

# *Engaging clients with mental and behavioral health challenges in tobacco treatment = Enhancing Evidence Based Practice!*

Chizimuzo (Zim) T.C. Okoli, PhD, MPH, MSN, RN, NCTTP

Associate Professor, University of Kentucky College of Nursing

Director of Behavioral Health and Wellness Environments for Living and Learning (BHWELL)

Director of Tobacco Treatment Services and Evidence-Based Practice, Eastern State Hospital



# Goals of this presentation

- Describe factors associated with tobacco use dependence among persons living with mental and behavioral health challenges
- Describe evidence-based treatment approaches when providing tobacco dependence services to persons living with mental and behavioral health challenges
- Discuss resources to enhance tobacco treatment for those living with mental and behavioral health challenges

# Mental Disorders are Prevalent



- 18.1% have any mental disorder
- 4.1% suffer from a serious mental illness (SMI)

# Substance use Disorder

**Problematic pattern of use of an intoxicating substance leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:**

- ❑ The substance is often taken in **larger amounts** or over a **longer period** than was intended.
- ❑ There is a **persistent desire** or **unsuccessful effort to cut down** or control use of the substance.
- ❑ A **great deal of time** is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.
- ❑ **Craving**, or a strong desire or urge to use the substance.
- ❑ Recurrent use of the substance resulting in a **failure to fulfill major role obligations** at work, school, or home.
- ❑ Continued use of the substance despite having persistent or recurrent **social or interpersonal problems** caused or exacerbated by the effects of its use.
- ❑ Important **social, occupational, or recreational activities are given up** or reduced because of use of the substance.
- ❑ Recurrent use of the substance in situations in which it is **physically hazardous**.
- ❑ Use of the substance is continued despite knowledge of having a persistent or recurrent **physical or psychological problem that is likely to have been caused** or exacerbated by the substance.
- ❑ **Tolerance**, as defined by either of the following:
  - ❑ A need for markedly increased amounts of the substance to achieve intoxication or desired effect.
  - ❑ A markedly diminished effect with continued use of the same amount of the substance.
- ❑ **Withdrawal**, as manifested by either of the following:
  - ❑ The characteristic withdrawal syndrome for that substance (as specified in the DSM- 5 for each substance).
  - ❑ The substance (or a closely related substance) is taken to relieve or avoid withdrawal symptoms.



# Classes of substances of abuse

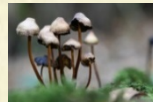
## Opioids/Narcotics

- [Fentanyl](#)
- [Heroin](#)
- [Hydromorphone](#)
- [Methadone](#)
- [Morphine](#)
- [Opium](#)
- [Oxycodone](#)



## Hallucinogens

- [Ecstasy/MDMA](#)
- [K2/Spice](#)
- [Ketamine](#)
- [LSD](#)
- [Peyote & Mescaline](#)
- [Psilocybin](#)
- [Marijuana/Cannabis](#)
- [Steroids](#)
- [Inhalants](#)



## Stimulants

- [Amphetamines](#)
- [Cocaine](#)
- [Khat](#)
- [Methamphetamine](#)
- [Alcohol \(low dose\)](#)
- [Nicotine \(high dose\)](#)



## Depressants

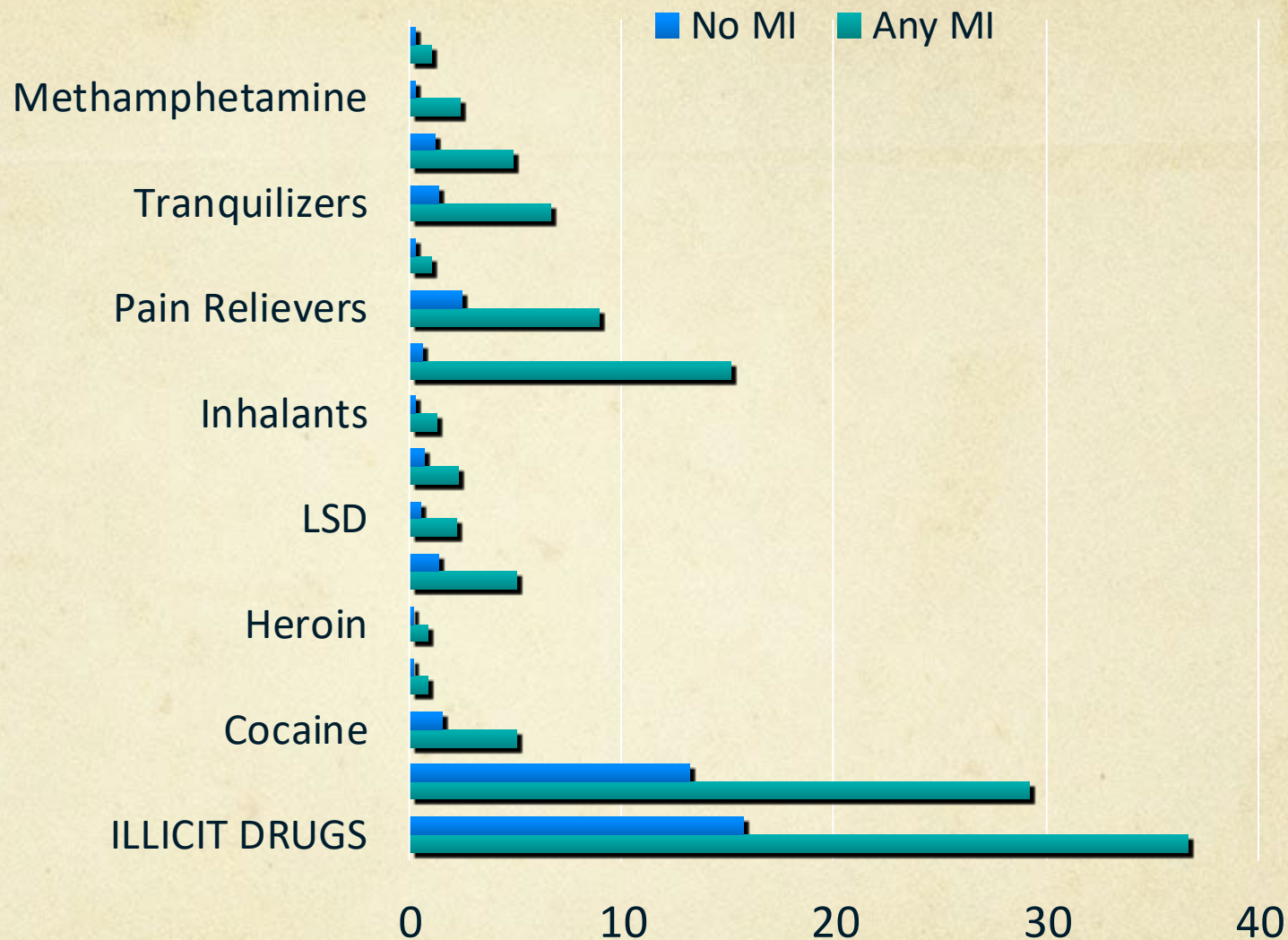
- [Barbiturates](#)
- [Benzodiazepines](#)
- [GHB](#)
- [Rohypnol®](#)
- [Alcohol \(high dose\)](#)
- [Nicotine \(low dose\)](#)



## Drugs of Concern

- [Bath Salts or Designer Cathinones](#)
- [DXM](#)
- [Kratom](#)
- [Salvia Divinorum](#)

# Past year use of illicit drugs by MI status (adults $\geq 18$ yrs)



2018 National Survey on Drug Use and Health:

<https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHDetailedTabs2018R2/NSDUHDetTabsSect8pe2018.htm>

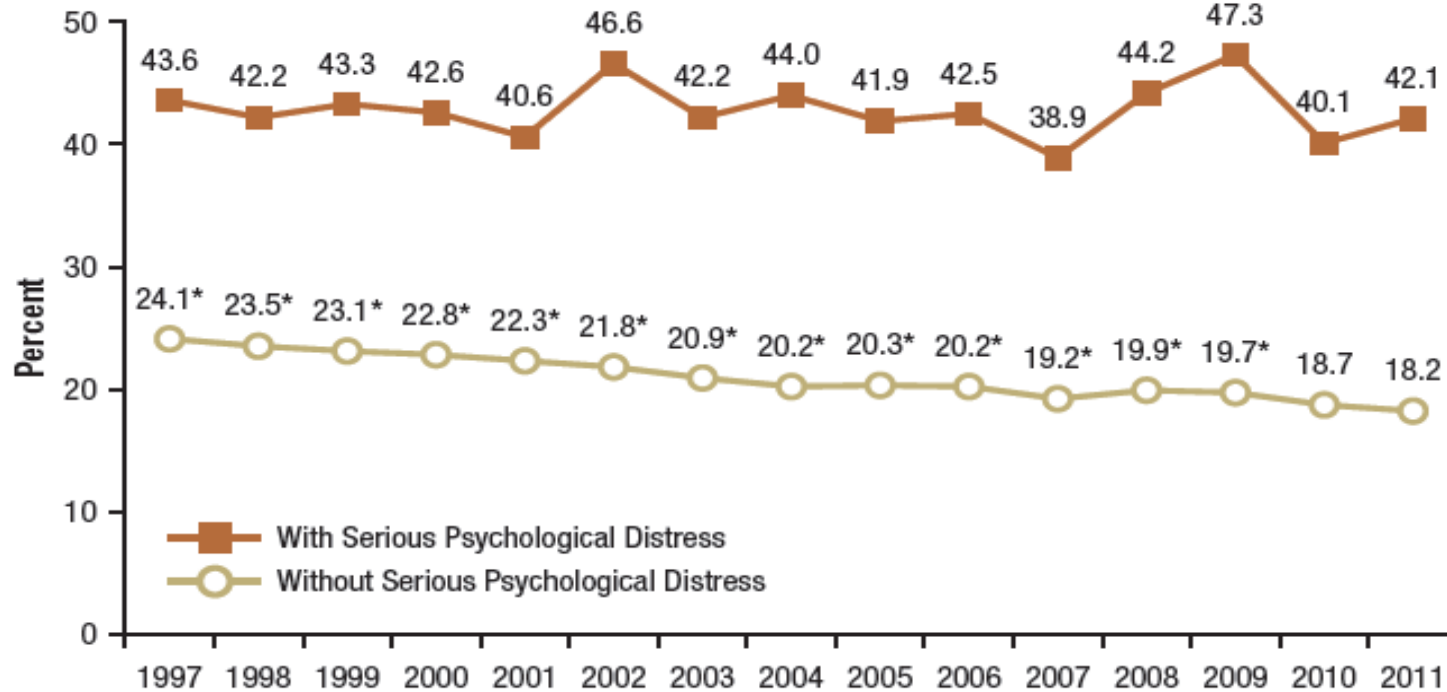
Percent%

# Why Engage Persons with mental and behavioral health challenges in Tobacco Treatment?



# Little decline in smoking prevalence among those with mental illnesses

Current Smoking among Adults Aged 18 or Older, by Past Month Serious Psychological Distress Status: NHIS, 1997 to 2011



\* Difference between estimate and estimate for 2011 is statistically significant at the .05 level.

