Treating Tobacco Use and Dependence Guidelines

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Treating Tobacco Use and Dependence Guidelines:Objectives

- To understand current guideline summaries and there application for tobacco cessation
- To be able to identify national reports that can provide additional resources for tobacco cessation
- To provide information regarding where current research is being conducted

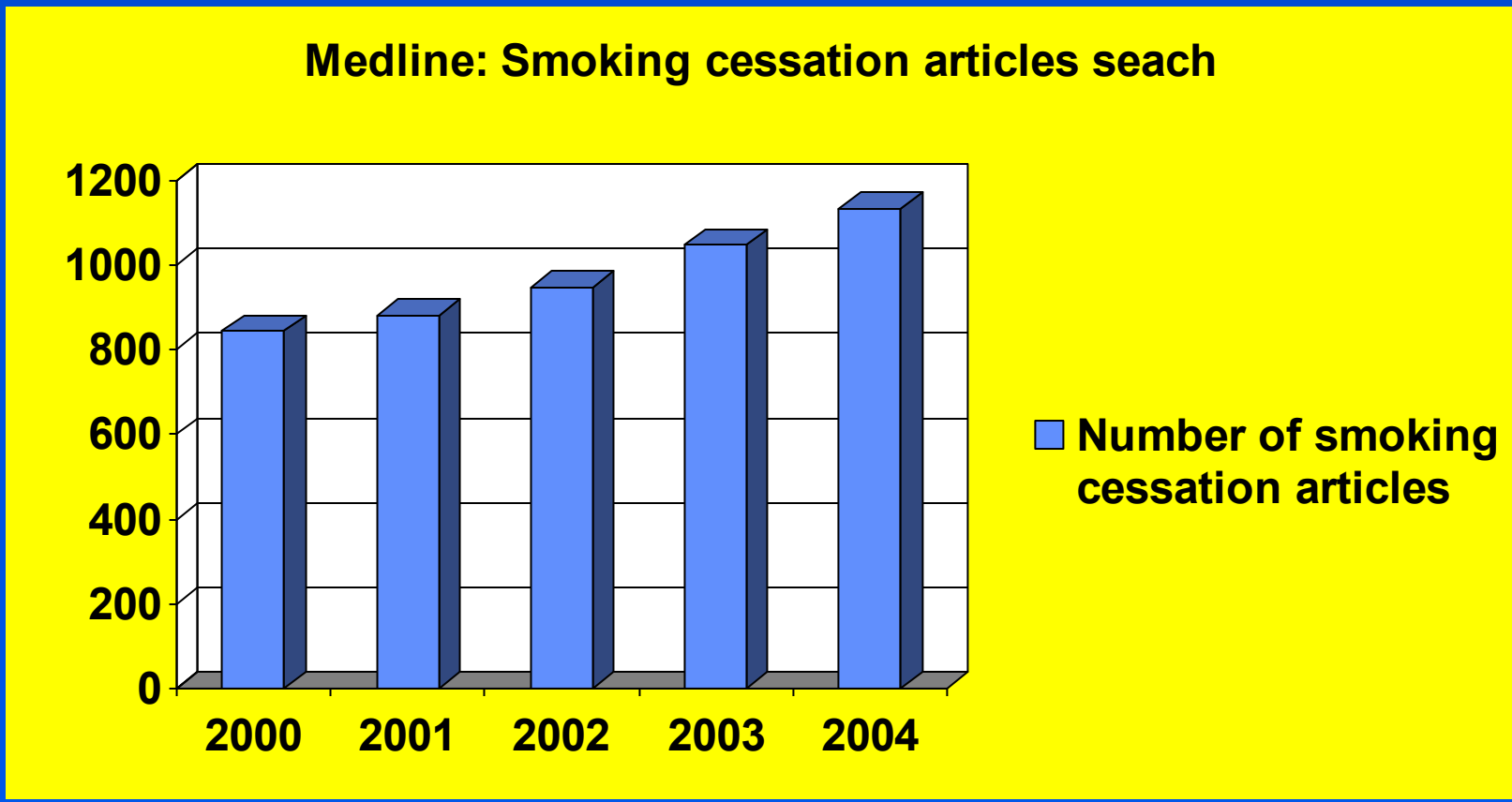
Treating Tobacco Use and Dependence Guidelines

- Guideline summaries
- National reports
- Research

Why is a summary necessary?

