Behavioral Health & Wellness Program

Advancing Cessation Strategies with Individuals with Mental Health and Substance Abuse Disorders

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School of Medicine
UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS

FDA-Approved Pharmacotherapy for the Behavioral Health Population

National Behavioral Health Network for Tobacco & Cancer Control

Operated by the National Council for Behavioral Health

NATIONAL COUNCIL
FOR BEHAVIORAL HEALTH
MENTAL HEALTH FIRST AID

About the Network

MENTAL HEALTH FIRST AID
NATIONAL COUNCIL
FOR BEHAVIORAL HEALTH
Healthy Minds. Strong Communities.

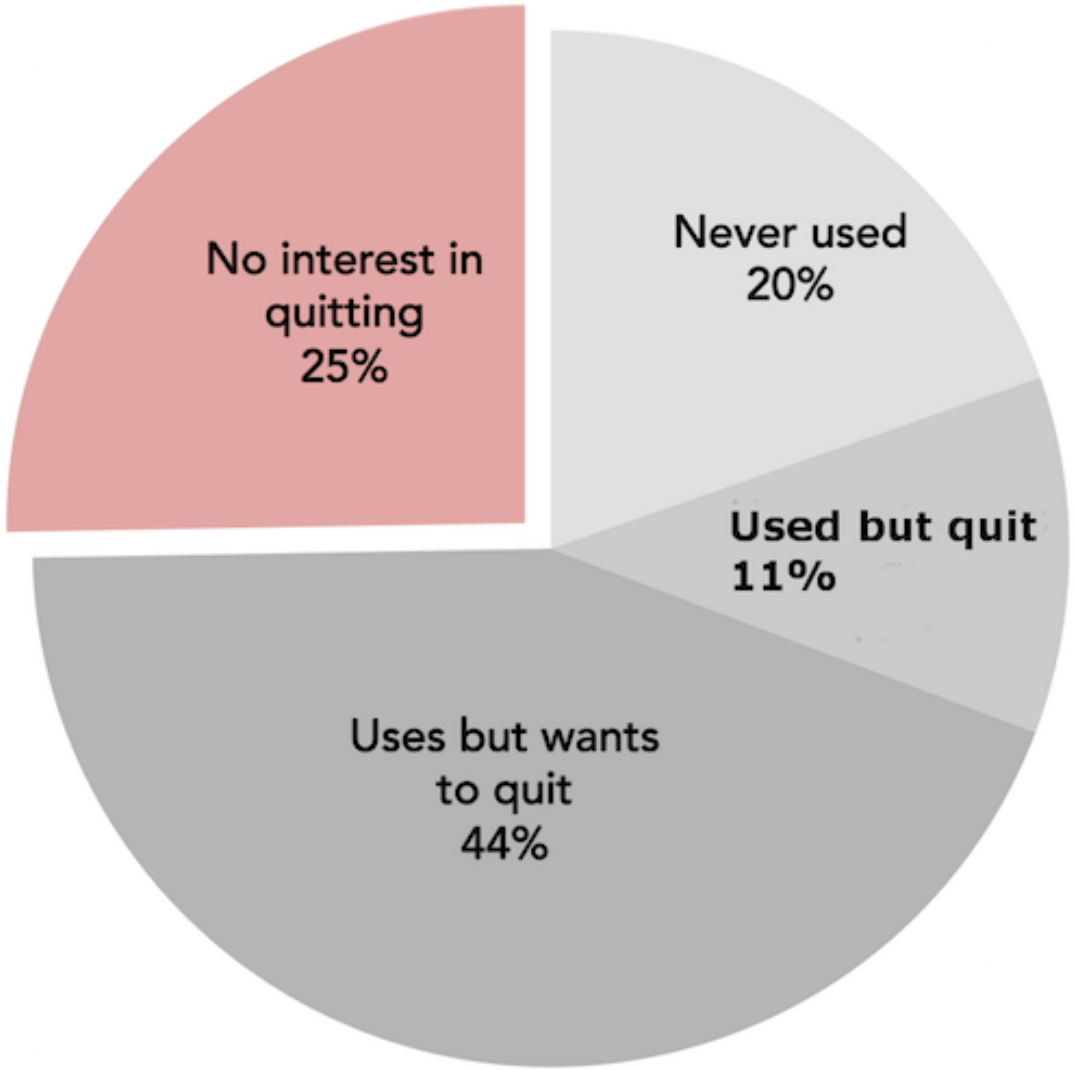
SMOKING CESSATION LEADERSHIP CENTER

CRI CENTERSTONE RESEARCH INSTITUTE

