Smoking Cessation in Behavioral Health Workshop

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University of Maryland Baltimore County
Overview

- Nicotine: A Hidden Addiction in Substance Abuse and Mental Health Treatment
- Putting Smoking in Perspective
- Addressing Current Barriers
- Current Treatment Recommendations for Quitting Tobacco Use
- Creating the future: Integrating Smoking Cessation into Mental Health, Addiction, and Dual Diagnosis Treatment
Why is it important to Quit?

• “Cigarette Smoking… is the chief, single, avoidable cause of death in our society and the most important public health issue of our time.”

C. Everett Koop, M.D.
former U.S. Surgeon General
The Big Picture – 2010

In 2010 an estimated 45.3 million people (19.3% of all adults (18 or 9 older) smoked cigarettes in the U.S.

- 78.2% (35 million) of smokers smoke every day
- 21/8% (9.9 million) smoked some days
- 68.8% of these adult smokers wanted to stop smoking
- 52.4% made a quit attempt (> 1 day) in the past year
- 31.7% had used counseling and/or medications when they tried
- 6.2% has recently quit

However, since 2002 the number of former smokers has exceeded the number of current smokers so over 50% of current ever smokers have quit

- We have over 46 million former smokers
- Prevalence has dropped from 42% in 1965 to 19.3% in 2010
Tobacco-Related Healthcare Costs in MD

$1.96 Billion
• Annual State cost directly caused by tobacco use

$67.9 Million
• Annual State cost of secondhand smoke exposure

$476.0 Million
• State Medicaid cost caused by tobacco use

$1.2 Billion ($616/household)
• Citizens’ state/federal taxes to cover smoking costs

$1.83 Billion
• Smoking caused productivity losses
  ➢ Example: Smokers miss 2-4 more work days per year than non-smokers

$13.91
• Health costs and productivity losses per pack

Sources: CTFK Maryland Fact Sheet, as of November 12, 2010; Journal of Occupational Environmental Medicine, 1996; 2000-2004 SAMMEC)
Smoking Among People with Mental Illnesses

- 44% of all U.S. made cigarettes are smoked by people with mental illnesses
- 60-90% of people with mental health diagnoses smoke
- Nearly 50% of tobacco-related deaths in the U.S. each year are among people with mental illnesses
- People with mental illnesses are often not advised to quit smoking
Behavioral Health and Smoking in Maryland

Maryland Behavioral Health Smoking Rates (CY 2010)

- Admissions to State-Funded Alcohol and Drug Abuse Treatment
  - 81.4% Inpatient
  - 64.0% Outpatient

Source: ADAA SMART [State of Maryland Automated Record Tracking] System

National Behavioral Health and Smoking

- Over 70% of the behavioral health population wants to quit
- Approximately 35-40% behavioral health staff smoke vs. 20.4% general population

Source: 2006 NASHMHPD Research Institute Survey on Smoking Policies
Behavioral Health Consumers Smoke at Greater Rates than the General Population in Almost All Counties in Maryland.
Smoking Rates by Education Level for Adults in Addiction Treatment vs. General Population

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Addiction</th>
<th>Gen. Pop (BRFSS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; HS grad</td>
<td>69.2%</td>
<td>31.2%</td>
</tr>
<tr>
<td>HS grad</td>
<td>71.1%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Some College</td>
<td>67.2%</td>
<td>19.2%</td>
</tr>
<tr>
<td>College Grad</td>
<td>54.6%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Post Grad</td>
<td>42.9%</td>
<td>-</td>
</tr>
</tbody>
</table>

Sources: Addiction Treatment (2010 ADAA); General Population (2009 BRFSS)
Smoking Rates by Ethnicity & Gender in Maryland Mental Health and Addiction Clients

The highest percentage of BH smokers are White, followed by Black and Hispanic. Within ethnic groups, there is little difference between males and females.

Clients

Sources: Addiction Treatment (2010 ADAA); Mental Health (2010 PMHS)
### 2010 Smoking Rates by Age Group in Maryland
Addiction/Mental Health Clients

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Addiction</th>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underage</td>
<td>43.8%</td>
<td>6.2%</td>
</tr>
<tr>
<td>18-20</td>
<td>69.0%</td>
<td>33.5%</td>
</tr>
<tr>
<td>21-25</td>
<td>73.0%</td>
<td>45.7%</td>
</tr>
<tr>
<td>26-30</td>
<td>74.1%</td>
<td>51.0%</td>
</tr>
<tr>
<td>31-40</td>
<td>73.1%</td>
<td>49.6%</td>
</tr>
<tr>
<td>41-50</td>
<td>71.9%</td>
<td>52.6%</td>
</tr>
<tr>
<td>51-60</td>
<td>69.5%</td>
<td>47.6%</td>
</tr>
<tr>
<td>Over 60</td>
<td>53.6%</td>
<td>34.7%</td>
</tr>
</tbody>
</table>

**Data Sources:** 2010 ADAA & PMHS
Over Time Smoking Rates have Increased among Persons Admitted for Addiction Treatment in Almost All Age Groups

Source: 2007-2010 ADAA persons admitted to State-Funded Alcohol and Drug Abuse Treatment (N=41,233 [2007], N=41,072 [2008], N=42,324 [2009], N=43,467 [2010])
Smoking Prevalence among People with Mental Illnesses

- Major depression: 50 to 60%
- Anxiety disorder: 45 to 60%
- Bipolar disorder: 55 to 70%
- Schizophrenia*: 65 to 85%

*20% of those with schizophrenia started smoking at college age and many began smoking in mental health settings, receiving cigarettes for good behavior.

Note: Compared to approximately 20-21% of people without mental illnesses.

Smoking Sequelae

- Individuals with SMI are more than
  - twice as likely to develop cardiovascular disease,
  - over three times as likely to develop respiratory disease and cancer, and
  - have a life expectancy that is twenty-five years shorter than the general population
Morbidity & Mortality

- Persons with mental illness experience higher rates of disease and premature death and a reduced quality of life compared to those without mental illness.
- Half of all deaths due to smoking are experienced by individuals with mental illness.