- Resource for quick information
- Too much information
    - Google search of Tobacco Cessation Guidelines = 589,000 !!
- Tobacco addiction remains high
- Increasing world wide burden
- Increased health care cost

Why is a summary necessary?



Evidence

- The ineffective approach
  - Look it up in a textbook
- The inefficient approach
  - Do a Pubmed search / Internet search. Tobacco cessation search 8,707 articles!
- The efficient approach
  - Evidence-based clinical practice guidelines

Evidence

- United States Department of Health and Human Services (USDHHS) Clinical Practice Guidelines on Treating Tobacco Use and Dependence
  - Updated 2000
  - Original 1996
- 6000 total articles
- 5 month abstinence
- Cochrane collaboration
- Updated regularly (2002)
- 6-12 month abstinence
- Randomized trials
- Analysis of subgroups
- Provide details of methods

Summary of Strength of Evidence for Recommendations

Strength of evidence classification	Criteria
Strength of evidence = A	**Multiple will-designed randomized clinical trial, directly relevant to the recommendation, yielded a consistent pattern of findings.**
Strength of evidence =B	**Some evidence from randomized clinical trials supported the recommendation, but the scientific support was not optimal. For instance, few randomized trials existed, the trials that did exist were somewhat inconsistent, or the trials were not directly relevant to the recommendation.**
Strength of evidence =C	**Reserved for important clinical situations where the panel achieved consensus on the recommendation in the absence of relevant randomized controlled trials.**

Fiore, MC, Bailey WC, Cohen SJ, et al. Treating Tobacco Use and Dependence. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service.June 2000

Treating Tobacco Use and Dependence Guidelines

- Guideline summaries
  - Behavioral interventions
  - Pharmacotherapy
  - Combination therapy

Behavioral Interventions

- All work to varying degrees
  - Physician advice
  - Nurse or nonphysician advice
  - Individual counseling
  - Group counseling
  - Telephone counseling
  - Self-help

Behavioral Interventions

Intervention	Improvement in cessation over controls
Physician advice	2-3%
Non-physician advice	1-5.6%
Individual	4-6%%
Group counseling	3-10.1%
Self help	1-1.5%
Telephone counseling	2.3-2.4%

Sources. The Cochrane Database of Systemic Reviews et al, The Cochrane Library. 2001-2003 . And [1] Fiore, MC, Bailey WC, Cohen SJ, et al. Treating Tobacco Use and Dependence. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. June 2000

Minimal Intervention
The 5 A's

- Ask
- Advise
- Assess
- Assist
- Arrange

Fiore, MC, Bailey WC, Cohen SJ, et al. Treating Tobacco Use and Dependence. Clinical Practice

Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service.

June 2000

Enhancing Motivation to Quit
The 5 R's

- Relevance
- Risk
- Rewards
- Roadblocks
- Repetition

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Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service.

