



# Eliminating Tobacco-Related Disparities for Persons with Mental Illnesses:

## *Development and Implementation of a Tobacco Cessation Toolkit*



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# Objectives

- Discuss the unique challenges and barriers
- Review evidence-based guidelines for tobacco cessation
- Describe the development and dissemination of a mental health provider toolkit
- Present preliminary data from a randomized study of tobacco cessation strategies



## Prevalence of Tobacco Use

- 20% of Americans have mental illnesses at any point in time
- Are nicotine dependent at rates 2-3 times higher than the general population
- Represent 44.3% of the U.S. tobacco market
- Represent 7.1% of the total U.S. population but consume 34.2% of all cigarettes smoked

(Lasser K et al: JAMA 284:2606-10, 2000)

- Persons with mental illnesses die young
  - **20% shorter life span due to tobacco-related diseases**



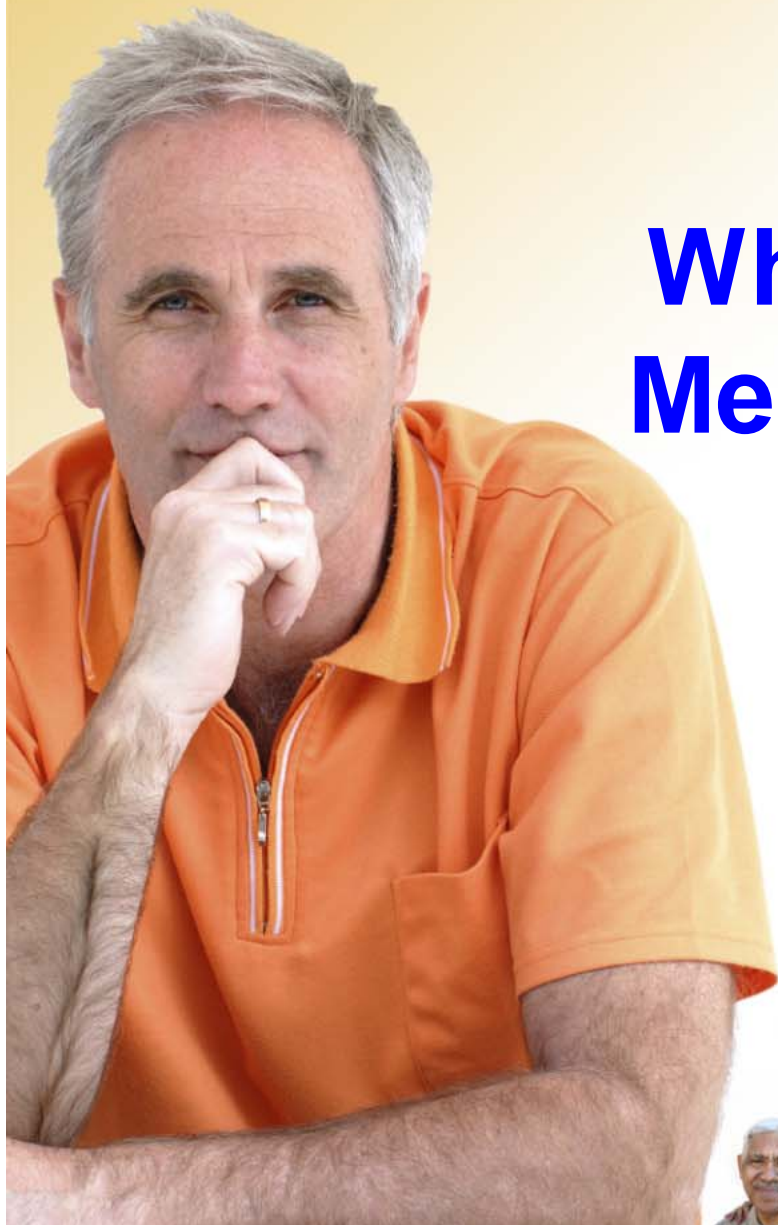
# Tobacco Use by Psychiatric Diagnosis

Schizophrenia	65-85%
Bipolar disorder	55-70%
Major depression	50-60%
Anxiety disorders	45-60%

Lasser K et al: JAMA 284:2606-10, 2000; NASMHPD 2006



# Why Do Persons with Mental Illnesses Smoke More?



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# Biological Predisposition

- Nicotine enhances
  - concentration
  - information processing
  - learning
- Enhances mood
- May reduce medication side effects

# Barriers to Tobacco Interventions

## System, Clinician, and Patient Factors

- Stigma, Competing demands
- Tobacco as socialization activity, behavioral reward
- Staff acceptance, promotion
- Fear of symptom exacerbation
- Lack of training
- Expectation of failure
- Lack of recovery
- Other substance abuse



# Interventions: What is the Evidence That Anything Works?



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# Cessation Rates

Although quit rates for persons with mental illnesses are less than the general populations, smoking cessation rates are still substantial.