Behavioral Health & Wellness Program

Most Clients Want to Quit

Recent Community of Practice Findings



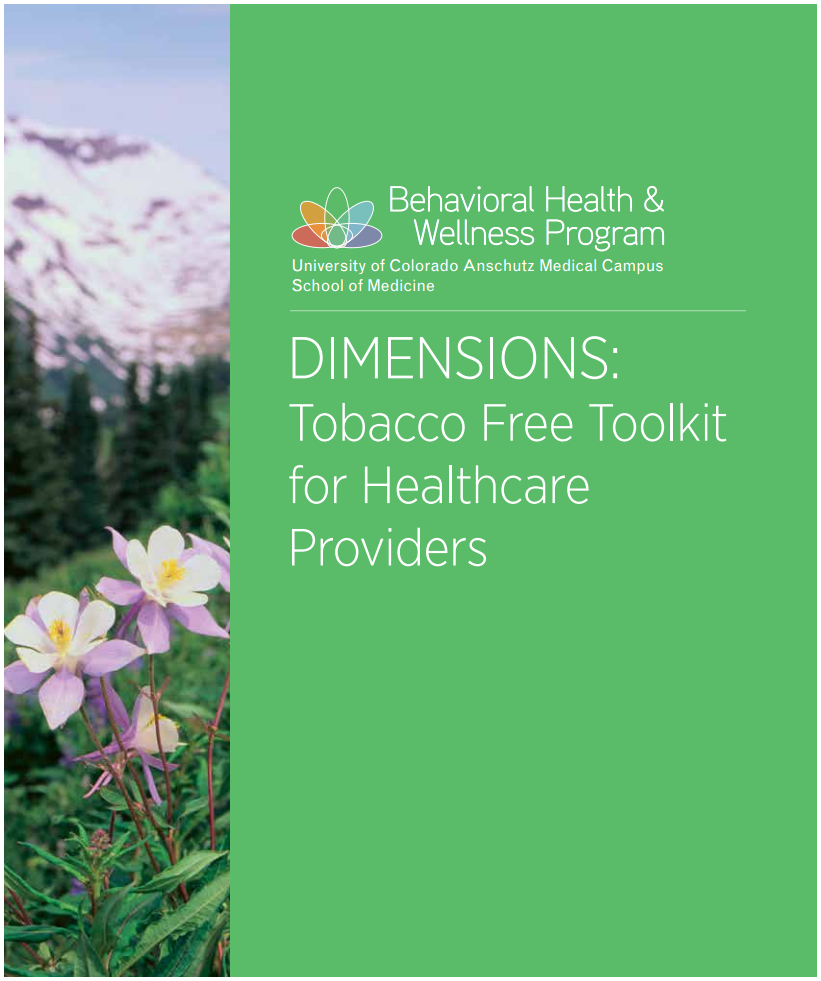
Tobacco Cessation Treatment Strategies

Treatment Format	Abstinence Rate
Unaided	4-7%
Self-help	11-14%
Quitline	11-15%
Individual counseling	15-19%
Group counseling	12-16%
Medication alone	22%
Medication + counseling	25-30%

Cessation Medications for Persons with Mental Illnesses and Addictions

- Higher levels of nicotine dependence
- There is no medical reason not to use cessation medications
  - First line treatments are recommended
- Comfortable detox for temporary abstinence

Evidence-Based Guidance



Supplements

- Behavioral Health
- Youth (Ages 11-18)
- Young Adults (18-25)
- Low-Income
- Pregnant and Post Partum