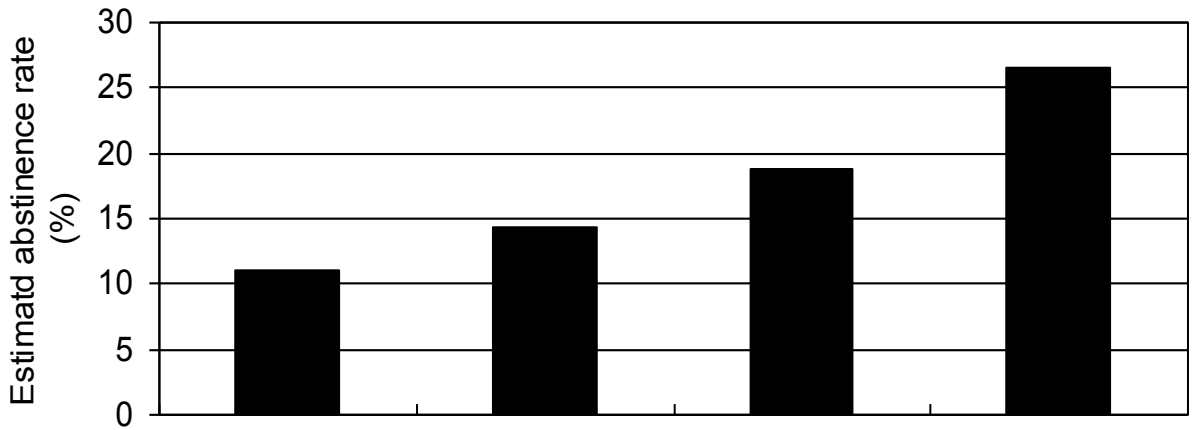
June 2000

Behavioral Intervention

- Dose response
  - Intensity of counseling, time per session
  - Total contact time
  - Number of sessions
  - Number of formats
  - Numbers of various clinicians

Behavioral Intervention
Intensity of Person-to-Person Contact

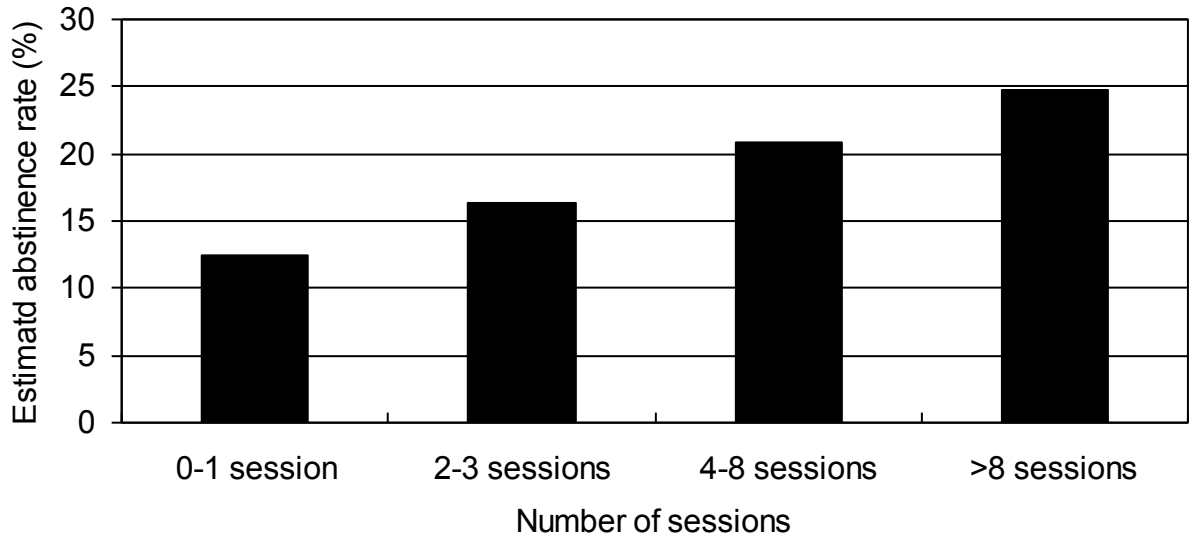
Table 12. Estimated abstinence rates for various intensity levels of person-to-person contact (N=43 studies)



Adapted from Fiore, MC, Bailey WC, Cohen SJ, et al. Treating Tobacco Use and Dependence. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. June 2000

Behavioral Intervention Number of Sessions

Table 14. Estimated abstinence rates for numer of person-to-person treatment sessions (N=43 studies)