Source: Smoking Cessation Leadership Center, a national program office of the Robert Wood Johnson Foundation
Special Populations: SMI

- Individuals with serious mental illness, (e.g., schizophrenia and bipolar disorder) are
  - more likely to smoke cigarettes
  - smoke more cigarettes per day and
  - take in more nicotine and tar from each cigarette

Source: Dr. Marc L. Steinberg, an assistant professor of Psychiatry @ the UMDNJ-Robert Wood Johnson Medical School
Benefits of Quitting

Time Since Quitting

- **2 weeks to 3 months**
  - Ability to clear lungs is better
  - Less coughing, tiredness, shortness of breath

- **1 year**
  - Added risk of heart disease is now much less

- **1 to 9 months**
  - Lungs work better

- **10 years**
  - Less lung and many other types of cancers

- **5 years**
  - Risk of stroke is now similar to those who never smoked

- **after 15 years**
  - Risk of heart disease is now similar to those who never smoked
If you save the money you use to buy cigarettes for 50 years @ $4.32 per pack and earn 4% interest

- 1 Pack/day: $251,725
- 2 Packs/day: $503,451
- 3 Packs/day: $755,177

If you don’t invest the money, you will save $1503.80/yr for each pack a day smoked.
Smoking and Substance Abuse Treatment – Breaking the Link

- Common Provider Myths:
  - Individuals in substance abuse tx are not interested/less motivated/cannot quit smoking; tobacco is necessary “medication”
  - Health care professionals can help the general population quit smoking more easily than helping someone who is also quitting another substance
  - Quitting smoking interferes with recovery, eliminates a coping strategy, leads to decompensation in mental health functioning – the patient will just drop out or might have increased chance of relapse
  - Tobacco cessation is the lowest priority due to its perception of having only distal effects – if a person has substance abuse issues, their smoking is much more benign in terms of health risks and concerns and can be addressed later
Current Numbers of Smoking Cessation services in SA Treatment Facilities

• Unfortunately, there needs to be an increase in smoking cessation services offered as up to 60% of programs do not offer any formal cessation services (Knudsen, 2011).

• Studies have found that hospital affiliation, service breadth, the priority given to physical health, the availability of medication to treat addictive problems, assessment of cigarette smoking, and a greater perception of the proportion of patients who smoke were associated with the delivery of smoking cessation services (Friedman, Jiang, & Richter, 2008).
Challenges to Facilities/Providers
Smoking Cessation in Substance Abuse & Mental Health Treatment

1. Many clinicians smoke, and do not promote and/or implement smoking cessation interventions as much as clinicians who do not smoke (Knudsen & Studts, 2010; Rothrauff, 2011).

2. Clinicians are faced with insufficient financial reimbursement to properly administer tobacco cessation interventions to their clients (Rothrauff, 2011).

3. There is also a possible lack of access to smoking cessation services as well as insufficient training and educational tools for staff members to address tobacco dependence among patients (Knudsen, 2010; Knudsen & Studts, 2010; Williams, 2005).
Does tobacco use increase risk for alcohol misuse?

- YES, daily and non-daily smokers:
  - drink more
  - drink for longer periods of time
  - find alcohol more reinforcing
Tobacco Dependence has Two Parts

Treatment should address both the addiction and the habit.

**Physical**
- The addiction to nicotine
  - Treatment
  - Medications for cessation

**Behavior**
- The habit of using tobacco
  - Treatment
  - Behavior change program/Counseling
Helping with the Physical Part: Medication

- Medications help with the physical part of quitting (addiction)
- Make people more comfortable when quitting
- Less irritable, better sleep and mood, less cravings, less weight gain
- Medications do not have the harmful ingredients in cigarettes
- Can focus on changing behavior
Helping with the Behavior Part: Counseling and Support

- Counseling helps with the Behavior part (Habit)
- **Prepare to quit**: Change the environment
  - Have tobacco-free home rules
  - Avoid smoke and things that remind you of smoking (ash trays, tobacco branded items)
  - Plan other activities for when you usually smoke (e.g., after dinner)
- **Plan to quit**: Pick a date to quit
- Decide why YOU want to quit: reasons
Barriers to quitting

When quitting, people have a hard time because they…

- Fear weight gain
- Fear withdrawal symptoms
- Give up a social activity to do with friends
- Expect failure- maybe they failed in the past
- Think they cannot cope with tension and anxiety
- Do not know enough about the good parts of quitting
- Have a hard time changing daily routines that include smoking
Effective intervention begins with understanding the journey into and out of addiction.
A Personal Journey

• The journey into and out of nicotine addiction is a personal one marked by
  • Biological, psychological and social risk and protective factors
  • Social Influences (peers, media, tobacco companies, policies, current events)
  • Personal choices and decisions
  • A process of change that is common and unique
How Do People Change?

- People change voluntarily only when
  - They become *interested and concerned* about the need for change
  - They become *convinced* that the change is in their best interest or will benefit them more than it will cost them
  - They organize a *plan of action* that they are *committed* to implementing
  - They *take the actions* that are necessary to make the change and sustain the change
Stage of Change Tasks

- Precontemplation
- Contemplation
- Preparation
- Action
- Maintenance
- Interested and Concerned
- Risk-Reward Analysis & Decision making
- Commitment & Creating an Effective/Acceptable Plan
- Implementation of Plan and Revising as Needed
- Consolidating Change into Lifestyle
Theoretical and practical considerations related to movement through the Stages of Change

- Motivation
- Decision-Making
- Self-efficacy/Temptation

Precontemplation → Contemplation → Preparation → Action → Maintenance

- Personal Concerns
- Environmental Pressure
- Decisional Balance (Pros & Cons)
- Cognitive Experiential Processes
- Recycling
- Behavioral Processes
- Relapse
Cyclical Model for Intervention

