.6 (1.4, 1.8)	12.7 (11.3, 14.2)

Pro-active Quitlines

Effectiveness of and estimated abstinence rates for quitline counseling and medication compared to medication alone (n = 6 studies)

Intervention	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
Medication alone	6	1.0	23.2
Medication and quitline counseling	6	1.3 (1.1, 1.6)	28.1 (24.5, 32.0)

Low Socio-Economic Status/Limited Formal Education

Effectiveness of and estimated abstinence rates for counseling interventions with low socio-economic status/limited formal education (n = 5 studies)

Intervention	Number of arms	Estimated odds ratio (95% C. I.)	Estimated abstinence rate (95% C. I.)
Usual care or no counseling	6	1.0	13.2
Counseling	5	1.42 (1.0,1.9)	17.7 (13.7, 22.6)

Psychiatric Disorders Including Substance Use Disorders

Effectiveness of and estimated abstinence rates for treatment with bupropion and nortryptiline for smokers with a history of depression (n = 4 studies)

Intervention	Number of arms	Estimated odds ratio (95% C. I.)	Estimated abstinence rate (95% C. I.)
Placebo	5	1.0	13.2
Bupropion SR or nortryptiline	8	3.4 (1.7, 6.8)	29.9 (17.5, 46.1)

Adolescent Smokers

Effectiveness of and estimated abstinence rates for counseling interventions with adolescent smokers (n = 7 studies)

Adolescent smokers	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
Usual care	7	1.0	6.7
Counseling	7	1.8 (1.1, 3.0)	11.6 (7.5, 17.5)

Pregnant Smokers

Effectiveness of and estimated pre-parturition abstinence rates for psychosocial interventions with pregnant smokers (n = 8 studies)

Pregnant smokers	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
Usual care	8	1.0	7.6
Psychosocial intervention (abstinence pre-parturition)	9	1.8 (1.4, 2.3)	13.3 (9.0, 19.4)

Intervention as a Covered Health Benefit

Estimated rates of quit attempts for individuals who received tobacco use interventions as a covered health insurance benefit (n = 3 studies)

Treatment	Number of arms	Estimated odds ratio (95% C.I.)	Estimated quit attempt rate (95% C.I.)
Individuals with no covered benefit	3	1.0	30.5
Individuals with the benefit	3	1.3 (1.01, 1.5)	36.2 (32.3, 40.2)

Intervention as a Covered Health Benefit

Estimated abstinence rates for individuals who received tobacco use interventions as a covered benefit (n = 3 studies)

Treatment	Number of arms	Estimated odds ratio (95% C.I.)	Estimated abstinence rate (95% C.I.)
Individuals with no covered benefit	3	1.0	6.7
Individuals with the benefit	3	1.6 (1.2, 2.2)	10.5 (8.1, 13.5)

Systems Interventions: Clinician Training and Chart Reminders

Effectiveness of clinician training combined with charting on asking about smoking status (“Ask”) (n = 3 studies)

Intervention	Number of arms	Odds Ratio (95% C.I.)	Estimated rate (95% C.I.)
No intervention	3	1.0	58.8
Training and charting	3	2.1 (1.9, 2.4)	75.2 (72.7, 77.6)

Systems Interventions: Clinician Training and Chart Reminders

Effectiveness of training combined with charting on setting a quit date (“Assist”) (n = 2 studies)

Intervention	Number of arms	Odds Ratio (95% C.I.)	Estimated rate (95% C.I.)
No intervention	2	1.0	11.4
Training and charting	2	5.5 (4.1, 7.4)	41.4 (34.4, 48.8)

Systems Interventions: Clinician Training and Chart Reminders

Effectiveness of training combined with charting on arranging for follow-up (“Arrange”) (n = 2 studies)

Intervention	Number of arms	Odds Ratio (95% C.I.)	Estimated rate (95% C.I.)
No intervention	2	1.0	6.7
Training and charting	2	2.7 (1.9, 3.9)	16.3 (11.8, 22.1)

Special Populations

- HIV-positive smokers
- Hospitalized smokers
- Lesbian/gay/bisexual/transgender smokers
- Smokers with low SES/limited formal education
- Smokers with medical comorbidities
- Older smokers
- Smokers with psychiatric disorders including substance use disorders
- Racial and ethnic minority smokers
- Women smokers

Specific Populations

- Children and Adolescent Smokers
- Light Smokers
- Noncigarette Tobacco Users
- Pregnant Smokers

Ten Key Guideline Recommendations

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- 1. Tobacco dependence is a chronic disease that often requires repeated intervention and multiple attempts to quit. However, effective treatments exist that can significantly increase rates of long-term abstinence.**
- 2. It is essential that clinicians and healthcare delivery systems consistently identify and document tobacco use status and treat every tobacco user seen in a healthcare setting.**

Ten Key Guideline Recommendations

- 3. Tobacco dependence treatments are effective across a broad range of populations. Clinicians should encourage every patient willing to make a quit attempt to use the counseling treatments and medications recommended in this Guideline.**

Ten Key Guideline Recommendations

4. **Brief tobacco dependence treatment is effective. Clinicians should offer every patient who uses tobacco at least the brief treatments shown to be effective in this Guideline.**

5. **Individual, group and telephone counseling are effective, and their effectiveness increases with treatment intensity. Two components of counseling are especially effective and clinicians should use these when counseling patients making a quit attempt**
 - **Practical counseling (problem-solving/skills training)**
 - **Social support delivered as part of treatment**

Ten Key Guideline Recommendations

6. There are numerous effective medications for tobacco dependence and clinicians should encourage their use by all patients attempting to quit smoking, except when medically contraindicated or with specific populations for which there is insufficient evidence of effectiveness (i.e., pregnant women, smokeless tobacco users, light smokers and adolescents).
 - Seven first-line medications (5 nicotine and 2 non-nicotine) reliably increase long-term smoking abstinence rates:
 - Bupropion SR
 - Nicotine gum
 - Nicotine inhaler
 - Nicotine lozenge
 - Nicotine nasal spray
 - Nicotine patch
 - Varenicline
 - Clinicians should also consider the use of certain combinations of medications identified as effective in this Guideline.

Ten Key Guideline Recommendations

- 7. Counseling and medication are effective when used by themselves for treating tobacco dependence. However, the combination of counseling and medication is more effective than either alone. Thus, clinicians should encourage all individuals making a quit attempt to use both counseling and medication.**
- 8. Telephone quitline counseling is effective with diverse populations and has broad reach. Therefore, clinicians and healthcare delivery systems should both ensure patient access to quitlines and promote quitline use.**

Ten Key Guideline Recommendations

- 9. If a tobacco user is currently unwilling to make a quit attempt, clinicians should use the motivational treatments shown in this Guideline to be effective in increasing future quit attempts.**
- 10. Tobacco dependence treatments are both clinically effective and highly cost-effective relative to interventions for other clinical disorders. Providing coverage for these treatments increases quit rates. Insurers and purchasers should ensure that all insurance plans include the counseling and medication identified as effective in this Guideline as covered benefits.**

Dissemination Plan

- Pocket guide for clinicians
- Consumer guide for low-literacy smokers
- Web-based system information
- Others in development

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 - <http://www.surgeongeneral.gov/tobacco/>
- List of over 50 endorsing organizations at
 - http://www.ctri.wisc.edu/Researchers/researchers_CPGupdate2008_endorse.htm
- May 7th webcast
 - <http://www.ctri.wisc.edu/>
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