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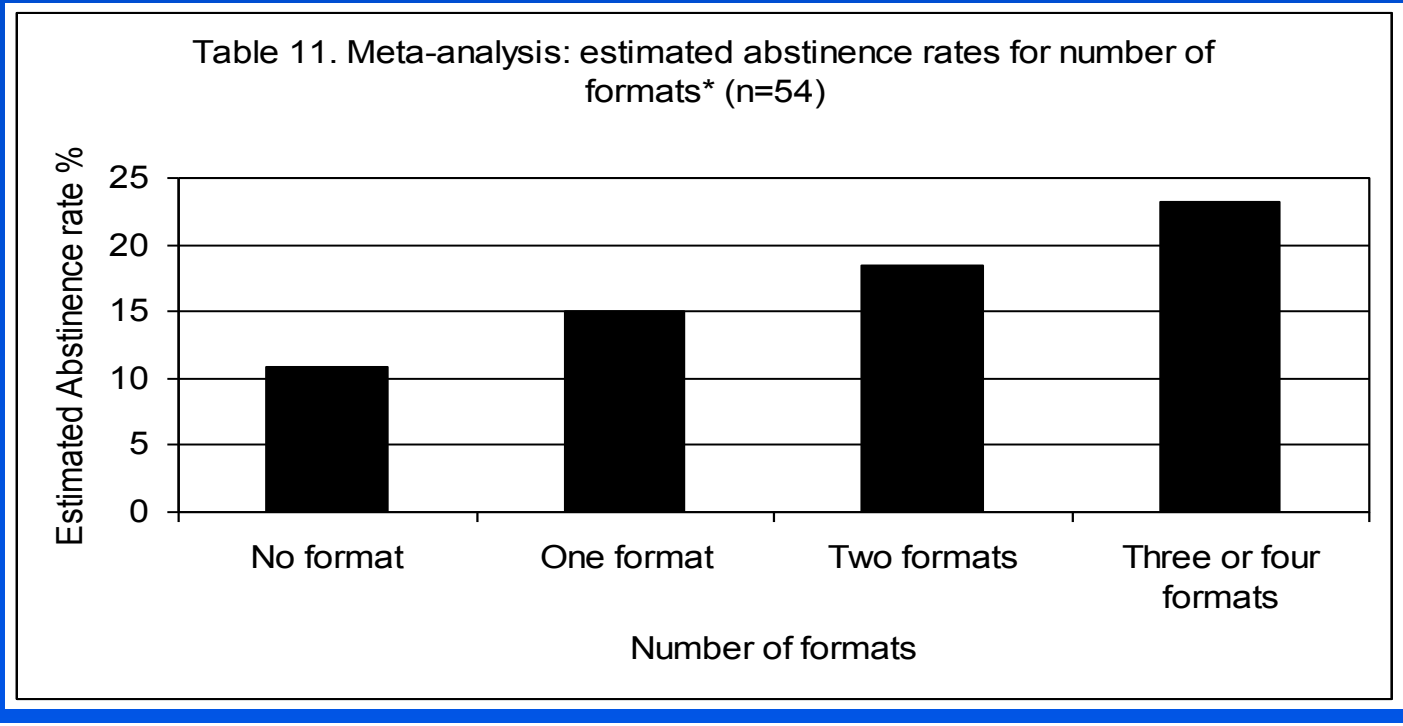