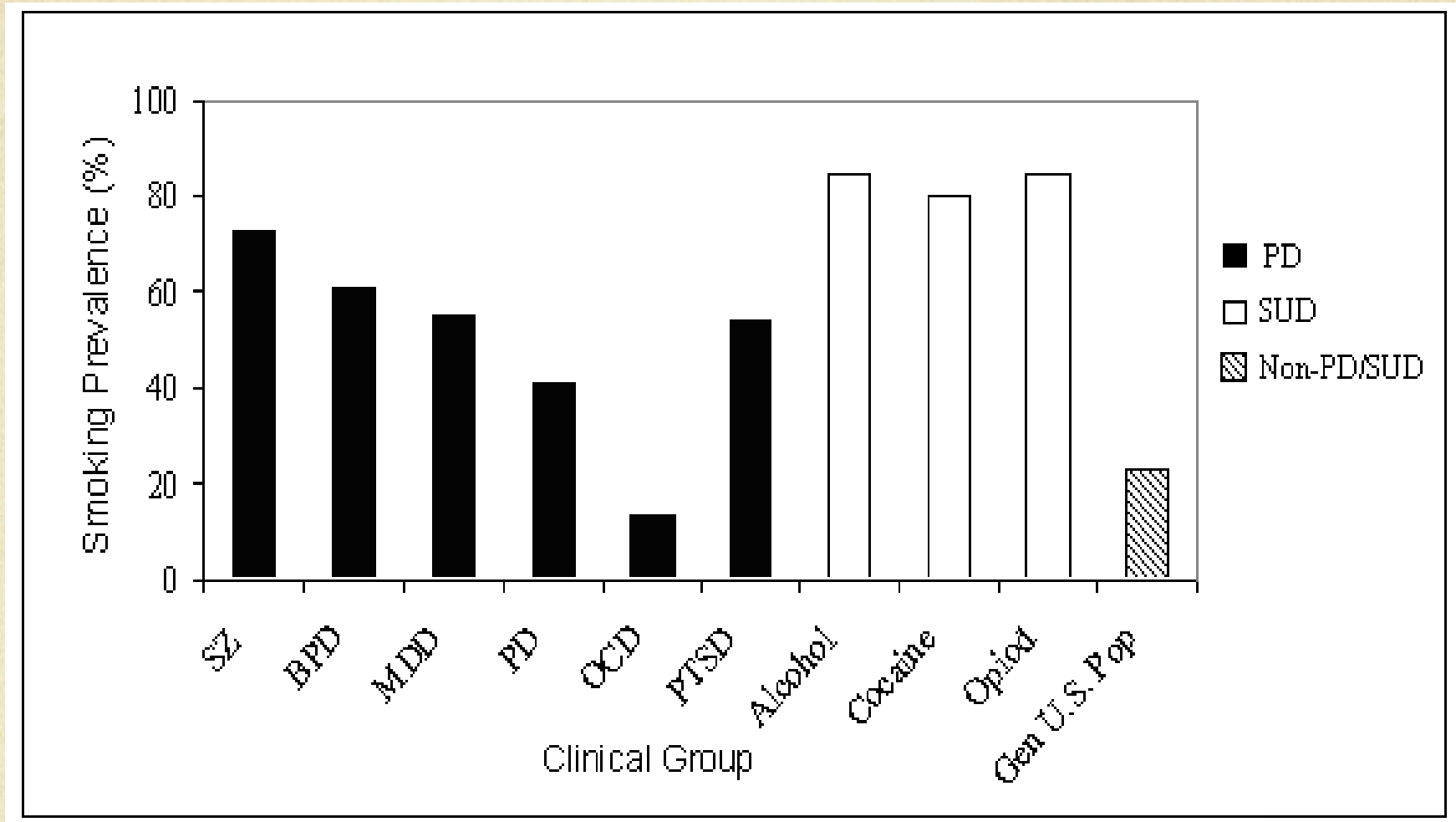
US Department of Health and Human Services. (2014). The health consequences of smoking—50 years of progress: a report of the Surgeon General. Atlanta, GA

Data from the National Health Interview Survey. Current smoking is defined as those who had smoked 100 cigarettes in their lifetime and smoked daily or some days at time of the interview. This illustration was obtained with permission from the SAMHSA CBHSQ Report, July 18

2013:[http://www.samhsa.gov/data/sites/default/files/spot120-smokingspd\\_/spot120-smokingSPD.pdf](http://www.samhsa.gov/data/sites/default/files/spot120-smokingspd_/spot120-smokingSPD.pdf)



# Prevalence of smoking by MI/SUD disorder



Kalman, Morissette, & George. "Co-Morbidity of Smoking in Patients with Psychiatric and Substance Use Disorders." *The American journal on addictions / American Academy of Psychiatrists in Alcoholism and Addictions* 14.2 (2005): 106–123. PMC. Web. 7 Mar. 2016

# Effects of smoking among persons with MI/SUD

## Smokers with MI/SUD:

- Die 10-25 years earlier
- Have more depression and anxiety
- Have more substance use problems
- Have more cardiovascular and cardiopulmonary problems
- Are more likely to commit suicide
- Have sexual problems

## Nonsmokers with MI/SUD:

- Have better health
- Live longer
- Need less medication
- Have less depression
- Save more money

# Smoking is the leading cause of death in individuals with mental illness and substance use disorders!



Smoking tobacco causes more deaths among clients in substance abuse treatment than the alcohol or drug use that brings them to treatment. A seminal 11-year retrospective cohort study of 845 people who had been in addictions treatment found that 51 percent of deaths were the result of tobacco-related causes.<sup>1</sup> This rate is twice that found in the general population and nearly 1.5 times the rate of death by other addiction-related causes. Despite these statistics, most substance abuse treatment programs do not address smoking cessation.

**Why do people with MI/SUD  
use tobacco?**

# Reasons for smoking among persons with MI

## Genetic

- Smoking and **major depression** <sup>1,2</sup>
- Nicotine dependence and **PTSD** <sup>3</sup>
- Smoking behaviors and **schizophrenia** <sup>4</sup>

## Bio-behavioral

- Nicotine reduces **sensorimotor gating** in schizophrenia <sup>5</sup>
- Smoking reduces brain levels of **MAO-A** (an enzyme linked to depression) <sup>6</sup>
- Nicotine may be an **anxiolytic** <sup>7</sup>

## Psychosocial

- Smoking used as a **'token economy'** in mental health facilities <sup>8</sup>
- Smoking encouraged as a means of **enhancing 'socialization'** among patients<sup>9</sup>

1. Kendler, et al. Smoking and Major Depression: A Causal Analysis. Archives of General Psychiatry 1993; 50:36-43

2. Lyons, et al. A twin study of smoking, nicotine dependence, and major depression in men. Nicotine & Tobacco Research 2008; 10:97 – 108

3. Koenen, et al. A Twin Registry Study of the Relationship Between Posttraumatic Stress Disorder and Nicotine Dependence in Men. Arch Gen Psych 2005; 62:1258-1265

4. Faraone, et al. (2004). A novel permutation testing method implicates sixteen nicotinic acetylcholine receptor genes as risk factors for smoking in Schizophrenia families

5. Postma, et al. (2006). Psychopharmacology, 184: 589–599

6. Fowler, et al. (1996). Proceedings of the National Academy of Sciences of the United States of America, 93:14065-14069

7. McCabe, et al. (2004). Journal of Anxiety Disorders, 18:7-18

8. Lawn S. Cigarette smoking in psychiatric settings: occupational health, safety, welfare and legal concerns. Australian and New Zealand J Psych 2005; 39:886-891

9. Kawachi I, Berkman L. Social ties and mental health. Journal of Urban Health 2001; 78:458-467

# Reasons to treat tobacco use in persons with MI

They <b>WANT</b> to quit!	Siru et al., 2009	Review study (9 studies)	<ul style="list-style-type: none"> <li>• 50% contemplating cessation</li> </ul>
	Stockings et al., 2013	Australia (97 inpatients)	<ul style="list-style-type: none"> <li>• 47% made quit attempt in previous year</li> </ul>
	Du Plooy, et al., 2016	South Africa (116 male inpatients)	<ul style="list-style-type: none"> <li>• 59.4% attempted to quit in the previous year</li> </ul>
They <b>ARE ABLE</b> to quit!	Anthenelli et al., 2016	RCT (8144 with & without MI)	<ul style="list-style-type: none"> <li>• Pharmacotherapy (VAR, BUP, NRT) superior to placebo in both groups</li> </ul>
	Prochaska et al., 2013	RCT (224 inpatient smokers)	<ul style="list-style-type: none"> <li>• Motivational counseling + NRT initiated in hospital increased quitting success</li> </ul>
Cessation <b>IMPROVES</b> Psychiatric symptoms	Taylor et al., 2014	Meta-analysis (26 studies)	<ul style="list-style-type: none"> <li>• Cessation associated with improvements in depression, anxiety, stress, mood and quality of life</li> </ul>

1. Siru, R.; Hulse, G.K.; Tait, R.J. Assessing motivation to quit smoking in people with mental illness: A review. *Addiction* **2009**, *104*, 719-733

2. Stockings, et al. Readiness to quit smoking and quit attempts among Australian mental health inpatients. *Nicotine & Tobacco Research* **2013**, *15*, 942-949.

3. Du Plooy, et al. (2016). Cigarette smoking, nicotine dependence, and motivation to quit smoking in South African male psychiatric inpatients. *BMC psychiatry*, *16*(1), 403.

4. Anthenelli, et al. (2016). Neuropsychiatric safety and efficacy of varenicline, bupropion, and nicotine patch in smokers with and without psychiatric disorders (EAGLES): a double-blind, randomised, placebo-controlled clinical trial. *The Lancet*, *387*(10037), 2507-2520. doi:10.1016/S0140-6736(16)30272-0

5. Prochaska, et al. Efficacy of initiating tobacco dependence treatment in inpatient psychiatry: A randomized controlled trial. *Am J Public Health* **2013**, *104*, 1557-1565

6. Taylor, et al. (2014). Change in mental health after smoking cessation: systematic review and meta-analysis. *Bmj*, *348*, g1151

# Our responsibility

“All smokers with psychiatric disorders, including substance use disorders, should be offered tobacco dependence treatment, and clinicians must overcome their reluctance to treat this population....

