Establishing Smoking Cessation Initiatives in Health Centers

Chad Morris, PhD & Bettie Thompson Blackmon, FNPC

August 15, 2011
Health Resources and Services Administration & The National Council for Community Behavioral Healthcare
Behavioral Health & Wellness Program
www.bhwellness.org
What is killing the majority of us is not infectious disease, but our chronic and modifiable behaviors.
Quitting smoking is easy to do. I’ve done it a million times.

Mark Twain
Why Community Health Clinics?

- Integrated and health home models
- Access to high risk populations
- Community-based and patient-directed
- Complements other prevention and wellness activity
- HRSA performance measure
Trends in Adult Smoking in the U.S. up to 2007

19.8% of adults are current smokers

Graph provided by the Centers for Disease Control and Prevention. 1955 Current Population Survey; 1965–2007 NHIS. Estimates since 1992 include some-day smoking.
Comparative Causes of Annual Deaths in the U.S.

Among those who keep smoking, at least half will die from a tobacco-related disease.

- AIDS: 17
- Alcohol: 81
- Motor Vehicle: 41
- Homicide: 19
- Drug Induced: 14
- Suicide: 30
- Smoking: 435

*Also suffer from mental illness and/or substance abuse

Secondhand Smoke

Nonsmokers who are exposed to secondhand smoke at home or work increase their heart disease risk by 25–30% and their lung cancer risk by 20–30%

http://www.cdc.gov/tobacco/basic_information/health_effects/heart_disease/index.htm
Youth Targeting

“If our Company is to survive and prosper, over the long term, we must get our share of the youth market.”

– RJ Reynolds planning memorandum 1973
Dopamine Reward Pathway

Prefrontal cortex

Dopamine release

Stimulation of nicotine receptors

Nucleus accumbens

Ventral tegmental area

Nicotine enters brain
Nicotine Effects

Receptor Activation
- Increase arousal
- Heighten attention
- Influence stages of sleep
- Produce states of pleasure
- Decrease fatigue
- Decrease anxiety
- Reduce pain
- Improve cognitive function

Withdrawal Symptoms
- Mentally sluggish
- Inattentive
- Insomnia
- Boredom and dysphoria
- Fatigue
- Anxiety
- Increase pain sensitivity
- Decrease cognitive function

Most withdrawal symptoms peak 24-48 hr after quitting and subside within 2-4 weeks
Intervention & Treatment
Addressing Provider Concerns

- “They can’t”
- “They don’t want to”
- “I don’t have time to do this on top of everything else”
- “I’ve always heard smoking helps symptoms. I don’t want to make their symptoms worse.”
- “They will lose their sobriety if they also try to quit smoking”
- “I don’t have the training necessary”
Services should be integrated at the point of delivery, actively involve patients as partners in their care, and be coordinated with other community resources.

-CBHC, 2010
Tobacco Cessation Works

- 70% of smokers say they want to quit, 40% of smokers attempt to quit
- Quitting tobacco is difficult but absolutely feasible if assistance is provided
  - Quit rates with willpower alone – 4%
  - Pharmacotherapy (NRT) alone – 22%
  - QuitLine counseling plus NRT – 36%
  - Chantix – 44%
- Smokers are more than twice as likely to quit with coverage
Assessment, Treatment Planning, and Continuity of Care
Clinic Checklist

- Do intake forms include charting smoking status or is there another mechanism for charting smoking status?
- Are tobacco use assessments included in client visits?
- Does the intake form provide space for updating information during subsequent patient visits?
- Is tobacco cessation listed on the treatment plan?
- Is there a current copy of specific resources/ referrals available to all staff?
- Are patient educational materials readily available (& in non-English languages)?
- Are prescribing guidelines for cessation available to clinicians?
Brief Strategy A1. Ask—Systematically identify all tobacco users at every visit