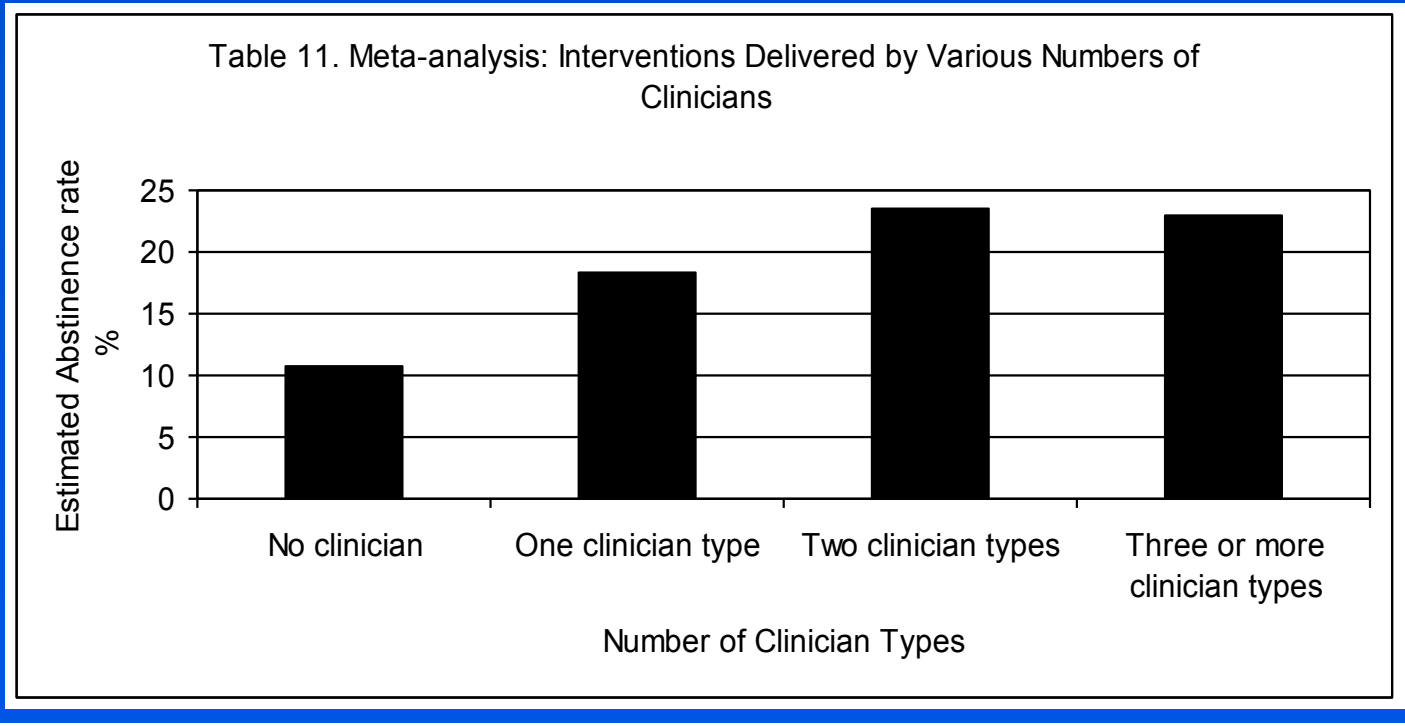
Behavioral Intervention Number of Formats