Treating tobacco dependence in individuals with psychiatric disorder is made more complex by the potential for multiple psychiatric disorders and multiple psychiatric medications.”

*(Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline)*



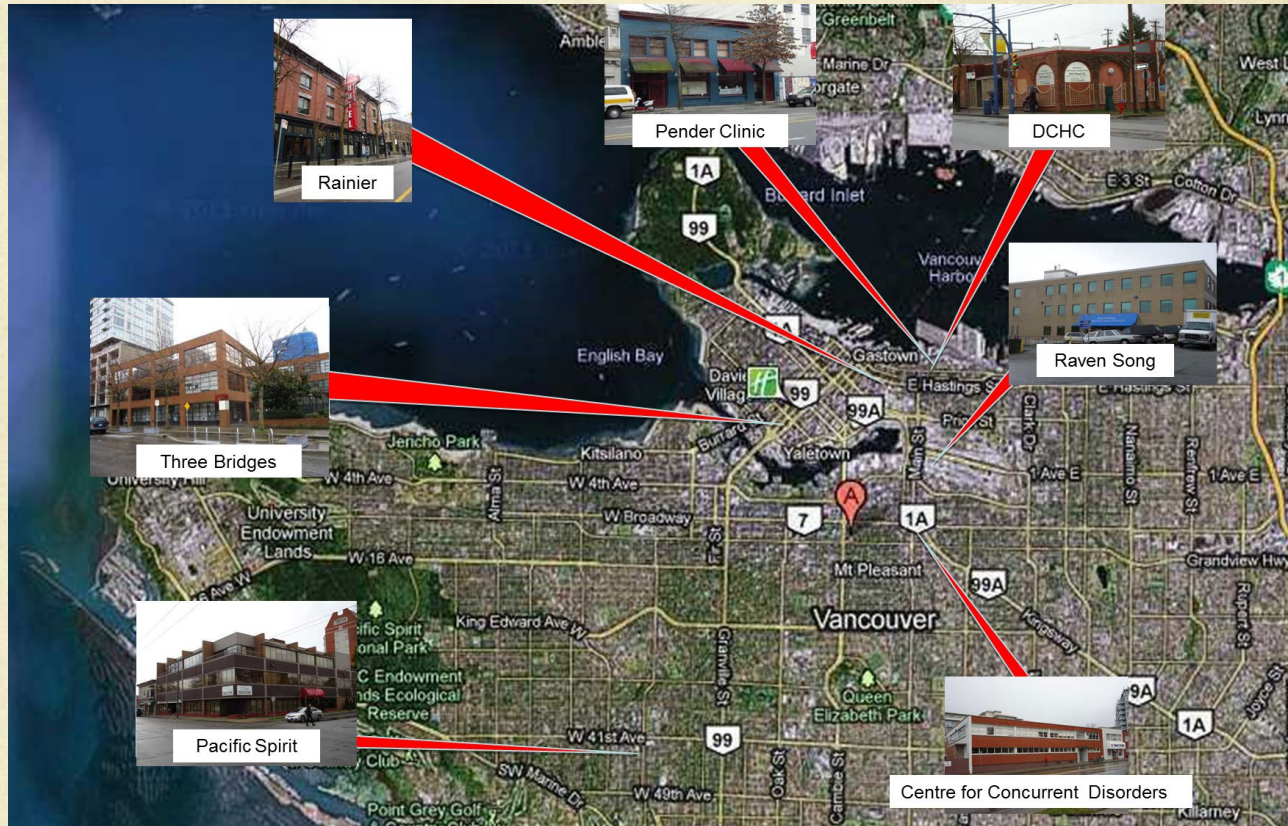
# Research Addressing Tobacco Treatment among people with MI





# Tobacco Dependence Clinics,

## Vancouver Coastal Health Authority, British Columbia, Canada



1. Khara, M., & Okoli, C. T. (2011). The Tobacco-Dependence Clinic: Intensive Tobacco-Dependence Treatment in an Addiction Services Outpatient Setting. *The American journal on addictions*, 20(1), 45-55.
2. Okoli, C. T., Anand, V., & Khara, M. (2017). A Retrospective Analysis of the Outcomes of Smoking Cessation Pharmacotherapy Among Persons With Mental Health and Substance Use Disorders. *Journal of Dual Diagnosis*, 13(1), 21-28.

# Phases of Treatment

**MANUALIZED 'CLOSED GROUP'**  
**Phase 1:** Process engagement – weeks 1-2  
**Phase 2:** planning for change – weeks 3-4  
**Phase 3:** sustaining change – weeks 5-8

**NON MANUALIZED 'OPEN GROUP'**

**Behavioral  
Counseling**

**Support Group**

**Tailored  
Pharmacotherapy**

8 -12 Weeks

**Tailored  
Pharmacotherapy**

Up to 24- 28  
Weeks



# Sample

1075  
Intent-to-treat  
**(From Sept 2007-July 2013)**

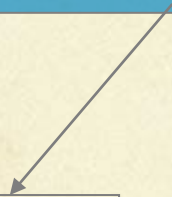
289

Not engaged  
(Had  $\leq 2$  visits)

- Marijuana use (18.3% vs. 10.1%)
- Younger (45.8 years vs. 48.2 years)
- Lower Expired CO at baseline (18.5 vs 20.5)

786

Engagers



163

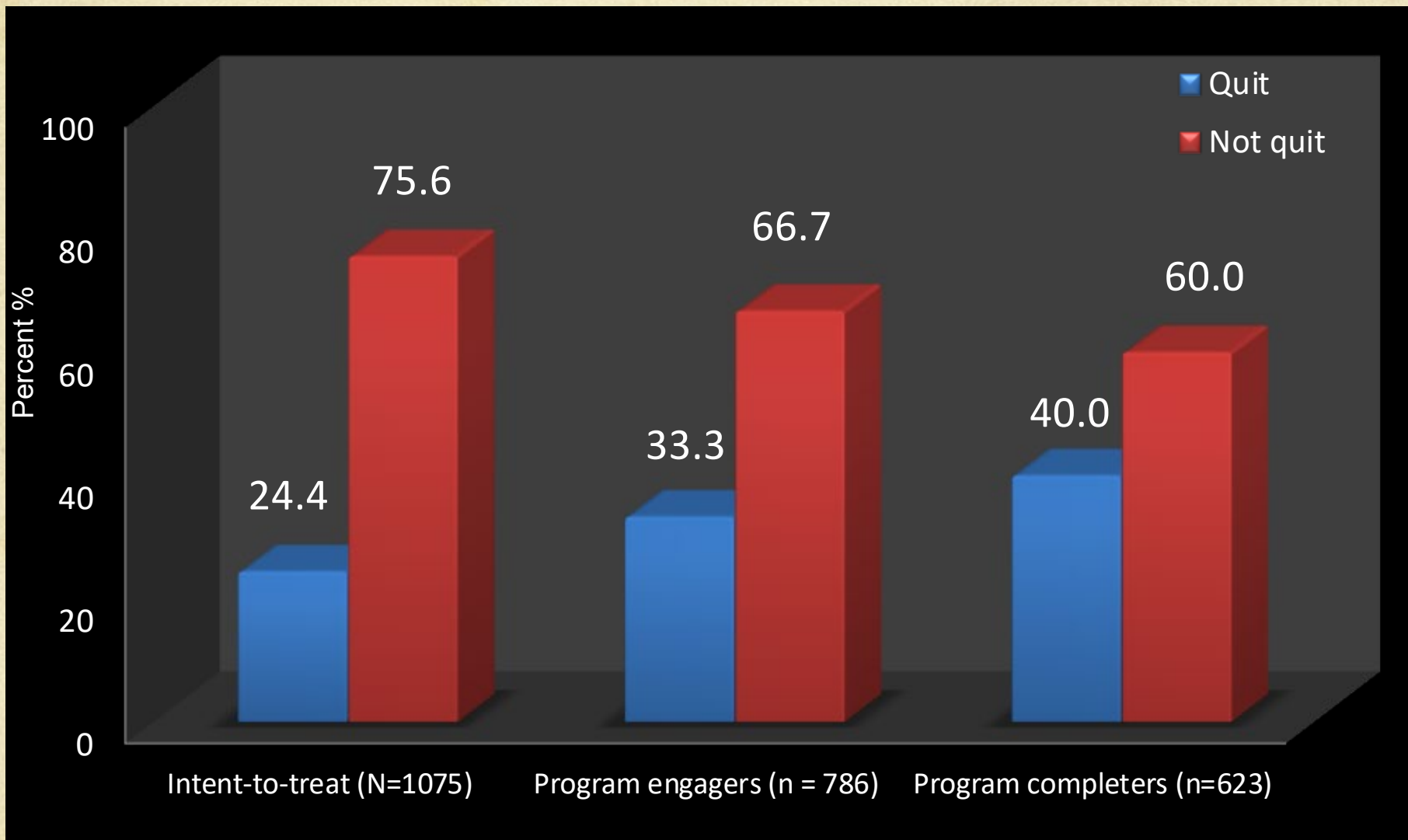
Non-completers  
(Had  $< 6$  visits)