Major depression- up to 38% (Lasser et al., 2000)

Schizophrenia- between 10-30% (Addington et al., 1998; Baker et al., 2006)



# Treatment Recommendations

- Cognitive-Behavioral Therapy (CBT) + nicotine replacement therapy (NRT)
- Groups of approximately 8-10 individuals that meet once/week for 7-10 weeks
  - More person-to-person contact = better outcomes
- Individualized treatments based on diagnoses
- Stress consumer preference
- Address psychosocial needs that might undermine tobacco cessation
- Cessation may produce rapid, significant increase in medication blood levels
- Monitor for side effects, depression, weight gain



# Pharmacotherapy

All smokers trying to quit should receive  
pharmacotherapy

(US Clinical Practice Guidelines)

- Nicotine replacement therapy (NRT)
- Bupropion SR
- Varenicline (Chantix—Pfizer)
- Clonidine\*
- Nortriptyline\*

\*Not FDA-approved for tobacco cessation



# The Colorado Model

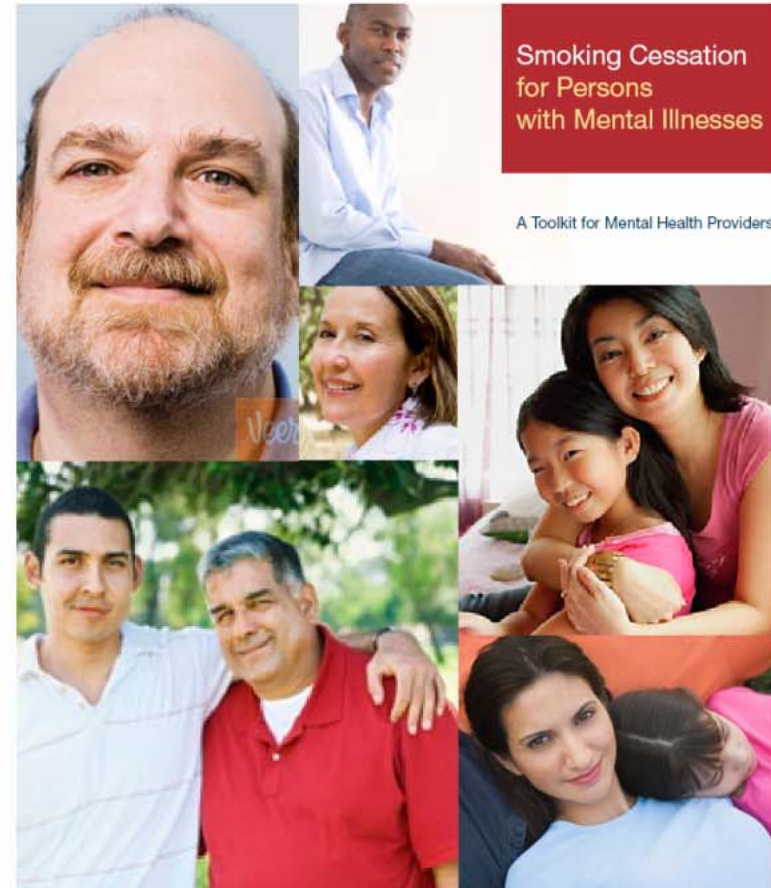
- 2004 & 2006 Statewide Focus Groups
- Prevalence Studies
- Toolkit for Mental Health Providers
- Wellness Group Manual
- Randomized Study of Cessation Strategies
- Peer-to-Peer Interventions
- Primary Care
- Other Disparities Groups