* Formats included self-help, proactive telephone counseling, group or individual counseling

Adapted from Fiore, MC, Bailey WC, Cohen SJ, et al. Treating Tobacco Use and Dependence. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. June 2000

Behavioral Intervention Number of Clinicians



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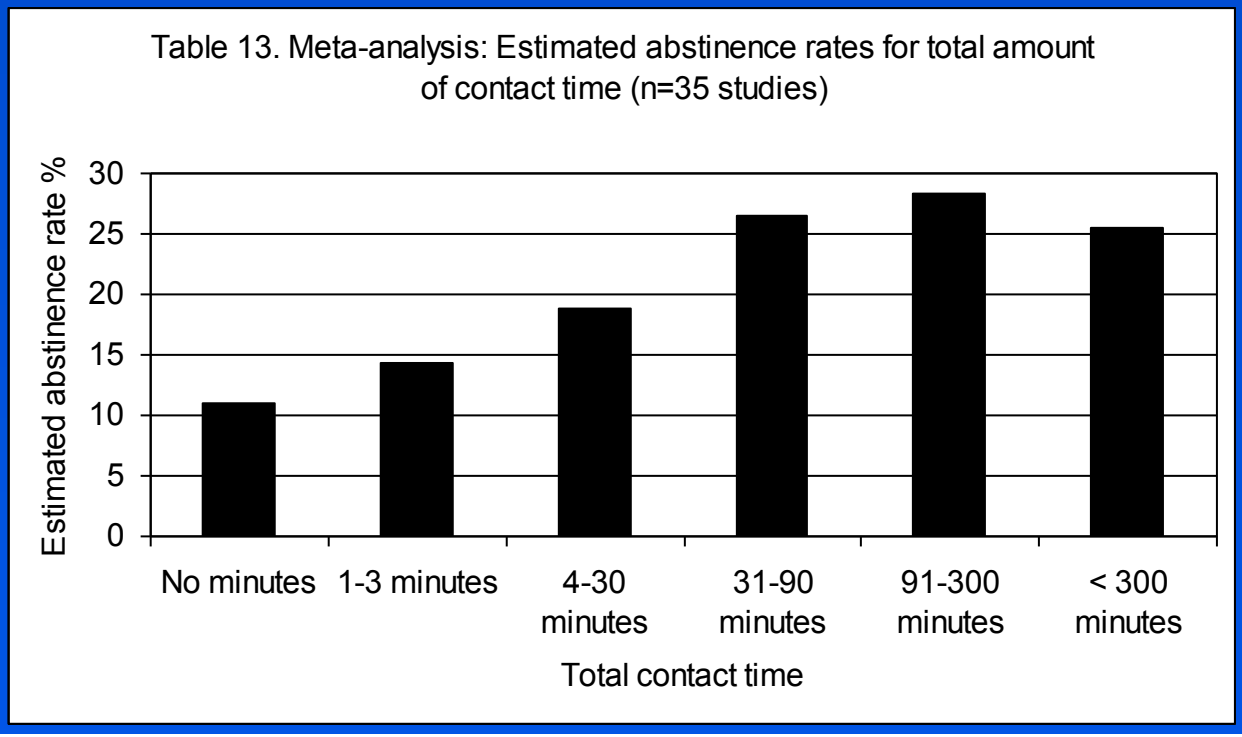
Behavioral Intervention
Total Minutes of Contact Time



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Pharmacology
All effective to varying degrees

- Five first-line tobacco cessation medicines
  - Nicotine gum (polacrilex)
  - Nicotine patch
  - Nicotine nasal spray
  - Nicotine inhaler
  - Bupropion
- Two second-line tobacco cessation medicines
  - Clonidine
  - Nortriptyline

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First Line Pharmacology

Intervention	Improvement in cessation over controls
Nicotine Gum 2 mg or 4 mg	6.6-8%
Nicotine patch 7-21 mg	6-7.7%
Nicotine Nasal Spray	12-16.6%
Nicotine Inhaler	8-12.3%
Bupropion	10-13.2%

Source Silagy C, Lancaster T, Stead L, Mant D, Fowler G. Nicotine replacement therapy for smoking cessation . The Cochrane Database of Systemic Reviews, The Cochrane Library. Vol 1 2003. Hughes JR, Stead LF, Lancaster T. Antidepressants for smoking cessation . The Cochrane Database of Systemic Reviews, The Cochrane Library. Vol 1 2003And [1] Fiore, MC, Bailey WC, Cohen SJ, et al. Treating Tobacco Use and Dependence. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. June 2000

First Line Pharmacology

- Highly addicted
  - Greater than 20 cigarettes/day
  - First cigarette within the 30 minutes of waking
- Use increase dose of NRT
  - 4mg gum or lozenge versus 2mg

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Second Line Pharmacology

- Two second-line tobacco cessation medicines
  - Clonidine
  - Nortriptyline

- Recommended case by case
- Not approved by Food and Drug Administration (FDA) for tobacco dependence
- More potential side effects than first line pharmacology