<table>
<thead>
<tr>
<th>Action</th>
<th>Strategies for implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement an office-wide system that ensures that, for EVERY patient at EVERY clinic visit, tobacco-use status is queried and documented.</td>
<td>Expand the vital signs to include tobacco use or use an alternative universal identification system.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VITAL SIGNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Pressure: _______</td>
</tr>
<tr>
<td>Pulse: _______  Weight: _______</td>
</tr>
<tr>
<td>Temperature: _______</td>
</tr>
<tr>
<td>Respiratory Rate: _______</td>
</tr>
<tr>
<td>Tobacco Use:  Current  Former  Never  (circle one)</td>
</tr>
</tbody>
</table>

b Alternatives to expanding the vital signs are to place tobacco-use status stickers on all patient charts or to indicate tobacco use status using electronic medical records or computer reminder systems.

---

\(^a\) Repeated assessment is not necessary in the case of the adult who has never used tobacco or has not used tobacco for many years, and for whom this information is clearly documented in the medical record.
If you have limited time:

ASK → ADVISE → REFER

COLORADO Quit Line
Be tobacco free
1-800-QUIT-NOW
1-800-784-8669
Assessment and the 5A’s

**ASK**
- about tobacco USE

**ADVISE**
- tobacco users to QUIT

**ASSESS**
- READINESS to quit

**ASSIST**
- with the QUIT ATTEMPT

**ARRANGE**
- FOLLOW-UP care
Advice Can Improve Chances of Quitting

Compared to people who smoke who do not get help from a clinician, those who get help are 1.7–2.2 times as likely to successfully quit for 5 or more months.

2 A’s and R Model

- **ASK:** Determine tobacco use status
- **ADVISE** “ Quitting is very important to improving your health. I can refer you to people who can help you”
- **REFER**
  - To a Quitline (1-800-Quit-Now)
  - To Cessation and/or Wellness Group
  - To Peer Support Group
Quitline

Take Control

1-800-QUIT-NOW

Call. It's free. It works.
1-800-784-8669
www.smokefree.gov
Tobacco dependence is a 2-part problem.

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

**Behavior**
- The habit of using tobacco
  - Treatment
- Behavior change program

Treatment should address both the addiction and the habit.

*Courtesy of the University of California, San Francisco*
Resources & Tools for Change

- Motivational enhancement
- Multi-disciplinary treatment planning
- Cognitive-Behavioral Therapy
- Individual counseling >4 sessions
- Groups meeting 6-10 weeks
- Peer-to-peer support
- Community referral
If Ready to Quit

- Number of cigarettes smoked per day
- Previous quit attempt?
- Withdrawal symptoms?
- Worries about cessation?
- Strategies to quit smoking
- Advise setting a quit date
- When is the first cigarette smoked
- Refer to the helpline and other cessation resources
- Offer an appointment or telephone call 1-2 weeks after the quit date
- Recommend/prescribe nicotine replacement therapy or other medications

Tremblay, Cournoyer & O’Loughlin, 2009
If Not Ready to Quit

Discuss the effects of smoking on health
Pros and cons of smoking?
Pros and cons of quitting?
Express concerns about their smoking
Advise to stop smoking
Discuss the effects of secondhand smoke on health of children, relatives, and friends
Offer an appointment specifically to discuss quitting

Tremblay, Cournoyer & O’Loughlin, 2009
Individual or Group Intervention

- Session A: Healthy Behaviors
- Session B: Truth About Tobacco
- Session C: Changing Behaviors
- Session D: Coping with Cravings
- Session E: Managing Stress
- Session F: Planning Ahead
Tobacco dependence is a 2-part problem.

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

**Behavior**
- The habit of using tobacco
  - Treatment
  - Behavior change program

Treatment should address both the addiction and the habit.