623

Completers

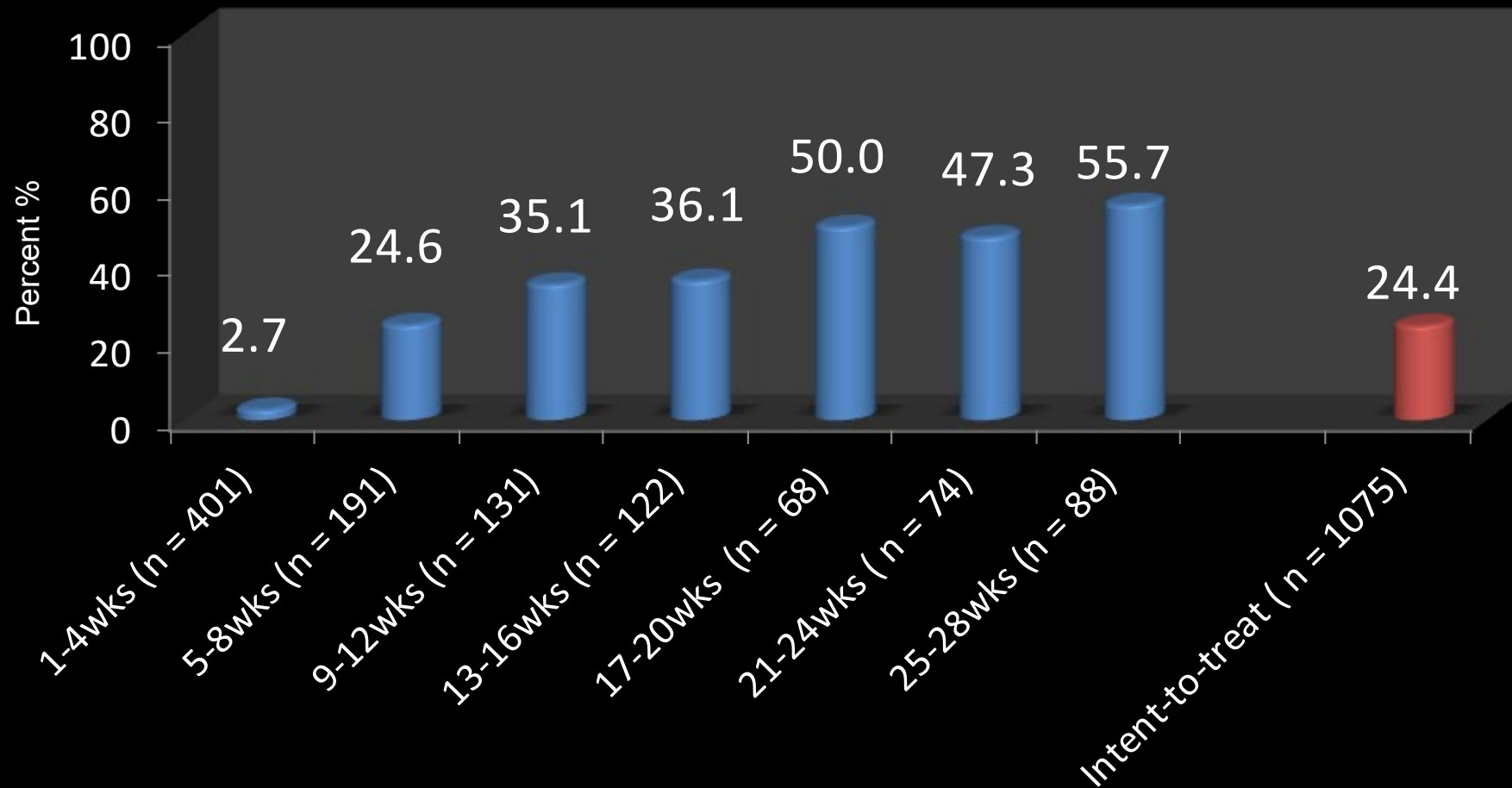
Analysis is based on a retrospective chart review of participants in the Tobacco Dependence Clinic program (between Sept 2007 and Mar, 2012) from 8 clinics, in Vancouver, Canada

# Smoking cessation\* outcomes at end-of-treatment



\*Smoking cessation at end-of-treatment (i.e., anytime between 8 weeks to 26 weeks) based on 7-day point-prevalence of abstinence verified by expired CO levels

# Smoking Cessation by length of stay in the program (n = 1075) Sept 2007-July 2013



Statistically significant linear-by-linear associations  $\chi^2=195.7$  (df = 1),  $p < .0001$

# Summary of findings

- Providing tobacco treatment behavioral Counseling + tailored Pharmacotherapy in community mental health and addictions settings works
  - ❑ Greater intensity of treatment (longer duration) increases success
  - ❑ High doses of smoking cessation medications (and in combinations) to achieve success

# Cooper-Clayton Stop Smoking Program ©

## Participation Station, Lexington, KY

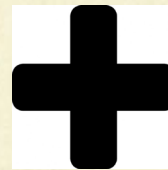


1. Okoli, C. T., Mason, D. A., Brumley-Shelton, A., & Robertson, H. (2017). Providing Tobacco Treatment in a Community Mental Health Setting: A Pilot Study. *Journal of addictions nursing*, 28(1), 34-41.

# Intervention-Cooper Clayton Program ©

## Behavioral Counseling (13 Wks)

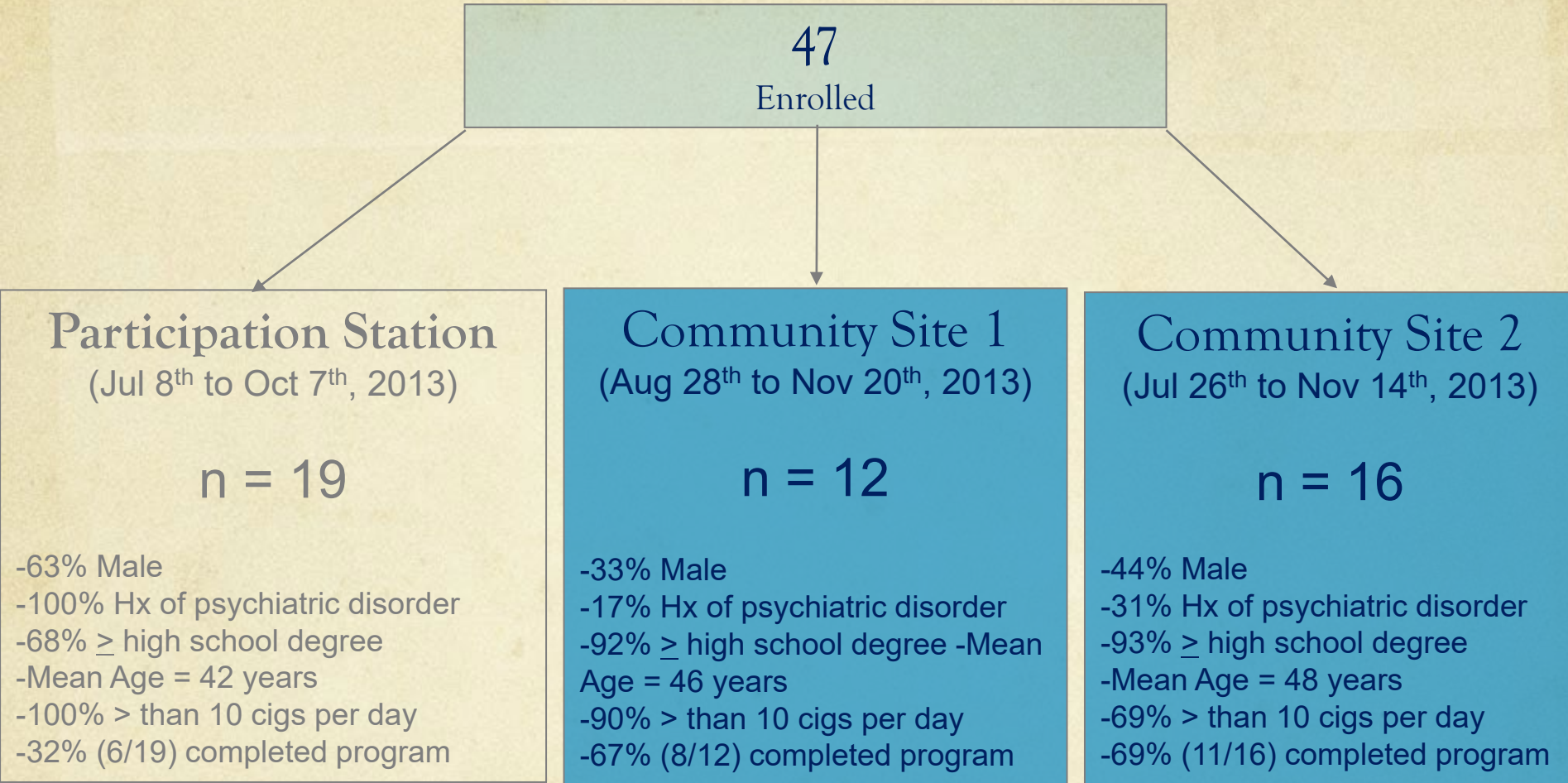
- **Psychoeducation:** On smoking and reaction of body and brain to nicotine replacement therapy
- **Counseling:** On relapse prevention techniques
- **Setting a Quit date\*\*:** Must set quit date by week 5 of program



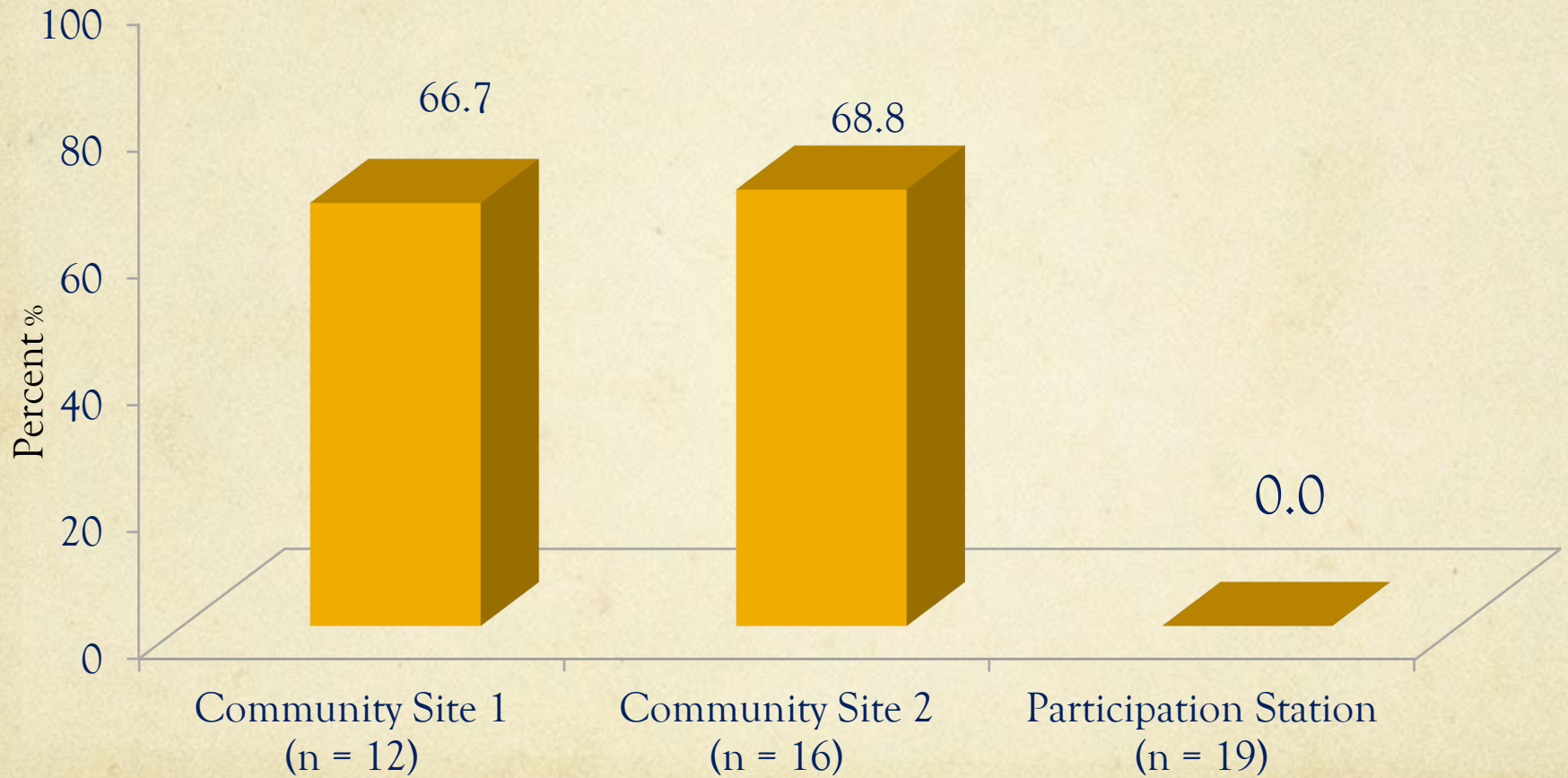
**Nicotine  
Replacement  
Therapy**



# Sample



# Smoking cessation outcomes by treatment site (intent-to-treat)



# Summary of findings

- Providing 'non-tailored' behavioral counseling + pharmacotherapy in community mental health settings may be less effective
  - ❑ Existing tobacco treatment programs for the general population may need to be modified for those with chronic mental illnesses
  - ❑ More studies are needed to understand components of effective programming for those with chronic mental illnesses