Fiore, MC, Bailey WC, Cohen SJ, et al. Treating Tobacco Use and Dependence. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. June 2000

Second Line Pharmacology

Intervention	Improvement in cessation over controls
Clonidine	11-11.7%
Nortriptyline	12-18.4%

Sources: Hughes JR, Stead LF, Lancaster T. Antidepressants for smoking cessation. The Cochrane Database of Systemic Reviews, The Cochrane Library.2003 (2). Gourlay SG, Stead LF, Benowitz NL. Clonidine for smoking cessation. The Cochrane Database of Systemic Reviews, The Cochrane Library. 2000 (2). And Fiore, MC, Bailey WC, Cohen SJ, et al. Treating Tobacco Use and Dependence. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. June 2000

Alternative: Not endorsed at this time but may prove effective

- Behavioral
  - Hypnotherapy
  - Aversive therapy
  - Acupuncture
  - Exercise
- Pharmacological
  - Lobeline Nicotine agonist
  - Anxiolytics
    - Diazepam
    - Meproprobomate
    - Metoprolol
    - Oxprenolol
  - Mecamaylamine
    - Nicotine agonist

Combined Therapies

- More than one NRT for highly addicted or failed previous NRT cessation trials recommended by USDSS Clinical Practice Guidelines.
  - 3 pooled studies
  - Improved cessation by 11% over monotherapy

- More restraint urged by Cochrane Database

Combined Therapies

- Combined behavioral and interventional
  - Lung Health Study
    - 10 Centers enrolled 5887 mild COPD patients who smoke
    - Randomized to 3 groups
      - Usual care (1964 control vs 3923 intervention)
      - Smoking cessation plus inhaled ipratropium
      - Smoking cessation plus inhaled placebo

Combined Therapies

- Combined behavioral and interventional
  - Lung Health Study
    - Smoking cessation involved
      - Intensive 12 session intervention
      - Individual intervention
      - Nicotine polacrilex (gum)

Lung Health Study Results

- 11 year abstinence
  - 22% intervention vs. 6% control [1]
- 11 year FEV1 decline per year
  - non smokers vs smokers [2]
  - Men 30cc vs 66cc
  - Women 21cc vs 54cc
- Nicotine polocrilex is safe and unrelated to cardiovascular illness [3]

1.Murray et al, Persistence of the effect of the Lung Health Study smoking intervention over eleven years. Prev Med. 2002, Oct; 35(4). 2. Anthonisen etl al. Smoking and lung function of Lung Health Study participants after 11 years. Am j Resp Crit Care Med. 2002 Sep 1; 166 (5)3 Murray et al, Safety of nicotine polacrilex gum used by 3,094 participants in the Lung Health Study. Chest. 1996 Feb. 109(2)

Treating Tobacco Use and Dependence Guidelines

- Guideline summaries
- National reports
- Research

National Reports and Organizations

- National Institutes of Health (NIH) http://health.nih.gov
- U.S. Surgeon General http://www.surgeongeneral.gov/tobacco/default.htm
- National Insitute on Drug Abuse (NIDA) http://www.nida.nih.gov

National Reports and Organizations

- National Cancer Institute (NCI) http://www.nci.nih.gov
- National Heart, Lung and Blood Institue (NHLBI) http://www.nhlbi.nih.gov/index.htm
- American Lung Association http://www.lungusa.org
- Smokefree.Gov

Treating Tobacco Use and Dependence Guidelines

- Guideline summaries
- National reports
- Research

Research

- Robert Wood Johnson Foundationhttp://www.rwjf.org
- National Cancer Institute: http://dccps.nci.nih.gov/tcrb/
- Transdisciplinary Tobacco Use Research Center: www.tturc

Treating Tobacco Use and Dependence Guidelines:Conclusion

- Reviewed current guideline summaries for tobacco cessation
- Identified national reports that can provide additional resources for tobacco cessation
- Provided information regarding where current research is being conducted