MI Video Modules

http://www.bhwellness.org/resources/toolkits/

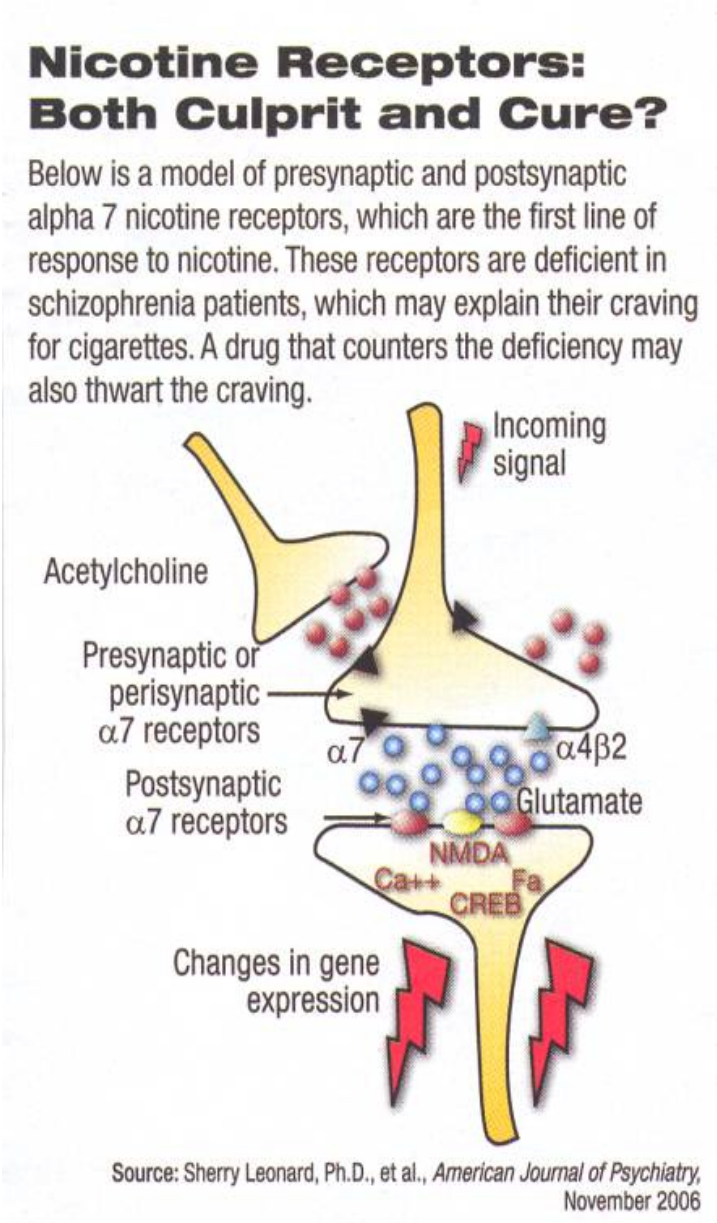
The Biology of Tobacco Dependence

Neurochemical Effects of Nicotine

➔ Dopamine	➡ Pleasure, reward
➔ Norepinephrine	➡ Arousal, appetite suppression
➔ Acetylcholine	➡ Arousal, cognitive enhancement
➔ Glutamate	➡ Learning, memory enhancement
➔ β-Endorphin	➡ Reduction of anxiety and tension
➔ GABA	➡ Reduction of anxiety and tension
➔ Serotonin	➡ Mood modulation, appetite suppressant

Schizophrenia

- Decreased α-7 nicotinic receptors
- Nicotine activates nAChR
- Partially normalizes sensory processing deficits
- Smoking may improve negative symptoms and cognitive functioning, including attention and orientation



Nicotine Withdrawal Effects

- Irritability, frustration, anger
- Anxiety
- Difficulty concentrating
- Restlessness, impatience
- Depressed mood
- Insomnia
- Increased appetite

Most symptoms:

- Appear within first 1–2 days
- Peak within the first week
- Decrease within 2–4 weeks