# Eastern State Hospital Tobacco Treatment Services



1. Okoli, C.T., Shelton, C., Khara, M. (in preparation). Predictors of tobacco use among inpatients in a psychiatric hospital
2. Okoli, C.T., Al-Myrazat, Y., Stead, B. (under review). The effect of implementing a tobacco treatment service on adherence to evidence-based practice in an inpatient state-owned psychiatric hospital. *The American Journal on Addictions*
3. Okoli, C. T., Otachi, J. K., Kaewbua, S., Woods, M., & Robertson, H. (2017). Factors Associated With Staff Engagement in Patients' Tobacco Treatment in a State Psychiatric Facility. *Journal of the American Psychiatric Nurses Association*, 1078390317704045.
4. Okoli, C. T., Otachi, J. K., Manuel, A., & Woods, M. (2017). A cross-sectional analysis of factors associated with the intention to engage in tobacco treatment among inpatients in a state psychiatric hospital. *Journal of psychiatric and mental health nursing*.

# ESH Tobacco Treatment Services Approach

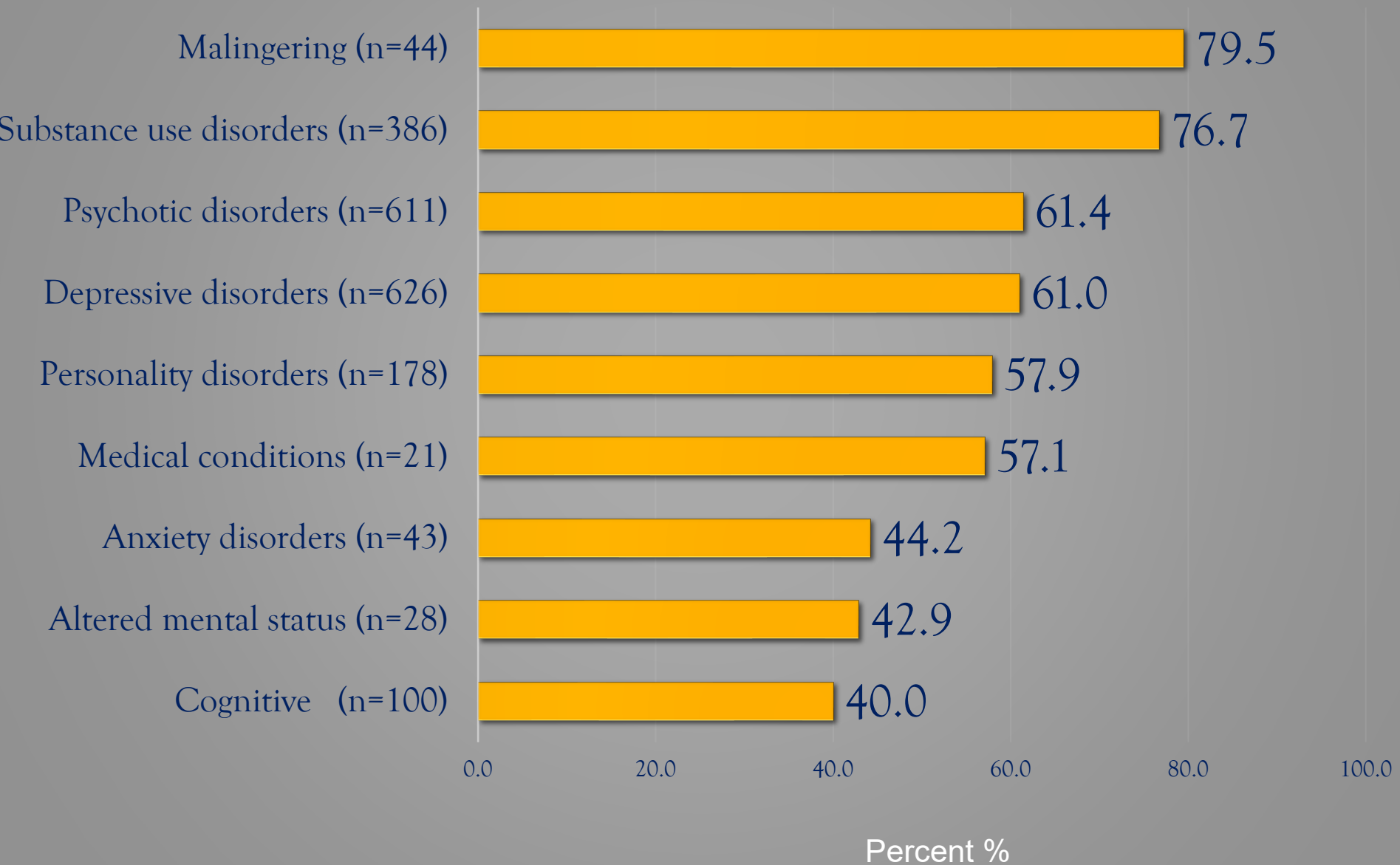
Patient identified as a tobacco user at admission

Admitting Physician/APP offers appropriate NRT

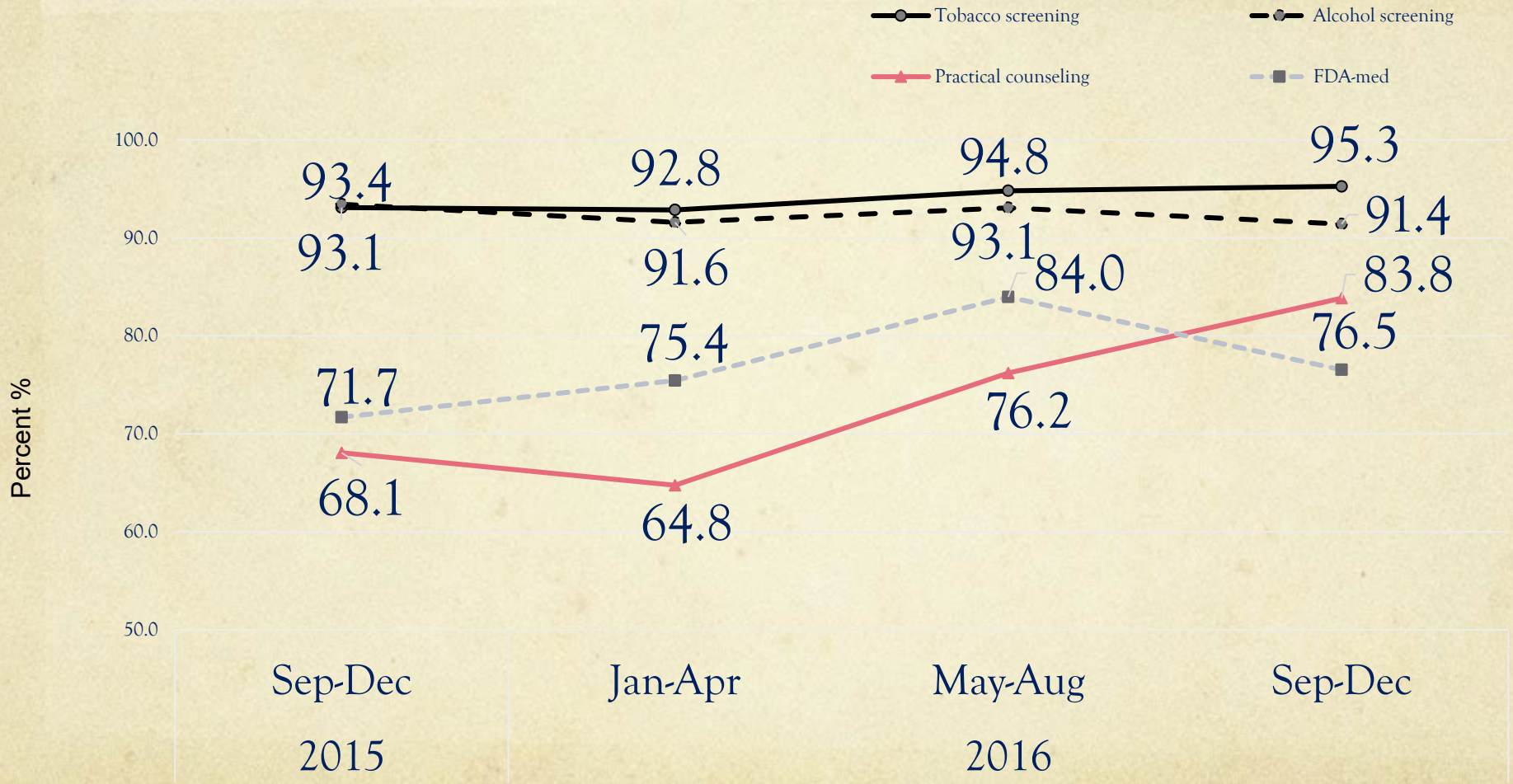
Tobacco Treatment Nurse provides follow-up assessment on unit

1. Assesses nicotine withdrawal, motivation to quit, and stage of change
2. Make recommendations to care team for tobacco treatment plan
  - a) Adjustment of tobacco cessation medication
  - b) Attend tobacco dependence education or cessation group (based on SOC)

# Tobacco use by diagnosis among non-repeat admissions in 2016 (n = 2037)



# Changes in screening for tobacco use and provision of nicotine replacement and practical counseling by 4-month intervals (Sept 2015-Dec 2016)