- Most smokers will recycle through multiple quit attempts and multiple interventions.
- However successful cessation occurs for large numbers of smokers over time.
- Keys to successful recycling
  - Persistent efforts
  - Repeated contacts
  - Helping the smoker take the next step
  - Bolster self-efficacy and motivation
  - Match strategy to patient stage of change
Stage of Change for Smoking Cessation

• Using the 2000, 2002, & 2006 Maryland Adult Tobacco Surveys (MATS) respondents were classified into 5 Stages of Smoking Cessation:

• **Precontemplation** = Current smokers who are *not* planning on quitting smoking in the next 6 months

• **Contemplation** = Current smokers who are planning on quitting smoking in the next 6 months but have *not* made a quit attempt in the past year

• **Preparation** = Current smokers who are *definitely* planning to quit within next 30 days and *have made a quit attempt* in the past year

• **Action** = Individuals who are not currently smoking and have stopped smoking within the past 6 months

• **Maintenance** = Individuals who are not currently smoking and have stopped smoking for longer than 6 months but less than 5 years

DiClemente, 2003
# Maryland Data

<table>
<thead>
<tr>
<th>Stages of Change for Smoking Cessation</th>
<th>2000 MATS</th>
<th>2002 MATS</th>
<th>2006 MATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>1,664</td>
<td>2,153</td>
<td>1,704</td>
</tr>
<tr>
<td>(40.5%)</td>
<td>(36.6%)</td>
<td>(45.3%)</td>
<td></td>
</tr>
<tr>
<td>Contemplation</td>
<td>691</td>
<td>963</td>
<td>773</td>
</tr>
<tr>
<td>(16.8%)</td>
<td>(16.4%)</td>
<td>(20.5%)</td>
<td></td>
</tr>
<tr>
<td>Preparation</td>
<td>621</td>
<td>966</td>
<td>310</td>
</tr>
<tr>
<td>(15.1%)</td>
<td>(16.4%)</td>
<td>(8.2%)</td>
<td></td>
</tr>
<tr>
<td>Action</td>
<td>229</td>
<td>403</td>
<td>216</td>
</tr>
<tr>
<td>(5.6%)</td>
<td>(6.9%)</td>
<td>(5.7%)</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>904</td>
<td>1,396</td>
<td>762</td>
</tr>
<tr>
<td>(22.0%)</td>
<td>(23.7%)</td>
<td>(20.2%)</td>
<td></td>
</tr>
<tr>
<td>Readiness to Change &amp; Intentions</td>
<td>2000 (Wave 1)</td>
<td>2002 (Wave 2)</td>
<td>2006 (Wave 3)</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------</td>
<td>---------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Ever Seriously Considered Quitting a, b</td>
<td>% yes</td>
<td>% yes</td>
<td>% yes</td>
</tr>
<tr>
<td>Precontemplation (PC)</td>
<td>75.2</td>
<td>72.4</td>
<td>68.6</td>
</tr>
<tr>
<td>Contemplation (C)</td>
<td>96.1</td>
<td>95.5</td>
<td>95.2</td>
</tr>
<tr>
<td>Preparation (P)</td>
<td>96.8</td>
<td>97.7</td>
<td>96.5</td>
</tr>
<tr>
<td>All Stages</td>
<td>84.7</td>
<td>85.2</td>
<td>79.7</td>
</tr>
<tr>
<td>Number of Prior Quit Attempts b, c, †</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Precontemplation (PC)</td>
<td>4.0 (7.6)</td>
<td>4.3 (6.5)</td>
<td>4.6 (11.2)</td>
</tr>
<tr>
<td>Contemplation (C)</td>
<td>5.1 (7.3)</td>
<td>4.4 (5.3)</td>
<td>5.7 (11.3)</td>
</tr>
<tr>
<td>Preparation (P)</td>
<td>7.6 (11.4)</td>
<td>6.7 (9.8)</td>
<td>10.3 (17.9)</td>
</tr>
<tr>
<td>Action (A)</td>
<td>6.5 (9.7)</td>
<td>5.6 (9.5)</td>
<td>4.7 (8.7)</td>
</tr>
<tr>
<td>Maintenance (M)</td>
<td>4.8 (6.9)</td>
<td>5.3 (7.7)</td>
<td>6.8 (14.2)</td>
</tr>
<tr>
<td>All Stages</td>
<td>5.1 (8.4)</td>
<td>5.2 (7.7)</td>
<td>5.8 (12.6)</td>
</tr>
<tr>
<td>Rung a, b</td>
<td>Readiness Ladder 1 (lowest) - 10 (highest)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Precontemplation (PC)</td>
<td>2.9 (2.6)</td>
<td>3.1 (2.7)</td>
<td>3.1 (2.9)</td>
</tr>
<tr>
<td>Contemplation (C)</td>
<td>5.0 (3.1)</td>
<td>4.8 (3.0)</td>
<td>5.4 (3.1)</td>
</tr>
<tr>
<td>Preparation (P)</td>
<td>6.5 (3.0)</td>
<td>6.4 (3.1)</td>
<td>6.7 (3.3)</td>
</tr>
<tr>
<td>All Stages</td>
<td>4.2 (3.2)</td>
<td>4.4 (3.2)</td>
<td>4.2 (3.3)</td>
</tr>
</tbody>
</table>
Table 4. Expectations about and utilization of cessation products and services in 2006 (%)

<table>
<thead>
<tr>
<th>Around this time last year were you smoking cigarettes every day, some days, or not at all?</th>
<th>Every day</th>
<th>Some days</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>75.2</td>
<td>20.1</td>
<td>4.7</td>
</tr>
<tr>
<td>Contemplation</td>
<td>70.7</td>
<td>20.9</td>
<td>8.5</td>
</tr>
<tr>
<td>Preparation</td>
<td>57.7</td>
<td>24.1</td>
<td>18.3</td>
</tr>
<tr>
<td>Action</td>
<td>59.9</td>
<td>18.0</td>
<td>22.1</td>
</tr>
<tr>
<td>Maintenance</td>
<td>9.9</td>
<td>10.2</td>
<td>79.9</td>
</tr>
<tr>
<td>All stages</td>
<td>59.0</td>
<td>18.6</td>
<td>22.4</td>
</tr>
</tbody>
</table>