*Courtesy of the University of California, San Francisco*
Metabolism of Nicotine

70% of nicotine is cleared from the blood during each pass through the liver.
The half-life of nicotine in the blood is ~120 minutes.
Smoking induces CYP1A2 isoenzyme
Monitor for side effects, weight gain
Cessation may produce rapid, significant increase in blood levels of psychotropics and other medications
### Medications Known or Suspected To Have Their Levels Affected by Smoking and Smoking Cessation

<table>
<thead>
<tr>
<th></th>
<th>Chlorpromazine (Thorazine)</th>
<th>Olanzapine (Zyprexa)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANTIPSYCHOTICS</strong></td>
<td>Clozapine (Clozaril)</td>
<td>Thiothixene (Navane)</td>
</tr>
<tr>
<td></td>
<td>Fluphenazine (Permitil)</td>
<td>Trifluoperazine (Stelazine)</td>
</tr>
<tr>
<td></td>
<td>Haloperidol (Haldol)</td>
<td>Ziprasidone (Geodon)</td>
</tr>
<tr>
<td></td>
<td>Mesoridazine (Serentil)</td>
<td></td>
</tr>
<tr>
<td><strong>ANTIDEPRESSANTS</strong></td>
<td>Amitriptyline (Elavil)</td>
<td>Fluvoxamine (Luvox)</td>
</tr>
<tr>
<td></td>
<td>Clomimpramine (Anafranil)</td>
<td>Imipramine (Tofranil)</td>
</tr>
<tr>
<td></td>
<td>Desipramine (Norpramin)</td>
<td>Mirtazapine (Remeron)</td>
</tr>
<tr>
<td></td>
<td>Doxepin (Sinequan)</td>
<td>Nortriptyline (Pamelor)</td>
</tr>
<tr>
<td></td>
<td>Duloxetine (Cymbalta)</td>
<td>Trazodone (Desyrel)</td>
</tr>
<tr>
<td><strong>MOOD STABILIZERS</strong></td>
<td>Carbamazepine (Tegretol)</td>
<td></td>
</tr>
<tr>
<td><strong>ANXIOLYTICS</strong></td>
<td>Alprazolam (Xanax)</td>
<td>Lorazepam (Ativan)</td>
</tr>
<tr>
<td></td>
<td>Diazepam (Valium)</td>
<td>Oxazepam (Serax)</td>
</tr>
<tr>
<td><strong>OTHERS</strong></td>
<td>Acetaminophen</td>
<td>Riluzole (Rilutek)</td>
</tr>
<tr>
<td></td>
<td>Caffeine</td>
<td>Ropinirole (Requip)</td>
</tr>
<tr>
<td></td>
<td>Heparin</td>
<td>Tacrine</td>
</tr>
<tr>
<td></td>
<td>Insulin</td>
<td>Warfarin</td>
</tr>
<tr>
<td></td>
<td>Rasagiline (Azilect)</td>
<td></td>
</tr>
</tbody>
</table>
FDA Approvals for Smoking Cessation

Drugs in Development: rimonabant, nicotine vaccine, etc.

OTC nicotine gum & patch; Rx nicotine nasal spray

Rx transdermal nicotine patch

Rx nicotine gum

1984

1991

1996

1997

2002

2006

Rx varenicline

OTC nicotine lozenge

Rx nicotine inhaler; Rx bupropion SR

200X
Long-term (36 month) Quit Rates for Cessation Medications

- Nicotine gum: 19.5% (Active drug), 11.5% (Placebo)
- Nicotine patch: 14.6% (Active drug), 8.6% (Placebo)
- Nicotine lozenge: 16.4% (Active drug), 8% (Placebo)
- Nicotine nasal spray: 23.9% (Active drug), 11.8% (Placebo)
- Nicotine inhaler: 20.0% (Active drug), 9.1% (Placebo)
- Bupropion: 22.5% (Active drug), 10.2% (Placebo)
- Varenicline: 22.5% (Active drug), 9.4% (Placebo)