Predictors of providing tobacco treatment among providers (N=195; Adjusted R<sup>2</sup>= 0.44)

**Attitudes**

$$\beta = .15$$

**Subjective  
Norms**

$$\beta = .38$$

**Perceived  
Behavioral  
Control**

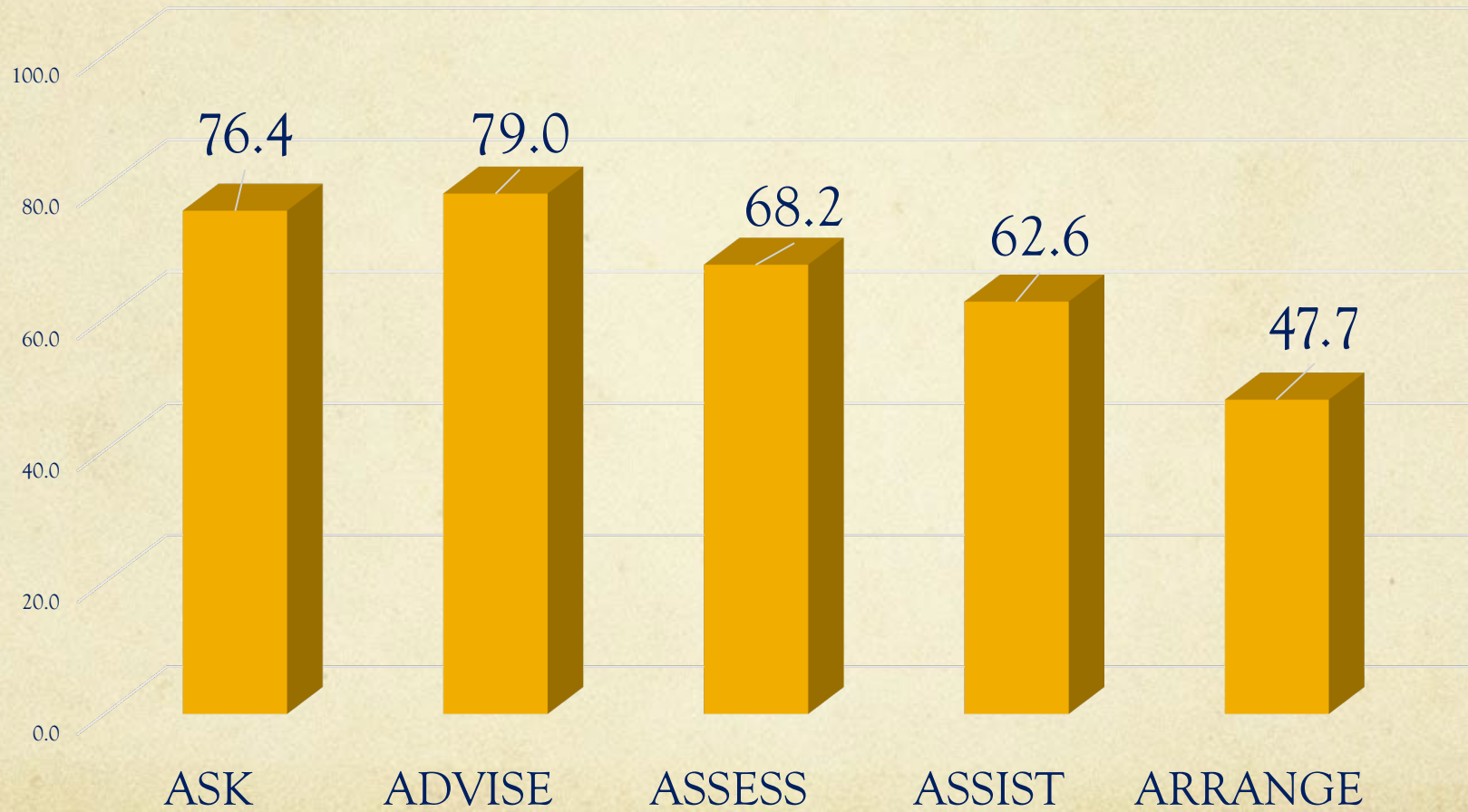
$$\beta = .25$$

**Intentions to  
provide tobacco  
treatment**

Adjusted R<sup>2</sup>= 0.44



# Frequency of providing evidence-based tobacco treatment (N=195)



Predictors of engaging in tobacco treatment among patients (N=115; Adjusted R<sup>2</sup>= 0.49 )