Medications Known or Suspected To Have Their Levels Affected by Smoking and Smoking Cessation		
ANTIPSYCHOTICS	Chlorpromazine (Thorazine)	Olanzapine (Zyprexa)
	Clozapine (Clozaril)	Thiothixene (Navane)
	Fluphenazine (Permitil)	Trifluoperazine (Stelazine)
	Haloperidol (Haldol)	Ziprasidone (Geodon)
	Mesoridazine (Serentil)	
ANTIDEPRESSANTS	Amitriptyline (Elavil)	Fluvoxamine (Luvox)
	Clomipramine (Anafranil)	Imipramine (Tofranil)
	Desipramine (Norpramin)	Mirtazapine (Remeron)
	Doxepin (Sinequan)	Nortriptyline (Pamelor)
	Duloxetine (Cymbalta)	Trazodone (Desyrel)
MOOD STABLIZERS	Carbamazepine (Tegretol)	
ANXIOLYTICS	Alprazolam (Xanax)	Lorazepam (Ativan)
	Diazepam (Valium)	Oxazepam (Serax)
OTHERS	Acetaminophen	Riluzole (Rilutek)
	Caffeine	Ropinirole (Requip)
	Heparin	Tacrine
	Insulin	Warfarin
	Rasagiline (Azilect)	

Psychiatric Symptoms Are Not Exacerbated by Smoking Cessation

Smoking cessation is associated with:

- ↓ depression, anxiety, and stress
- ↑ positive mood and quality of life compared with continuing to smoke
- The effect size seems as large for those with psychiatric disorders as those without
- The effect sizes are equal or larger than those of antidepressant treatment for mood and anxiety disorders

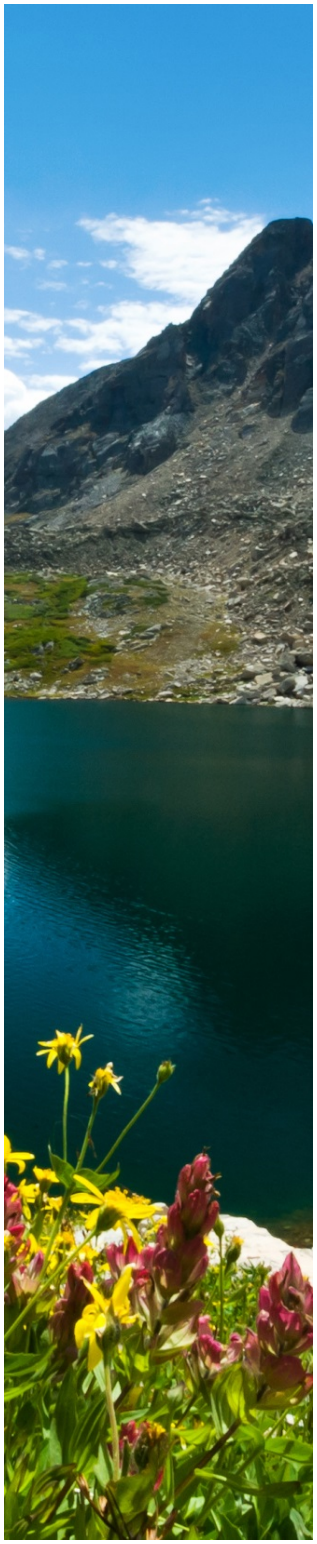
Taylor et al, 2014

Cessation Pharmacotherapy

Tobacco Cessation Medications

The only medications approved by the Food and Drug Administration (FDA) for tobacco cessation are:

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



Treatment Effectiveness: Numbers Needed to Treat

Intervention	Outcome	NNT
Statins	Prevent 1 death over 5 years	107
Antihypertensive therapy	Prevent 1 stroke, myocardial infarction, death over 1 year	700
Cervical cancer screening	Prevent 1 death in 10 years	1,140
Brief advice to stop smoking < 5 minutes	Prevent 1 premature death	80
Brief advice + pharmacological support	Prevent 1 premature death	38-56
Brief advice + pharmacological support + behavioral support	Prevent 1 premature death	16-40

WHO, 2013

Treatment Effectiveness for Smokers with Behavioral Health Conditions

Quitting tobacco is difficult but absolutely feasible for persons with behavioral health conditions…

if the right dose of evidence-based assistance is provided

Safety of NRT

- No interactions with most psychiatric medications
- Safe in presence of cardiovascular disease
- Effective for patients with chronic obstructive pulmonary disease (COPD)
- Safe while individual is still smoking
- General precautions:
  - Within 2 weeks of a heart attack
  - Serious arrhythmia
  - Uncontrolled hypertension
  - Peptic ulcers
  - Insulin-dependent diabetes
  - Severe or worsening angina