**IF YOU DECIDED TO GIVE UP SMOKING ALTOGETHER, HOW LIKELY DO YOU THINK YOU WOULD BE TO SUCCEED?**

<table>
<thead>
<tr>
<th></th>
<th>Very or somewhat likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>73.1</td>
</tr>
<tr>
<td>Contemplation</td>
<td>86.1</td>
</tr>
<tr>
<td>Preparation</td>
<td>88.6</td>
</tr>
<tr>
<td>All stages</td>
<td>78.8</td>
</tr>
</tbody>
</table>

**Do you ever expect to quit smoking?**

<table>
<thead>
<tr>
<th></th>
<th>% yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>70.4</td>
</tr>
<tr>
<td>Contemplation</td>
<td>98.3</td>
</tr>
<tr>
<td>Preparation</td>
<td>99.0</td>
</tr>
<tr>
<td>All stages</td>
<td>82.7</td>
</tr>
</tbody>
</table>

**Used an aid last time you tried to quit?**

<table>
<thead>
<tr>
<th></th>
<th>% yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>32.5</td>
</tr>
<tr>
<td>Contemplation</td>
<td>34.0</td>
</tr>
<tr>
<td>Preparation</td>
<td>36.3</td>
</tr>
<tr>
<td>All stages</td>
<td>33.5</td>
</tr>
</tbody>
</table>

**Ever used NRT to quit?**

<table>
<thead>
<tr>
<th></th>
<th>% yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>36.9</td>
</tr>
<tr>
<td>Contemplation</td>
<td>44.9</td>
</tr>
<tr>
<td>Preparation</td>
<td>48.7</td>
</tr>
<tr>
<td>Action</td>
<td>36.5</td>
</tr>
<tr>
<td>Maintenance</td>
<td>33.7</td>
</tr>
<tr>
<td>All stages</td>
<td>39.1</td>
</tr>
</tbody>
</table>

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*aAll between-stage comparisons significant at p<0.05 level.
NRT, nicotine replacement therapy*
Why Intervene with Tobacco Users?

- Advice by health providers…
  - Makes a difference
  - Enhances motivation to quit
  - Increases the likelihood of a quit attempt (now or later)
- Results in greater satisfaction with health care
- Is *highly* cost-effective

Source: Treating Tobacco Use and Dependence (TTUD), 2008
Selecting a Treatment: Triage Guidelines

- Steer patient to most appropriate treatment
  - Patient characteristics and preference
- Minimal self-help interventions are a good place to start for many smokers
- More intensive... if patient has made many prior attempts, is high on nicotine dependence and is ready and willing
- Treatment matching
  - Tailored materials
  - Pharmacological aids
Hall and colleagues (2006) RCT

- Depressed smokers who were treated with a combination of motivational counseling, nicotine patches, and behavioral therapy were more likely than their counterparts who did not receive the interventions to be smoke-free at 12- and 18-month assessments.
MORE DEPRESSED SMOKERS QUIT WITH STAGED CARE INTERVENTION Among smokers in outpatient treatment for depression, more who participated in the Staged Care Intervention achieved abstinence at the 12- and 18-month followups compared with participants in the control group.

NRT for Persons with MI & SMI

• The patch may be the preferred nicotine replacement option for people with serious mental illness because of its high compliance rate and ease of use.

• The patch is less helpful for immediate cravings, thus it is often coupled with nicotine gum, an inhaler or nasal spray

• Combination of patch plus one of the short-acting forms may be most efficacious approach

Source: National Association of State Mental Health Program Directors Toolkit
Evidence of effectiveness of tobacco dependence interventions in specific populations

- Bupropion SR and NRT may be effective for treating smoking in individuals with schizophrenia and may help improve negative symptoms and depressive mood
  - Individuals on atypicals may be more responsive to Bupropion SR than those taking standard antipsychotics
- Meta-analysis (2008): buproprion SR and nortriptyline vs. placebo for individuals with past history of depression
  - Bupropion & nortriptyline both effective in increasing long-term cessation rates in smokers with history of depression (OR = 3.42)
## Things to Consider ...

<table>
<thead>
<tr>
<th>SMOKING CESSATION MAY INCREASE BLOOD LEVELS OF THESE MEDICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANTIPSYCHOTICS</strong></td>
</tr>
<tr>
<td>Haloperidol</td>
</tr>
<tr>
<td>Chlorpromazine</td>
</tr>
<tr>
<td>Fluphenazine</td>
</tr>
<tr>
<td>Olanzapine</td>
</tr>
<tr>
<td><strong>MOOD STABILIZERS</strong></td>
</tr>
<tr>
<td>Carbamazepine</td>
</tr>
<tr>
<td><strong>ANXIOLYTICS</strong></td>
</tr>
<tr>
<td>Desmethyldiazepam</td>
</tr>
<tr>
<td>Oxazepam</td>
</tr>
<tr>
<td></td>
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Treatments Do Work

- Treatment for persons with MI that combine Nicotine Replacement Therapy (NRT) with Cognitive Behavioral Therapy (CBT) have been shown to be efficacious
- CBT programs with highest quit rates have
  - groups of approximately 8 to 10 individuals
  - meet once a week for 7 to 10 weeks

Source: Toolkit
Treatments Do Work

- For persons with schizophrenia, combining CBT with NRT and strategies to enhance motivation yield the highest success rates.
- Baker et al. (2006) found a significantly higher proportion of smokers with a psychotic disorder who completed all CBT treatment sessions remained abstinent at follow-up periods relative to controls who received usual care:
  - 3 months: 30.0% vs. 6.0%
  - 6 months: 18.6% vs. 4.0%
  - 12 months: 18.6% vs. 6.6%
Current Numbers of Smoking Cessation services in SA Treatment Facilities

- Unfortunately, there needs to be an increase in smoking cessation services offered as up to 60% of programs do not offer any formal cessation services (Knudsen, 2011).