**Attitudes**

$$\beta = .22$$

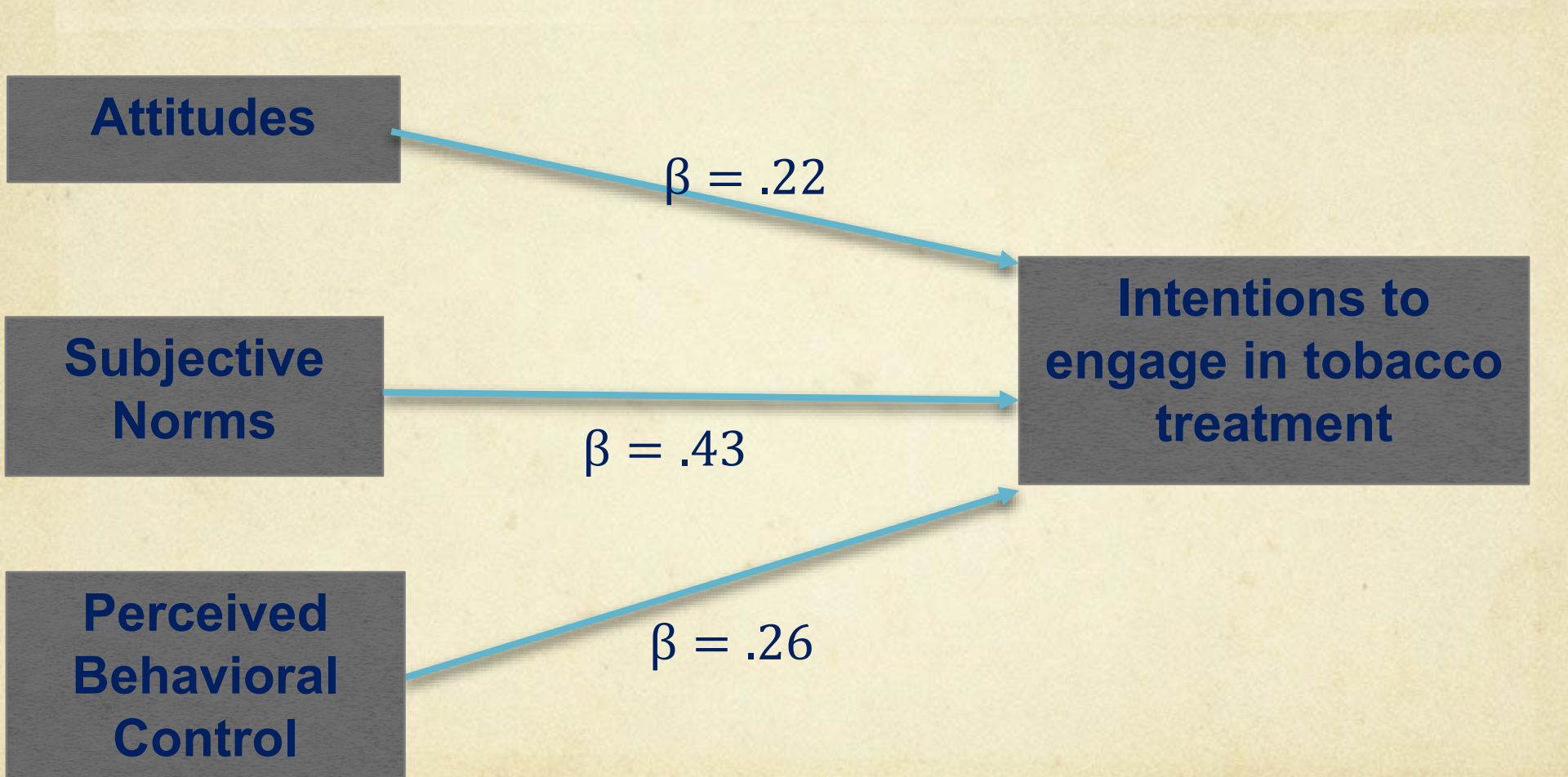
**Subjective  
Norms**

$$\beta = .43$$

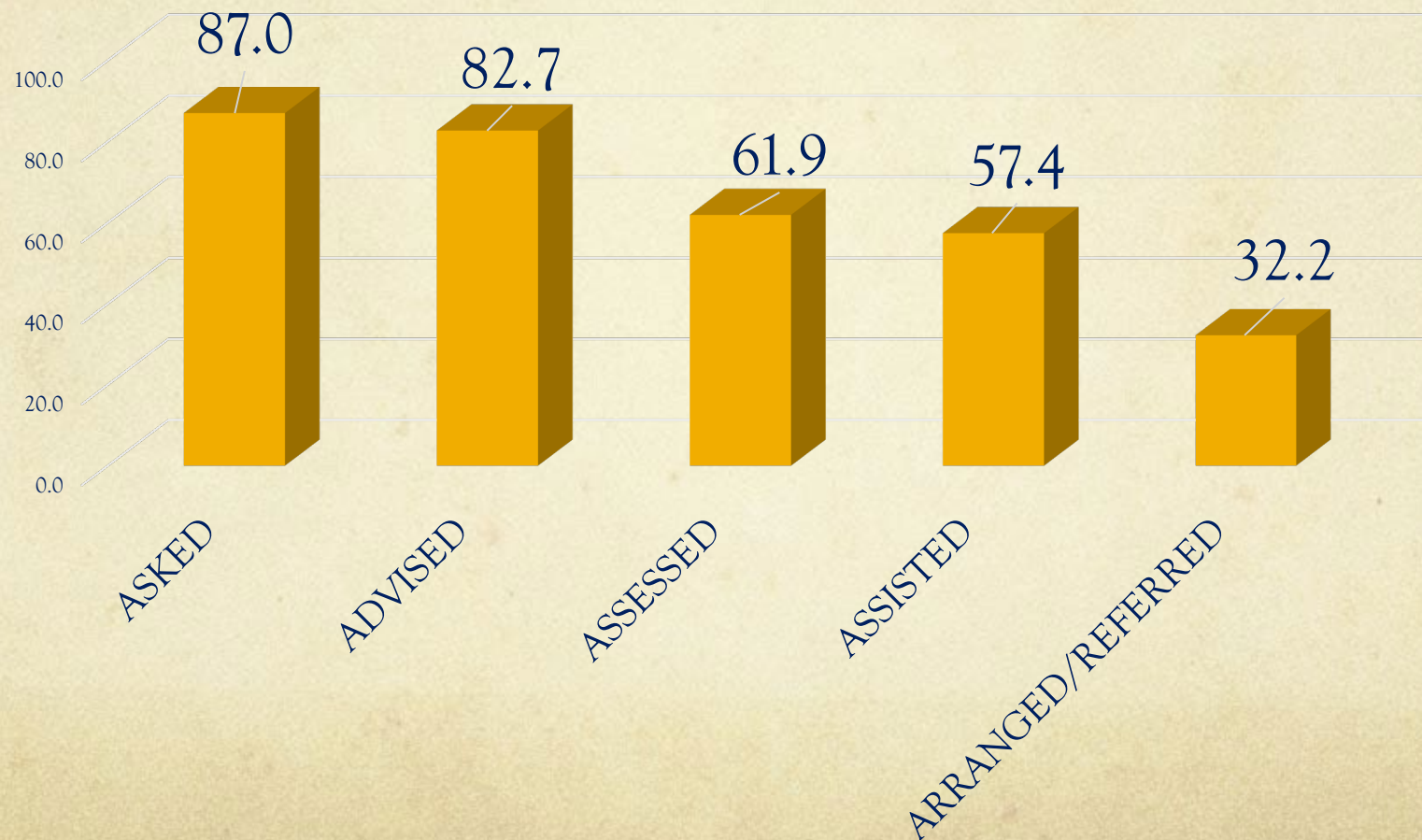
**Perceived  
Behavioral  
Control**

$$\beta = .26$$

**Intentions to  
engage in tobacco  
treatment**



# Frequency of experiencing evidence-based tobacco treatment by patients (N=115)



# Conclusions

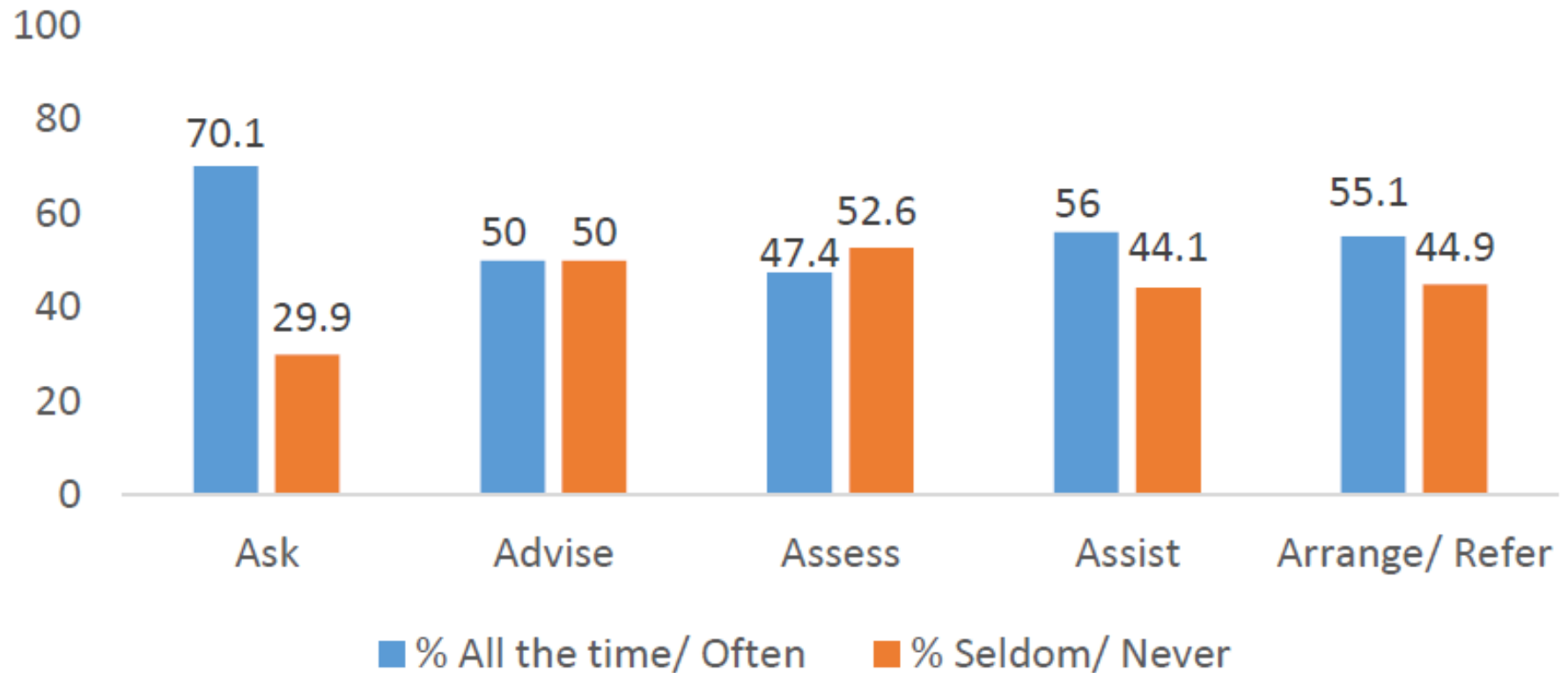
- Tobacco use is a leading cause of morbidity and mortality for those with MI
- Tobacco users with MI **WANT** to and **CAN** stop using tobacco—they need evidence-based assistance
- In the outpatient setting, those with MI often require more intensive treatment (**longer durations** and possibly **higher doses** on medications) to optimize cessation.
- Efforts should be made to promote tobacco treatment **as a normative behavior** within inpatient psychiatric settings.
- Direct care staff should be **trained** in evidence-based tobacco treatment, particularly assessing, assisting, and following-up (or referring) tobacco using patients

# Community Mental Health Center Tobacco Policy and Treatment Survey 2019-2020

<b>Table 1. Key findings from the CMHC's provider policy survey (N = 159)</b>		
	<b>n</b>	<b>%</b>
<b>Provider Role</b>		
Manager/ Supervisor	82	51.6
Staff Member	49	30.8
Healthcare Provider	28	17.6
<b>Facility has "No Smoking" signs displayed</b>	92	57.9
<b>Facility has a written policy restricting tobacco product use</b>	131	82.4
• Policy highlights impact of tobacco use on physical health	29	18.2
• Policy highlights impact of tobacco use on mental health	14	8.8
<b>Facility provides tobacco treatment services</b>	45	28.3
<b>Facility interested in training on tobacco free policy</b>	81	50.9
<b>Facility interested in tobacco treatment specialist training</b>	88	55.3
<b>Facility interested in community tobacco treatment referral resources</b>	106	66.7

# Community Mental Health Center Tobacco Policy and Treatment Survey 2019-2020

## Brief Interventions



# Resources



# BH WELL

Working to promote behavior health and wellness among individuals facing behavioral health challenges.

[www.uky.edu/bhwell](http://www.uky.edu/bhwell)

# Tobacco Treatment-Clinicians

## 5 A's The Brief Interventions for Smoking Cessation

An Evidence-Based Practice Tool

The 5 A's are a 10-minute decision support tool for clinicians to assist patients to quit smoking.

**1 Ask** about tobacco use  
Ask each patient this question on arrival:

"Have you smoked in the last 30 days?"

**2 Advise** all smokers to quit

"As a health professional, the best advice I can give you is to stop smoking."

"Giving up smoking is hard; however, it will help with (healing, finances, medication)."

"In the hospital, we have NRT (patches/gum) that you can try whether you are currently having cravings or not."

**3 Assess** patient readiness to quit

"Do you want to quit smoking?"

How many cigarettes do you smoke a day? Are you nicotine dependent? When you wake up each day, when do you smoke your first cigarette?  
Are you currently using medicine to help you quit?

**4 Assist** with medication and practical counseling

### Smoking Cessation Medications:

- Relieve nicotine withdrawal
- Increase chances of quitting

Offer NRT, Bupropion, and Varenicline. Offer practical counseling (motivational interviewing).

It is always safer to use NRT than to continue smoking.

**5 Arrange** for a follow-up or referral



Schedule a follow-up visit within 2-4 months.

FREEDOM FROM SMOKING  
1-800-LUNG-USA  
Toll-free line available in Kentucky  
1-800-QUIT-NOW

Embracing the 5 A's can help you guide patients toward smoking cessation.

For more information, contact Zim Okoli, PhD at 859-323-6606 or ctokoli@uky.edu.

Funded by the Kentucky Department of Public Health

## 5 R's Motivational Intervention for Smoking Cessation Readiness

An Evidence-Based Practice Tool

The 5 R's are a 10-minute motivational intervention tool for clinicians to increase readiness for smoking cessation.

**1 Relevance**

Tailor advice and discussion for each patient

"Do you think that quitting smoking is important to do for you and those around you?"

**2 Risks**

Outline the risks of continued smoking

"What effect do you think smoking will have on you and the ones you love?"

What thoughts have you had about your health and smoking?

What do you fear the most from smoking?

What concerns you about your smoking?

What worries do you have for your family because you smoke?

**3 Rewards**

Outline the benefits of quitting

"What do you think the benefits of quitting smoking may be for you personally?"



**4 Roadblocks**

Ask your patient about perceived roadblocks to quitting

Withdrawal symptoms Depression Fear of failure

A patient's perceived roadblocks negatively affect their readiness to quit.

Enjoyment of tobacco Weight gain Lack of support

**5 Repetition**



Respectfully repeat the 5 R's with each interaction.

Refer patients to tobacco dependence treatment program: toll-free line available in Kentucky 1-800-QUIT-NOW

The 5 R's can help you guide patients toward increasing desire to quit smoking.

For more information, contact Zim Okoli, PhD at 859-323-6606 or ctokoli@uky.edu.

Funded by the Kentucky Department of Public Health



# Tailored Tobacco Treatment Options

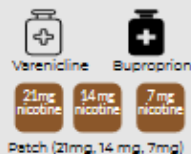
Quick Reference for Tailored Tobacco Treatment

A practice tool to help clinicians decide on tobacco treatment options

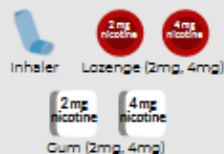
## Tobacco Treatment Pharmacotherapy Options\*

### Monotherapy

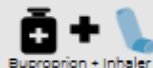
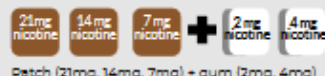
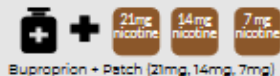
#### Long Acting Options



#### Short Acting Options



### Combination Therapy\*\* (Long and Short Acting)



\*The selection of patch dose is generally based on the number of cigarettes/day, with 1 mg of patch per cigarette smoked. For example, a 10 cigarette per day smoker would use a 10 mg patch, a 14 mg/day smoker a 14 mg patch, and a 20 cigarette per day smoker a 20 mg patch. Dose selection is also determined by the time to first cigarette after waking. If the first cigarette is smoked within 30 minutes, the 4 mg patch is used. If later, the 2 mg patch is used. Dose selection applies to use of lozenge or gum either as a single agent, or in combination with the patch or bupropion.