Nicotine Nasal Spray

- About 100 doses per bottle
- Quickly absorbed through the lining of the nose
- Sold with a prescription as Nicotrol NS

Label Update:
Nicotine Replacement Therapy

Previous Label	Current Label
Drug Facts Labeling	*Drug Facts Labeling*
Warnings **Do not use.** • If you continue to smoke, chew tobacco, use snuff, or use a different NRT product or other nicotine-containing products.	*Warnings* **None.** The "Do not use" statement has been removed.
Directions • Stop smoking completely when you begin using the NRT product. • It is important to complete treatment. Stop using the NRT product at the end of a specified number of weeks. If you still feel the need to use the NRT product, talk to you doctor.	*Directions* • Begin using the NRT product on your quit day. • It is important to complete treatment. If you feel you need to use the NRT product for a longer period to keep from smoking, talk to you healthcare provider.

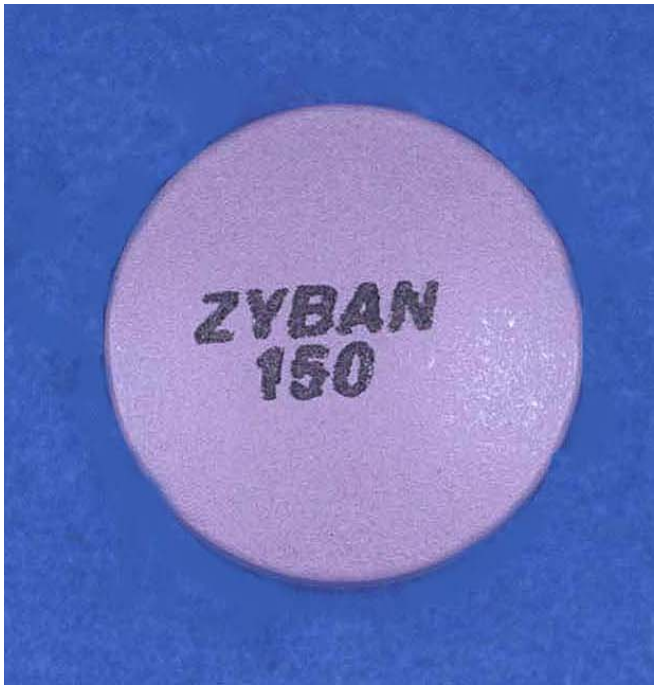
NRT Efficacy

Abstinence rates compared to placebo at 6 months or greater post-quit

Medication	Number of Studies (People)	Estimated Risk Ratio
Patch	43 (19,586)	1.6 (1.5-1.8)
Gum	56 (22,581)	1.5 (1.4-1.6)
Lozenge	7 (3,405)	2.0 (1.6-2.4)
Inhaler	4 (976)	1.9 (1.4-2.7)
Nasal Spray	4 (887)	2.0 (1.5-2.7)

Bupropion SR Tablets

- Does not contain nicotine
- The tablet is swallowed whole, and the medication is released over time
- Sold with a prescription as Zyban or generic



- Initial dose of 150 mg/day for 3 days, followed by 150 mg twice daily for 6-12 weeks

Bupropion
Side Effects and Precautions

- Side effects include:
  - Insomnia (35-40%)
  - Dry mouth (<10%)
  - Agitation, decreased appetite, dizziness, headache, nausea
- Avoid recommending to individuals:
  - With eating disorders
  - At increased risk for seizures
  - Diagnosed with bipolar disorder
  - With concomitant or recent use (past 2 weeks) of MAO inhibitors
- Take precautions for individuals with schizophrenia

Varenicline

- Does not contain nicotine
- The tablet is swallowed whole
- Sold with a prescription only as Chantix
- People who take Chantix should be in regular contact with their doctor

- Initial dosing is 0.5 mg/day for 3 days and then twice daily for 4 days. For next 11 weeks, dosing is 1 mg twice daily