- Studies have found that hospital affiliation, service breadth, the priority given to physical health, the availability of medication to treat addictive problems, assessment of cigarette smoking, and a greater perception of the proportion of patients who smoke were associated with the delivery of smoking cessation services (Friedman, Jiang, & Richter, 2008).
Barriers for Smoking Cessation in Substance Abuse Treatment

- Provider Myths
- Challenges to Facilities and Providers
Common Provider Myths
Smoking Cessation in Substance Abuse Treatment

Myth #1:
- If someone in substance abuse treatment has to give up smoking too, they will just drop out or might have increased chance of relapse.

Myth #2:
- Health care professionals can help the general population quit smoking more easily than helping someone who is also quitting another substance as well.

Myth #3:
- People who are willing to address their substance use problems are probably less motivated to quit smoking.

Myth #4:
- If a person has substance abuse issues, their smoking is much more benign in terms of health risks and concerns and can be addressed later.
Myth#1

• If someone in substance abuse treatment has to give up smoking too, they will just drop out or might have increased chance of relapse.
  • Inclusion of smoking as a target for intervention does not appear to reduce patients' commitment to broader addiction treatment.
  • Incorporating smoking cessation treatment into inpatient addiction treatment centers has not substantially reduced long term treatment completion (Sharp et al., 2003).
  • Smoking cessation interventions delivered during treatment actually increase the odds of abstinence (Prochaska, Delucci, & Hall, 2004).
  • Continued smoking post-treatment increases risk of substance abuse relapse, and quitting smoking reduces risk of relapse (Satre et al., 2007; Tsoh et al., 2011).
Myth #2

- Health care professionals can help the general population quit smoking more easily than helping someone who is also quitting another substance as well.
  
- Dr. Ong and fellow researchers at UCLA (2011) found that with counseling from a physician, persons with a substance use disorder who also smoked had quit rates very similar to those who did not have a substance use disorder (31% compared to 34%).
Myth #3

- People who are willing to address their substance use problems are probably less motivated to quit smoking.

- Actually, research has indicated that up to 80% of people in addiction treatment are interested in quitting smoking (Prochaska, 2004).

- Recent studies suggest that drug treatment patients are interested in quitting smoking, have tried to quit repeatedly, and often have made a serious attempt within the last year (Richter and Arnsten, 2006).

- In fact, one study showed that 70% were either contemplating quitting or preparing to quit in terms of their readiness to change (Nahvi, Richter, Li, Modali, & Arnsten, 2006).
Myth #4

- If a person has substance abuse issues, their smoking is much more benign in terms of health risks and concerns and can be addressed later.
  - Mortality statistics suggest that more people with alcoholism die from smoking-related diseases than from alcohol-related diseases (Hurt et al. 1996, Hser et al., 1994).
  - Many persons who abuse substances including alcohol also smoke putting them at high risk for tobacco-related complications including multiple cancers, lung disease, and cardiovascular disease (Richter, McCool, Okuyemi, Mayo, & Ahluwalia, 2002).
Challenges to Facilities/Providers
Smoking Cessation in Substance Abuse Treatment

1. Many clinicians smoke, and do not promote and/or implement smoking cessation interventions as much as clinicians who do not smoke (Knudsen & Studts, 2010; Rothrauff, 2011).

2. Clinicians are faced with insufficient financial reimbursement to properly administer tobacco cessation interventions to their clients (Rothrauff, 2011).

3. There is also a possible lack of access to smoking cessation services as well as insufficient training and educational tools for staff members to address tobacco dependence among patients (Knudsen, 2010; Knudsen & Studts, 2010; Williams, 2005).
Staff Smoking

- According to recent research literature, staff smoking in substance abuse treatment facilities ranges from 14-40% (Guydish, Passalacqua, Tahima, & Turcotte Manser, 2007)

- Recommendations (Williams, 2005):
  - A smoke-free policy should be implemented on all grounds of the treatment facilities.
  - Promotes a drug-free environment for both patients in treatment and patients out of treatment.
  - Providing smoking cessation resources not only helps them quit but also provides them with essentials tools necessary to help substance abuse clients quit smoking.
  - Smoke-free policies can be successfully established by:
    - Providing tobacco education to all staff members.
    - Thoughtfully and carefully implementing the smoke-free regulations
Financial Reimbursement

• Barriers associated with financial issues faced while trying to administer proper smoking cessation interventions can be circumvented by opting for less expensive interventions such as:
  • Quitlines
  • Handouts with information on smoking cessation,
  • Referrals to nonprofit organizations that provide free services and/or Websites that provide additional information and self-help guidelines to quit smoking, etc. (SAMHA; MDQuit; smokingstopshere.com)

• Federal Medicaid policy states that smoking cessation benefits, such as counseling and drug therapy, are OPTIONAL benefits under Medicaid (except for children covered under Early Periodic Screening, Diagnosis and Treatment).

• Smoking cessation-counseling services may be provided under a variety of Medicaid benefit categories. However, smoking cessation medications are specifically classified as those drugs that may be excluded.
Brief Intervention for Tobacco: Private Payer Benefits

- **HCPCS/CPT Codes:**
  - **99406:** Smoking and tobacco-use cessation counseling visit; intermediate, greater than 3 minutes up to 10 minutes. *Short descriptor: Smoke/Tobacco counseling 3-10*
  - **99381-99397:** Preventive medicine services
  - **96150-96155:** Health & Behavior Assessment/Intervention (Non-physician only)

- Private payer benefits are subject to specific plan policies. Before providing service, benefit eligibility and payer coding requirements should be verified.

AAFP, 2011
Increasing Access and Training to Providers

- Lack of knowledge and training has also been repeatedly shown to be a barrier in providing smoking cessation interventions during substance abuse treatment (Guydish et al., 2008; Knudsen, 2010; Knudsen & Studts, 2010; Williams, 2005).