## Nicotine Patch

### ADVANTAGES
- Provides consistent nicotine levels
- Easy to use and conceal
- Fewer compliance issues
- Safe in presence of C-V disease

### DISADVANTAGES
- Clients cannot titrate the dose
- Allergic reactions to adhesive may occur
- Taking patch off to sleep may lead to nicotine cravings in the morning
# NRT Patches

**Nicoderm CQ:**
Recommended doses for 10+ cigs/day (if less than 10 cigarettes per day consider other NRT or start with patch at 14mg/day)

<table>
<thead>
<tr>
<th>Patch strength</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 mg/day</td>
<td>6-8 weeks</td>
</tr>
<tr>
<td>14 mg/day</td>
<td>2-4 weeks</td>
</tr>
<tr>
<td>7 mg/day</td>
<td>2-4 weeks</td>
</tr>
</tbody>
</table>

**Nicotrol:**
15 mg/16 hours 8 weeks
Nicotine Gum

- Sugar-free chewing gum
- Absorbed through the lining of the mouth
- Available in two strengths (2mg and 4mg)
- Available flavors are:
  - Original, cinnamon, fruit, mint (various), and orange
- Sold without a prescription as Nicorette or as a generic
- Some find the gum difficult to chew
- May not be a good choice for people with jaw problems, braces, retainers, or significant dental work

Nicorette gum (shown here) is manufactured by GlaxoSmithKline.

Courtesy of the University of California, San Francisco
Bupropion SR Tablets

• Does not contain nicotine
• Tablet that is swallowed whole, and the medication is released over time
• Same medication as Wellbutrin, which is used to treat depression
• Sold with a prescription

Courtesy of the University of California, San Francisco
Varenicline

ADVANTAGES

- Oral formulation with twice-a-day dosing
- Offers a new mechanism of action for persons who previously failed using other medications
- Early trials suggest this agent is superior to bupropion SR

NOTE: Patients have reported changes in behavior, agitation, depressed mood, suicidal thoughts or actions while taking or after stopping Varenicline.

DISADVANTAGES

- Common side effects:
  - Nausea (in up to 33% of clients)
  - Sleep disturbances (insomnia, abnormal dreams)
  - Constipation
  - Flatulence
  - Vomiting
Combination Therapy

**Long-acting formulation** (patch, bupropion, varenicline), which produces relatively constant levels of nicotine

**PLUS**

**Short-acting formulation** (gum, lozenge, inhaler, nasal spray), which permits acute dose titration as needed for withdrawal symptoms

Ebbert et al., 2009; Hurt et al., 2009; Piper et al., 2009; Schneider et al., 2006; Steinberg et al., 2006
The Peer to Peer Tobacco Dependence Recovery Program

- A sustainable train-the-trainer model
- Active in 7 states

Positive Social Networking
Education and Awareness Building
One-on-One Motivational Interviews
Tobacco Dependence Support Groups
Tobacco-Free Policy

http://www.epa.gov/smokefree/pledge/index.html
Return on Investment

For Facilities:

- Reduced maintenance and cleaning costs
- Decreased accidents and fires
- Decreased health insurance costs
- Decreased worker’s compensation payments
Return on Investment

For Clinicians and Staff:
- Decreased hospital admissions
- Decreased absenteeism
- Increased staff productivity
- Increased staff satisfaction

For Patients:
- Decreased disease and death
- Decreased hospital admissions
- Increased quality of life
Clinician-assisted tobacco cessation

- RxforChange Home
- Welcome
- About
- News & Publications
- Resources
- FAQ
- National Speakers Bureau
- Contacts
- Petition Against Tobacco Sales in Pharmacies

http://rxforchange.ucsf.edu/curricula/
Interventions for Tobacco Use

PDF available at:
http://smokingcessationleadership.ucsf.edu/BehavioralHealth.htm
Peer-to-Peer Well Body Program
Peer Support Group Manual
Behavioral Health and Wellness Program
University of Colorado Anschutz Medical Campus
School of Medicine
Department of Psychiatry