Baker, R., McDonald, R., & Salyer, R. (2009). An algorithm for tailoring pharmacotherapy for smoking cessation: results from a Delphi panel of interventional experts. *Tobacco Control*, 18(1), 24-32.

Lindor, N., Chapiro, S. C., Yu, W., Ranshaw, T. R., Sullen, C., & Klemmner-Soyka, J. (2016). Offense dose, duration and mode of delivery of nicotine replacement therapy for smoking cessation. *Cochrane Database of Systematic Reviews*, (3).

Cahill, K., Stevens, S., Perera, R., & Lancaster, T. (2012). Pharmacological interventions for smoking cessation: an overview and network meta-analysis. *Cochrane database of systematic reviews*, (3).

\*\*The first line treatment for e-cigarette/tobacco users is counseling in combination with an oral exam by a dental professional, with medications added afterward or at the time of the oral exam. Among medications, varenicline and lozenge have been found to be the most efficacious for e-cigarette/tobacco users.

The American Dental Association. (2016). <http://www.ada.org/resources/care-services/oral-health-topics/e-cigarettes-and-tobacco-cessation> Ebers, J. O., Strickoff, M. Y., & Stead, L. R. (2012). Interventions for e-cigarette tobacco use cessation. *Cochrane Database of Systematic Reviews*, (3).

Appropriate pharmacotherapy with proper counseling should be offered to all tobacco users willing to reduce or stop their tobacco use

### Evidence Based Clinician Approach

**ASK**  
about tobacco use  
"Have you used tobacco in the last 30 days?"

**ADVISE**  
to quit  
"As a health professional, the best advice I can give you is to stop smoking."

**ASSESS**  
readiness to quit  
"On a scale of 1-10, how confident and ready are you to quit using tobacco?"

**ASSIST**  
to quit  
Use practical counseling and offer pharmacotherapy

**REFER**  
to program  
1-800-LUNG-USA  
(Freedom from smoking)  
1-800-QUIT-NOW  
(QUIT NOW Kentucky)

For more information, contact Zim Okoli, PhD  
Phone: 859-323-6606; Email: ctokoli@uky.edu.

Funded by the Kentucky Department of Public Health  
© University of Kentucky HealthCare

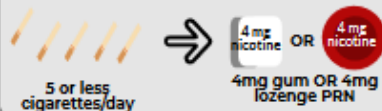
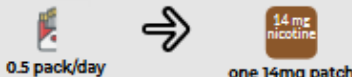
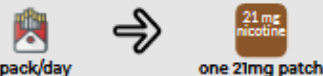
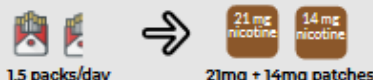
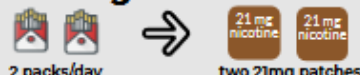
# Pharmacotherapy Choices

Quick Reference for Pharmacotherapy to Manage Nicotine Withdrawal

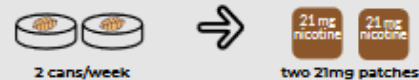
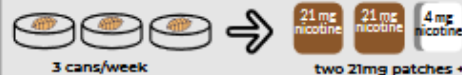
A practice tool to help clinicians decide on nicotine withdrawal management pharmacotherapy

## Nicotine Replacement Equivalencies\*

### Cigarettes



### Snuff



### Cigars



\*These nicotine replacement equivalencies are based on research studies and clinical experience to provide adequate replacement of nicotine during tobacco free hospitalizations. As such these equivalencies may be of-ficial prescribing.

Agaku, I. T., & Alpert, H. R. (2016). Trends in annual sales and current use of cigarettes, cigars, roll-your-own tobacco, pipes, and smokeless tobacco among US adults, 2003-2013. *Tobacco Control*, 35(6), e21-e27.

Jiangshen, S., Chabrier, J., Gaboriau, V., et al. (2014). Genetic variants in nicotine addiction and alcohol metabolism genes, oral Cancer risk and the propensity to smoke and drink alcohol: A replication study in Asia. *PLoS One*, 9(2), e88602.

Using adequate pharmacotherapy can help manage withdrawal and optimize success while stopping tobacco use

### Evidence Based Clinician Approach

**ASK**  
amount of tobacco use  
"What kind of tobacco products do you use? How often do you use them?"

**ASSESS**  
nicotine withdrawal  
"Have you experienced any of the following symptoms in the past 24 hours: (cravings, depressive symptoms, insomnia, anger, anxiety, poor concentration, restlessness, and decreased appetite)?"

**PROVIDE**  
nicotine replacement  
Offer nicotine replacement based on withdrawal score and tobacco product use.

For more information, contact Zim Okoli, PhD  
Phone: 859-323-6606; Email: ctokoli@uky.edu.  
Funded by the Kentucky Department of Public Health  
© University of Kentucky HealthCare

BE TOBACCO FREE

**QUIT NOW**  
**KENTUCKY**

Health Care Provider

English **OR** Español

[Home](#) | [Just Looking](#) | [Enroll Now](#)

Hello. [Sign In](#) or [Enroll today](#).

Worried about smoking or vaping and COVID-19? We can help.

Taking your first steps  
toward becoming  
tobacco free.

Help me decide

How do you feel about quitting?

Choose



Get Started

Skip, I want to explore  
on my own

Quitting tobacco is a process. Whether you are thinking about quitting, are not yet ready to quit, or have already quit, Quit Now Kentucky can help you with each step of the way.

*Free, Convenient, Safe & Secure*

*Are you a...*

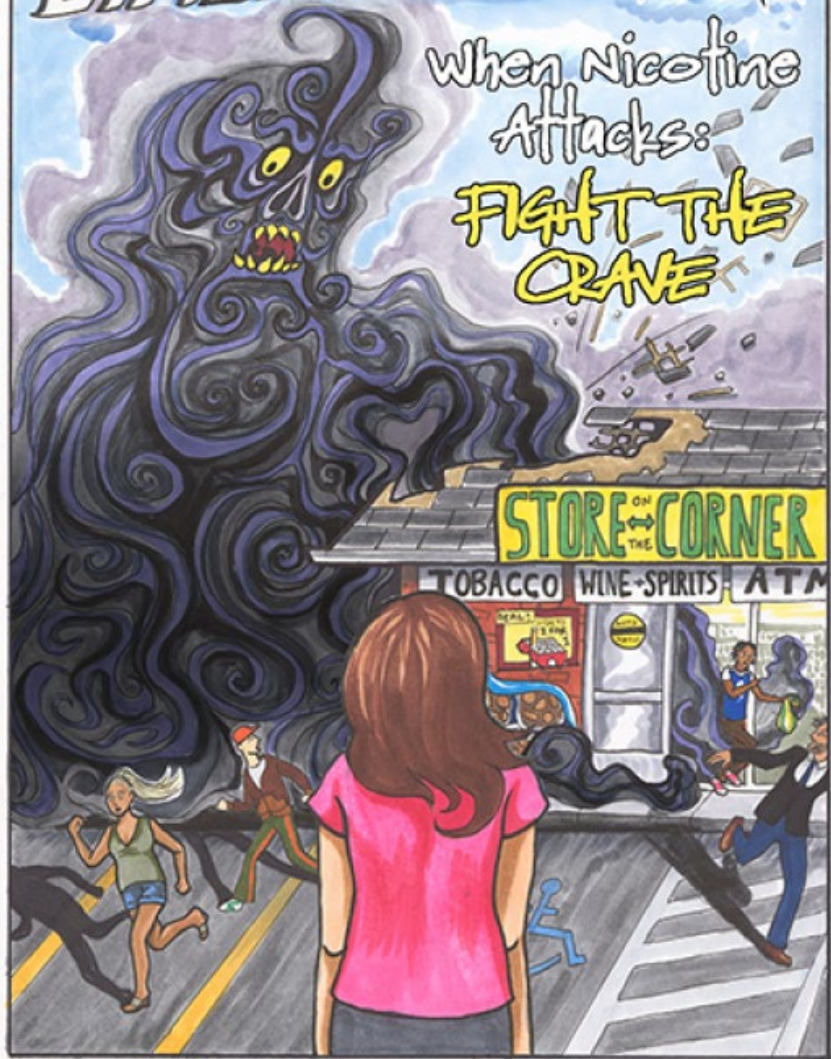
**Health Care Provider**  
looking for information?

OR

# THE DIMENSIONS



When Nicotine  
Attacks:  
**FIGHT THE  
CRAVE**



# Tobacco Dependence Treatment Resources are Available

- Resources for helping smokers with a Mental Illness are available
  - Learning About Healthy Living group program for people with mental illness.  
<http://ubhc.umdj.edu/nav/LearningAboutHealthyLiving.pdf>
  - **Smoking Cessation for Persons with Mental Illness: A Toolkit for Mental Health Providers (2007)**. Developed by the University of Colorado at Denver and Health Sciences Center and funded by the Tobacco Disparities Initiatives of the State Tobacco Education and Prevention Partnership (STEPP), Colorado Department of Public Health and the Environment.  
  
[http://www.cdhs.state.co.us/dmh/providers\\_ebp.htm](http://www.cdhs.state.co.us/dmh/providers_ebp.htm)
  - NASMHPD Technical reports on Smoking and Mental Illness and a Toolkit for Smoking Cessation in Mental Health Facilities  
<http://www.nasmhpd.org/publicationsmisc.cfm>

# Tobacco Dependence Treatment Resources are Available

- Best New Resources for helping smokers with a Mental Illness or Substance Use Disorder
- National Mental Health Partnership For Smoking Cessation and Wellness <http://smokingcessationleadership.ucsf.edu/MentalHealth.html> has guidelines for consumers, physicians, other treating professionals
- **2011, "A Hidden Epidemic: Tobacco Use and Mental Illness."** Legacy [http://www.legacyforhealth.org/PDF/A\\_Hidden\\_Epidemic.pdf](http://www.legacyforhealth.org/PDF/A_Hidden_Epidemic.pdf).
- **2011 "Tobacco Use Cessation During Substance Abuse Treatment Counseling"**, SAMHSA Advisory, Volume 10, Issue 2, [www.samhsa.gov](http://www.samhsa.gov) HHS Publication No. SMA) 11-46Clin