- Recommendations:
  - Policy regulation, provision of NRT and training for treatment providers can help integrate smoking cessation programs into residential substance abuse treatment centers.
  - Treatment providers should be familiar with the PHS: TTUD guidelines as the Best Practices recommendations for smoking cessation with this population.
Treating Tobacco Use and Dependence: 2008 Update

- TTUD recommendations:
  - Smoking cessation for all health care settings including SUD treatment
    - All smokers should be offered treatment
  - Brief interventions (identify and engage)
    - Patients unwilling to quit be provided with brief intervention to build motivation
    - Patients willing to quit be offered evidence based treatment
  - Treatment services (treat nicotine addiction)
    - Counseling
    - Medications (NRT, Chantix®, Zyban®)
Evidence Based Treatments

• Efficacious Interventions for smoking with Substance Abusers:
  • Interventions:
    • 5 A’s (willing to quit)
    • Brief Motivational Interviewing (not willing to quit)
    • Medications
    • Nicotine replacement therapy (NRT)
    • Cognitive-behavioral therapy
  • Formats:
    • Individual and/or group counseling

(Kalman, 2010; ahrq.com, Yahne & Baca, 2009)
Selecting a Treatment: Triage Guidelines

- Steer patient to most appropriate treatment
  - Patient characteristics and preference
- Minimal self-help interventions are a good place to start for many smokers
- More intensive...if patient has made many prior attempts, is high on nicotine dependence and is ready and willing
- Treatment matching
  - Tailored materials
  - Pharmacological aids
Effective Strategies

- Teachable Moments
- Various strategies used with individuals without mental illness will work with individuals with MI & SMI
  - Nicotine Replacement Therapy
  - CBT
  - Group Therapy
  - Quitlines
The 5 A’s approach is a simple, brief way to address tobacco use with every patient. Altogether, the 5 A’s may take 1 – 5 minutes. They do not need to be applied in a rigid manner, and entire office/clinical staff should be involved. Clinical settings that implement the 5 A’s fully show better results than those with partial use (Fiore et al., 2008).
5 A’s

- **ASK**: About tobacco use EVERY TIME!
- **ADVISE**: Urge ALL tobacco users to quit.
- **ASSESS**: Current willingness to make a quit attempt.
- **ASSIST**: Provide help for a successful quit attempt.
- **ARRANGE**: Schedule follow up contact.
Treating Tobacco Using the 5 A’s

**Ask** about current tobacco use

**Current User**

**Advise** to Quit and **Assess** Willingness to Quit

**Not Ready to Quit**

If **not** ready to quit, motivate and encourage to quit (use 5 R’s)

**Arrange for follow-up and check in at each visit to promote cessation & prevent relapse**

**Ready to Quit**

If ready to quit, **Assist** with individualized treatment or refer to Maryland Quitline

**No Current Use**

**Assess** Past Tobacco Use

**Not Ready to Quit**

If **not** ready to quit, motivate and encourage to quit (use 5 R’s)

**Arrange for follow-up and check in at each visit to promote cessation & prevent relapse**

**Yes**

**Assist** with relapse prevention

**No**

If no past use, promote future abstinence
Brief Motivational Interviewing

- Focus on exploring a tobacco user’s feelings, beliefs, ideas, and values regarding their use in an effort to uncover any ambivalence about using tobacco.

- Once ambivalence is uncovered, the clinician selectively elicits, supports, and strengthens the client’s change talk and commitment language.

- Four general principles:
  - Express Empathy
  - Develop Discrepancy
  - Roll with Resistance
  - Support Self Efficacy
Content covered in MI

- **5 R's**
  - **Relevance:** Encourage the patient to indicate why quitting is personally relevant, being as specific as possible.
  - **Risks:** The clinician should ask the patient to identify potential negative consequences of tobacco use.
  - **Rewards:** The clinician should ask the patient to identify potential benefits of stopping tobacco use.
  - **Roadblocks:** The clinician should ask the patient to identify barriers or impediments to quitting and provide treatment that could address barriers.
  - **Repetition:** The MI intervention should be repeated every time an unmotivated patient visits the clinic setting.
Medications

- Bupropion SR
  - Approximately doubles the likelihood of long term (>5 month) abstinence from tobacco use as compared to placebo treatment.
  - Prescription only.
- Varenicline
  - Not recommended in combination with NRT
  - 2 mg dose triples the likelihood of a long term abstinence from tobacco use.
  - Prescription only.
- Encouraging all patients attempting to quit to use effective medications for tobacco dependence treatment except where contraindicated or for special populations in which there is insufficient evidence of effectiveness.

Information from the TTUD Clinical Practice Guideline: 2008 Update
Nicotine Replacement Therapy

- **Nicotine Gum**
  - Increases likelihood of long term (>5 month) abstinence by about 50% as compared to placebo treatment.

- **Nicotine Inhaler**
  - Approximately doubles likelihood of long term abstinence.

- **Nicotine Lozenge**
  - For highly dependent smokers, approximately tripled the odds of abstinence 6 months postquit.

- **Nicotine Nasal Spray**
  - Approximately doubles likelihood of long term abstinence.

- **Nicotine Patch**
  - Approximately doubles likelihood of long term abstinence.
NRT for Persons with SA, MI & SMI

- The patch may be the preferred nicotine replacement option for people with serious mental illness because of its high compliance rate and ease of use.
- The patch is less helpful for immediate cravings, thus it is often coupled with nicotine gum, an inhaler or nasal spray.
- Combination of patch plus one of the short-acting forms may be most efficacious approach.

Source: National Association of State Mental Health Program Directors Toolkit
Cognitive Behavioral Therapy

When a person uses cognitive therapy to help quit smoking, the focus is on:

- Increasing the patient’s confidence in their ability to quit smoking.
- Exploring any ambivalence about quitting.
- Learning ways of coping with stress and urges to smoke.