Pharmacotherapy Efficacy

Abstinence rates compared to placebo at 6 months or greater post-quit

Medication	Number of Trials (People)	Estimated Risk Ratio
NRT	117 (51,265)	1.6 (1.5-1.7)
Bupropion	44 (13,728)	1.6 (1.5-1.8)
Varenicline	14 (6,166)	2.3 (2.0-2.6)

Varenicline and Schizophrenia

- 127 with schizophrenia/schizoaffective disorder
- Cessation at 12 weeks, 19.0% varenicline v. 4.7% placebo
- Cessation at 24 weeks, 11.9% varenicline v. 2.3% placebo
- Adverse Events were similar in both groups, with no significant changes in positive and negative symptoms of schizophrenia, or in mood and anxiety ratings.
- Rates of suicidal ideation: varenicline, 6.0%; placebo, 7.0%

Williams, Anthenelli, Morris et al. (2012)

Varenicline and Depression

- 525 adult smokers with stably treated current or past
- major depression
- 38 centers in 8 countries.
- Continuous abstinence weeks 9 to 12, Var 35.9% v. placebo 15.6%
- Weeks 9 to 24, 25.0% v. 12.3%
- Weeks 9 to 52, 20.3% v. 10.4%
- No clinically relevant differences between groups in suicidal ideation or behavior and no overall worsening of depression or anxiety in either group.
- Conclusion: Varenicline increased smoking cessation in smokers with stably treated current or past depression without exacerbating depression or anxiety.

Anthenelli, Morris, Ramey et al. (2013)

Neuropsychiatric Safety and Efficacy of Varenicline

- Randomized, double-blind, placebo-controlled and active-controlled
- 8,144 participants, 140 centers in 16 countries
- No significant increase in adverse events attributable to varenicline or bupropion relative to nicotine patch or placebo.
- Varenicline was more effective than placebo, nicotine patch, and bupropion in helping smokers achieve abstinence
- Bupropion and nicotine patch were more effective than placebo.

Anthenelli, Benowitz, West et al. (2016)

Combination Therapy

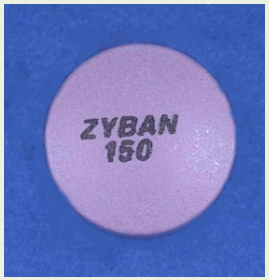
Use of two or more forms of tobacco cessation medications can improve cessation rates

PLUS

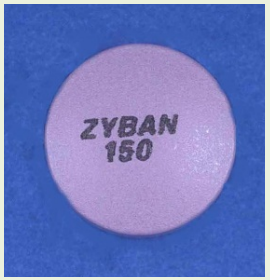
OR

OR

OR



PLUS



PLUS

OR

Communities of Practice

National Behavioral Health Network Communities of Practice

- 2016- Tobacco & Cancer Control
  - Community Behavioral Health Organizations (CBHO)
  - State, Tribal and Territorial Agencies
- 2017
  - Cancer Control for Integrated Healthcare Providers
  - Certified Community Behavioral Health Clinics Tobacco Control Community of Practice