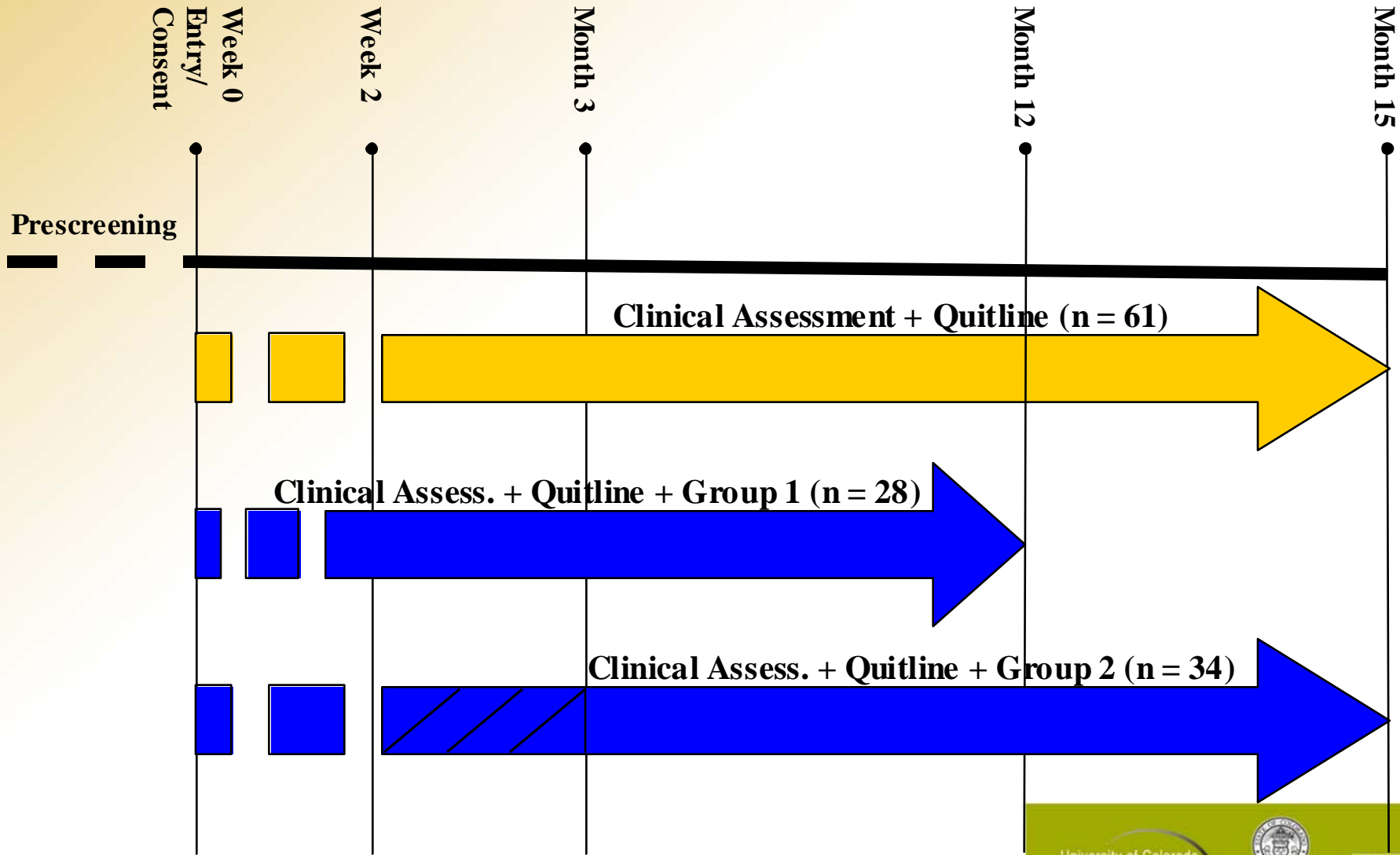
# Smoking Cessation for Persons with Mental Illnesses



Smoking Cessation for Persons with Mental Illnesses  
A Toolkit for Mental Health Providers



# The Study Intervention (N = 123)



# Wellness Group Sessions

- Session 1** Introduction to the program
- Session 2** Working with the positives (strengths)
- Session 3** How smoking affects your body
- Session 4** Building self-confidence
- Session 5** Dealing with stress and developing supportive relationships
- Session 6** Healthy ways of dealing with feeling down
- Session 7** Dealing with strong negative feelings
- Session 8** Healthy Lifestyle (Diet and exercise)
- Session 9** Planning for high-risk situations
- Session 10** Celebrating the road to recovery



# Study Measures

OUTCOME DOMAIN	MEASURE
<b>Patient Level</b>	
<b>Tobacco Use</b>	Fagerstrom Test for Nicotine Dependence (Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991; Payne, Smith, McCracken, McSherry, & Antony, 1994) CO Monitor (objective measure of tobacco use)
<b>Clinical Outcome</b>	Brief Psychiatric Rating Scale (BPRS) (Overall & Gorham, 1962) Hamilton Depression Rating Scale (HAM-D) (Hamilton, 1960)
<b>Functioning / Quality of Life</b>	SF-12 (Ware, Kosinski, & Keller, 1996)
<b>Pharmacotherapy</b>	Chart review of evidence-based treatment
<b>Self-Efficacy</b>	Self-Efficacy items from Snyder Hope Scale (Snyder et al., 1996)
<b>Motivational Stage-Readiness for Change</b>	Motivational Stage of Change- Contemplation Ladder (Baker et al., 2002)



## Preliminary 3-Month Outcomes

- Significant decrease in self-reported average number of cigarettes smoked per day across all three groups,  $F(3,83)=3.77$ ,  $p>.0002$ .
- All three groups had significantly lower rates of tobacco dependence from baseline as measured by the Fagerstrom test ( $p<.01$ ), but did not differ across groups.
- Scores on the HAM-D and BPRS showed a significant decrease in depressive and psychotic symptoms respectively over time for all groups ( $p<.01$ ) but did not differ across groups.



## Next Steps

- Collect 6- and 12- month follow up assessment data as well as QuitLine and medical chart data
- Determine quit rates
- Expand model to additional sites in Colorado
- Expand model to additional populations

# Contact Information

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