Cognitive behavior therapy is a goal-directed and problem-focused form of therapy.

Clients learn rational thinking and self-counseling skills.

Individual or Group Based Counseling

- In terms of treatment format, both individual and group based counseling have been shown to increase abstinence rates relative to no intervention (Fiore et al., 2008).
- Group format allows members to learn behavioral techniques for smoking cessation as well as offering each other mutual support (Nardini, 2008).
- Group format can either be didactic in nature or based on mutual support and groups have been found to be related to an increase in abstinence for persons with additional addictions (Jimenez-Ruiz, 2008).
<table>
<thead>
<tr>
<th>Approach</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Counseling</td>
<td>Teach problem solving and relapse prevention skills (e.g., recognizing and coping with cues that could precipitate relapse to tobacco use). Provide skills training (e.g., coping skills, anger management, lifestyle changes, relaxation techniques). Provide basic information about the harmful effects of tobacco, the benefits of quitting, and nicotine withdrawal symptoms.</td>
</tr>
<tr>
<td>Supportive Counseling</td>
<td>Provide support in the treatment program or by referral to a smoking cessation program. Provide encouragement. Give examples of success stories. Communicate caring and concern.</td>
</tr>
</tbody>
</table>

Quitlines
Clinical and Community Interventions

• According to the U.S. Public Health Service Clinical Practice Guidelines, proactive telephone counseling is effective and should be used in tobacco cessation interventions.

• Phone counseling, such as the Quitline, has been shown to double chances of quitting.

• Phone-based programs overcome many of the barriers to traditional tobacco cessation methods – free, personalized, and convenient.

• Maryland Tobacco Quitline evaluation found Marylanders who used the Quitline were far more successful, with quit rates seven times higher than the average rates of non-assisted quits.

• 98% of callers reported being satisfied with Quitline services.
The Maryland Tobacco Quitline 1-800-QUIT-NOW

• Free, confidential phone counseling service for all Marylanders age 18 and older who want to quit using tobacco

• Paid for by DHMH

• Operational seven days a week, 7:00am – 3:00am

• Established in 2006; FY11 averaged over 1,100 calls per month
The Maryland Tobacco Quitline Services

- **Phone Counseling:**
  - Offers participants who are dedicated to quitting smoking or other tobacco products up to four phone counseling sessions with Quit Coaches that last between 10-30 minutes each.
  - The Quit Coaches all have Master’s degrees and receive extensive training in cessation treatment, they are professionals in Psychology, Counseling, and other healthcare fields and many are ex-smokers.
  - Follow-up calls are made to help support the participant.
The Maryland Tobacco Quitline

- **Medications:**
  - Provides free nicotine patches or gum to eligible persons while supplies last (4,879 in FY11).
  - Products are mailed to the participants house within 3-5 business days.

- **Web-based Services:**
  - Provides interactive tools to help participant quit.

- **Publications:**
  - Provides free quit guides and information on the effects of tobacco use including tailored materials for pregnant woman and chronic diseases.

- **Referral:**
  - Provides referrals to free smoking cessation programs in the caller’s local jurisdiction (1,749 in FY11).
The Maryland Tobacco Quitline

- Intake Call/Reactive
  - Register for the program
  - If interested, transferred to a Quit Coach if ready to quit within 30 days
  - Quit guide mailed within one business day

- Outgoing Proactive Calls
  - Relapse-sensitive schedule
  - Mutually agreed upon times
  - Tailored to stage-based need of participant
Quitline Satisfaction and Quit Rates
Year 4 Evaluation

- 98% of callers were satisfied with Quitline services
  - Overall satisfaction rates were high for the MDQL services, with 97.5% of the respondents indicating that they were somewhat to very satisfied and 96.6% reporting that they would recommend the Quitline to others.

- 7 times the quit rates of non-assisted quit!

- 35.4% had not used tobacco for one month or longer. (without counseling the quit rate is usually 4-7%).
Quitline Evaluation

- 7 month follow-up for responders
  - 7-day point prevalence quit rates were 32%
  - 30 day quit rates were 27.9% compared to estimated rates of 3 to 10% for unassisted quit attempts.
- Statewide for 2010-2011
  - No significant differences between Blacks/African Americans and Whites/Caucasians on 7-day or 30-day quit status.
  - No differences found based on age or gender.
Additional Resources

What is MDQuit?

- Resource center for tobacco use cessation and prevention for the State of Maryland.
- Funded by the Maryland Department of Health and Mental Hygiene (DHMH).
- Dedicated to assisting providers and programs in reducing tobacco use among citizens across the state utilizing best practices strategies.

MDQuit Resource Center
UMBC Psychology
1000 Hilltop Circle, Baltimore, MD 21250
(410) 455-3628
www.mdquit.org
Fax Referral Program

- “Fax to Assist”- launched Dec. 2006
- On-line training & certification for HIPAA-covered entities
  - http://mdquit.org/fax-to-assist
- Providers can refer their patients or clients (who wish to quit, preferably within 30 days) to the Maryland Tobacco Quitline
- Tobacco users will sign the Fax Referral enrollment form during a face-to-face intervention with a provider
  - (e.g., at a doctor's office, hospital, dentist's office, clinic or agency site)
- The provider will then fax the form to the Quitline
- Within 48 hours, a Quit Coach™ makes the initial call to the tobacco user to begin the coaching process
Fax to Assist Provider Kits

When you complete the certification quiz, MDQuit will send you:

- Training CD-Rom with all 4 Modules
- 5A’s Clipboard
- 5A’s Mousepad
- MDQuit ink pen
Additional Support

- Nicotine Anonymous
- Peer Based Support
- Quitlines
Nicotine Anonymous

• For those who already attend AA or NA meetings, sometimes they offer smoke free meetings which do not have smoking during the breaks.

• There is also Nicotine Anonymous which promotes the same 12 step model as AA and NA, but is focused on the use of nicotine in all forms.

• They are free and run entirely by group members.