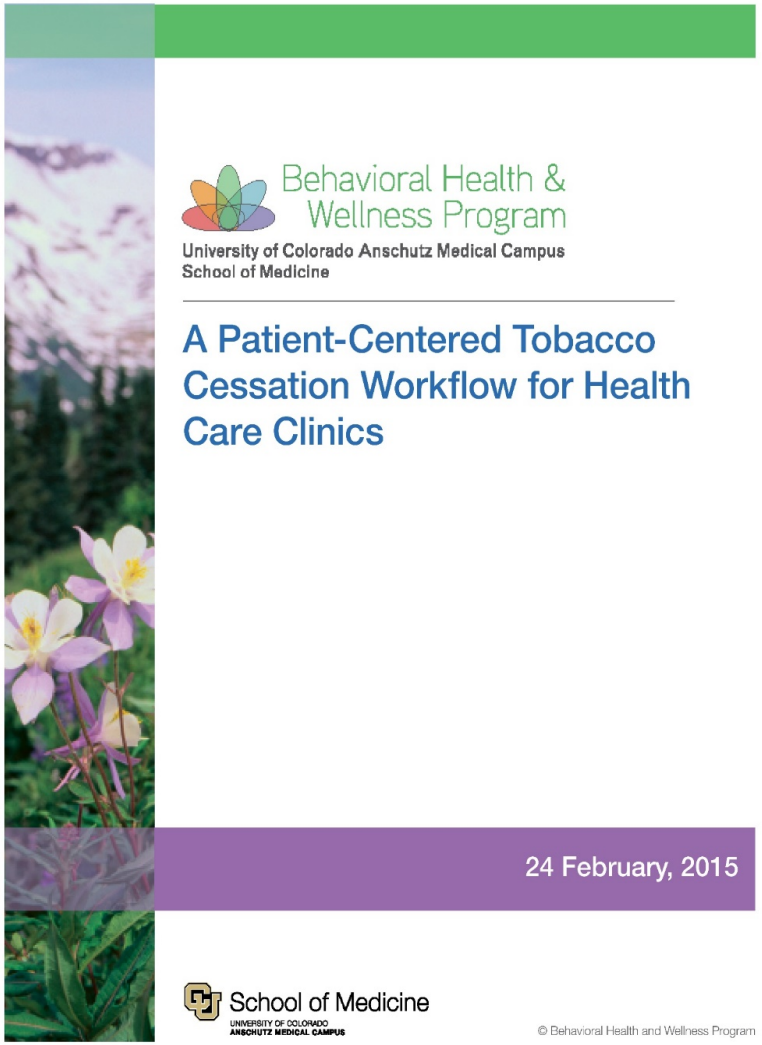
Wellness Recovery Learning Community

National Council for Behavioral Health & University of Colorado Behavioral Health and Wellness Program

- Support 7 Florida-based addictions provider organizations
- Enhance cross-systems collaborations with the Bureau of Tobacco Free Florida and the Florida Association on Alcohol and Drug Abuse

Delivery System Redesign

- Clear, dedicated team member roles
- Clinical workflow (when, where, who, what)
- Follow-up
- Performance feedback for clinicians