• (800) 642-0666 is a free, national number providing callers with meetings in their area.
Peer Based Support Programs

- Rx for Change is a tobacco use cessation program training clinicians Best Practices Techniques for smoking cessation interventions. It also has peer counselor training available.
  - Program is entitled “Peer to Peer: A Tobacco Cessation Program”
- “Choices” is a consumer driven program for smokers with additional Mental Illness.
- Peer support has been shown to be an additional help in reducing daily smoking and increasing motivation in adolescents to stay quit (Malchodi et al., 2003; Posovac, Kattapond, & Dew, 1999).
Quitting IS Possible!

- Within the general population, people who stop smoking, even at the age of 40-50, avoid more than 90% of the lung cancer risk associated with tobacco (Peto, Darby, Deo, Ilcocks, Whitley, & Doll, 2000).

- Drug treatment patients who quit smoking have been shown to improve their quality of life (McCarthy, Zhou, Hser, & Collins, 2002).

- In a national sample of active illicit drug users in the U.S., 1 in 5 (21%) were former smokers (Richter, Ahluwalia, Mosier, Nazir, & Ahluwalia, 2002).
Strategies for Increasing Cessation

- Know the Smoker
- Understand the Cessation Journey
- Treat the Smoker as a Consumer
- Create a continuum of care
- Develop collaborations and create synergy
- Take advantage of opportunities
Patients with co-occurring substance abuse and mental illness warrant heightened surveillance and should be medically evaluated and followed by a psychiatrist (Richter and Arnsten, 2006).

Certain medications have been shown to not only to assist in smoking cessation but also symptom improvement for certain disorders such as Schizophrenia (Fiore et al., 2008).

“Although psychiatric disorders may place smokers at increased risk for relapse, such smokers can be helped by tobacco dependence treatments.” (Fiore et al., 2008, pp. 146).
Additional Resources

- Free Tobacco Cessation Training
- Clinician Assisted Tobacco Cessation Curriculum --  
  www.rxforchange.ucsf.edu. This online comprehensive tobacco cessation education tool provides the knowledge and skills necessary to offer tobacco cessation counseling to clients who use tobacco. Has customized curriculums.

- Free Tobacco Cessation Tool Kits
- Bringing Everyone Along Resource Guide and Summary --  
  www.tcln.org/bea. Developed by the Tobacco Cessation Leadership Network, this guide and summary assists an array of health professionals to adapt tobacco cessation services to the unique needs of tobacco users with mental illness and/or substance use disorders.
MAKING THE CALL IS THE FIRST STEP

A smoke-free life begins here. First, we talk about your history with quitting. What worked? What didn’t? Next, we put together a quit plan based on your experiences. Finally, we discuss medications that might work for you like nicotine replacement therapy. Now we can plan your Quit Date.

Your second call will focus on giving you extra support. Your Quit Coach™ will see how your quit has gone so far and discuss any obstacles. They’ll listen to your concerns and give you the encouragement to keep you going.

In the third call, your Quit Coach™ will show they are still behind you 100%. If things are going well, they’ll cheer for you. If things aren’t going so great, they’ll offer advice to help get you back on track.

In the fourth call, your Quit Coach will discuss if you’ve had any past problems quitting so you can prepare for any future challenges. And if you should ever feel any doubts or cravings, a friendly, supportive voice is just a free phone call away.

CALL 1 CALL 2 CALL 3 CALL 4
FREE free call free support free medicine
CALL NOW 1-800-784-8669

This is a free service provided by Maryland’s Department of Health and Mental Hygiene

HAVE A QUIT COACH CONTACT YOU, IT’S THAT EASY
Click Here to start. It’s FREE, confidential and anonymous

CLICK HERE to order brochures

Fax to Assist

What is Fax to Assist?
Fax to Assist is an exciting and convenient way for you to refer your clients to Maryland’s Quitline to help them quit smoking.

Who is eligible to become Fax to Assist certified?
All Maryland healthcare providers who are employed by a HIPAA-covered entity are eligible and encouraged to use Fax to Assist to help their clients quit smoking.

How do I become Certified?
There are two options that are available:

- **Online Individual Training**
  - **Advantages:**
    - Training and certification can be completed in about 20 minutes!
    - Instant feedback on the individual certification examination.
    - Instant access to Fax to Assist referral forms and Quitline resources.
    - **How do I start?** Follow the directions below.

- **On-Site Group Training** (for 3 or more providers)
  - **Advantages:**
    - We come to you and provide a one hour training for your whole team!
    - Training can be tailored to your setting and patient population.
    - Same-day certification and Fax to Assist kits provided.
    - **How do I start?** CLICK HERE and send us an email to sign-up for on-site training.

Fax to Assist
Our online certification program is now CME-approved! CLICK HERE to find out more about Fax to Assist and complete your training.

Center Specialists
If you are interested in resources, training, or other prevention and cessation information to help consumers, please call us at (410) 455-3628 or contact one of our MDQuit Resource Center Specialists:

- Preston Greene, M.A.
- Angela Petersen
- Shayla Thrash
- Onna Van Orden, M.A.

Most Searched Topics

- Cancer
- Cardiovascular Disease
- Cessation
- Cigarettes
Cyclical Model for Intervention

- Most smokers will recycle through multiple quit attempts and multiple interventions.

- However, successful cessation occurs for large numbers of smokers over time.

- Keys to successful recycling
  - Persistent efforts
  - Repeated contacts
  - Helping the smoker take the next step
  - Bolster self-efficacy and motivation
  - Match strategy to patient stage of change
Many addictions shatter lives. This one is more likely to end them.

More than half of patients in drug and alcohol treatment will die from tobacco-related disease. Smokers want to quit more than you may think. And they can. Talk to them about it. For more help, refer them to 1-800-NO-BUTTS. And visit info.nobutts.org/mhs for free training, resources, and patient materials.

California Smokers' Helpline
1-800-NO-BUTTS
I didn’t go through treatment; get clean in recovery from drug addiction so I could die from lung cancer

I had to stop smoking,

Tony