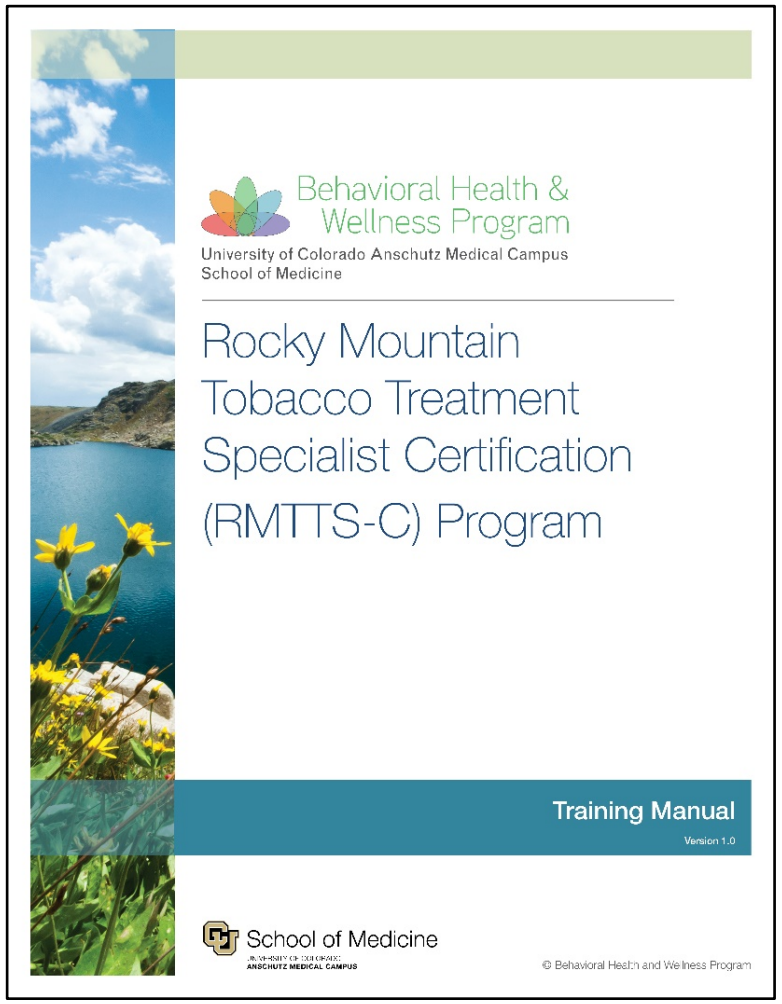


http://www.bhwellness.org/resources/fact-sheets-reports/

Tobacco Cessation Workflow Responsibilities

5A's	Tasks	Who's Responsible?
Ask	**Document Smoking Status of Every Patient:** • Ask, or • Give patient screening form → Verify smoking status at every visit	
Advise	**Advise patient to quit (brief, tailored counseling)**	
Assess **A**ssist	**Assess/Assist:** • Utilize motivational interventions to address tobacco use • CO monitor reading or other biometric screening • Collaborative treatment planning • Onsite cessation group and/or individual counseling • Peer services/patient navigator	
Arrange	**Arrange/Refer/Connect:** Treatment • Counseling • Prescribe medications Referral • Fax QuitLine referral and/or preauthorizations as needed Documentation • Enter interventions into EHR and/or chart • Billing Follow up appt. set within 1 month (in person or by phone), or within 1 week after quit date	
Other	• Post/place tobacco cessation materials in waiting area • Order cessation materials (brochures, posters)	

Rocky Mountain Tobacco Treatment Specialist Certification (RMTTS-C) Program



SAVE THE DATE:

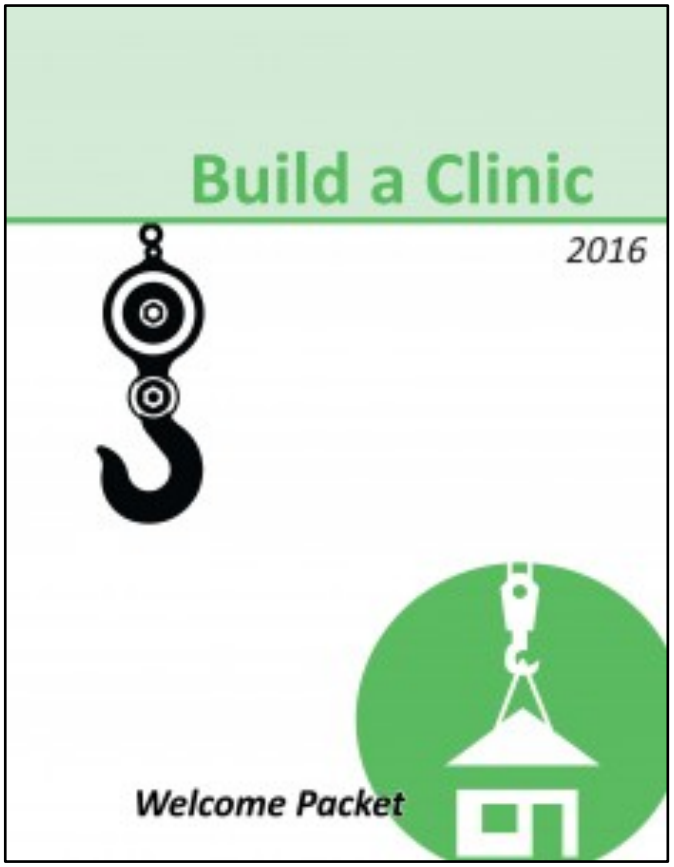
May 15-18, 2017

in Denver, CO

https://www.bhwellness.org/programs/rmtts-c

Ask - Advise - Refer

Increased Reach to Underserved Populations



- Case-based learning
  - ECHO Colorado
- Hub and spoke model
- Scalability

https://www.bhwellness.org/programs/about-the-build-a-clinic-program

NATIONAL BEHAVIORAL HEALTH NETWORK FOR TOBACCO & CANCER CONTROL

- Jointly funded by CDC's *Office on Smoking & Health* & *Division of Cancer Prevention & Control*
- Provides resources and tools to help organizations reduce tobacco use and cancer among people with mental illness and addictions
- 1 of 8 CDC National Networks to eliminate cancer and tobacco disparities in priority populations

Visit **www.BHtheChange.org** and Join Today!

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NETWORK INSIDER

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