Be Healthy, Wise, & Productive
Newsletter of the Behavioral Health and Wellness Program
www.bhwellness.org

SAMHSA-HRSA Center for Integrated Health Solutions

www.bhwellness.org
www.CenterforIntegratedHealthSolutions.org
A Tobacco-Free Toolkit for Community Health Facilities

Project TRUST Edition

For More Information, Contact:

Los Angeles County, Tobacco Control and Prevention Program
3530 Wilshire Blvd, Suite 800
Los Angeles, CA 90010
Phone: (213) 351-7890
Email: tobacco1@ph.lacounty.gov
Web: http://publichealth.lacounty.gov/tob/index.htm
National Resources

Smoking Cessation Leadership Center
http://smokingcessationleadership.ucsf.edu

Behavioral Health and Wellness Program
http://www.bhwellness.org

Americans for Non-Smokers’ Rights
http://www.no-smoke.org

Partnership for Prevention
http://www.prevent.org

National Association of State Mental Health Program Directors
http://www.nasmhpd.org

Tobacco Recovery Resource Exchange
http://www.tobaccorecovery.org
Community Best Practice

Primary Care Providers for a Healthy Feliciana, Inc.
Primary Care Providers for a Healthy Feliciana, Inc.

Serving Louisiana Families since 1999
A Network of FQHCs since 2005
Nurse Practitioner Driven
Joint Commission Accredited since 2007
NCQA Medical Home Designation 2009
MyWinMed EMR Risk Assessment

Nurses Section - Risk Assessment 03-24-2011

Risk Assessment
- Date Completed: MM/DD/YYYY
- Patient Refused: MM/DD/YYYY

Depression Screening
Over the past two weeks, how often have you been bothered by a...?

- Little interest or pleasure in doing things?
- Feeling down, discouraged, or hopeless?
- Trouble falling asleep, staying asleep, or having too much?
- Feeling tired or having little energy?
- Poor appetite or overeating?
- Feeling bad about yourself - or that you're a failure or have let yourself or
  others down?
- Trouble concentrating on things, such as reading the newspaper or watching
  television?
- Moving or speaking so slowly that other people have noticed. Or, the
  opposite - being so fidgety or hyperactive that you have been a puzzle to
  others?
- Thoughts that you would be better off dead or of hurting yourself in some
  way?

If you have checked off any problems, how difficult have those problems
been for you?
PHQ-2 Score: 0
PHQ-9 Score: 0

Asthma Assessment
- Not Applicable for this patient:
- Asthma action plan present?
- Last asthma related hospitalization?: MM/DD/YYYY

Severity Assessment:

Tobacco Assessment
- Current Tobacco Use
  - Smoking Status:
  - Smoking cessation counseling received?
  - Smoking cessation medication received?

Add Tobacco
- Type
- Packs Per Day
- Years Used

Adult Woman Assessment
- Never Had PAP:
- Date of last PAP exam?: MM/DD/YYYY
- Date of last mammogram?: MM/DD/YYYY

www.CenterforIntegratedHealthSolutions.org
My WinMed EMR - Social History

Social History

General Social History
- Occupation: Payroll clerk
- Living Arrangement: Family
- Highest Level of Education: 
- Notes:

Tobacco Use
- Current Tobacco Use
- Smoking Status:
- Smoking cessation counseling received?
- Smoking cessation medication received?
- Tobacco History Reviewed:

Add Tobacco

Type | Packs Per Day | Years Used | Date Quit
--- | --- | --- | ---
Cigarettes | 1.00 | 

Alcohol Use

Validation

www.CenterforIntegratedHealthSolutions.org
Results of Smoking Cessation Program

- Started Prog.: 16
- Completed Prog.: 14
- Quit Smoking: 2
- Decreased by 95%: 4
- Decreased by 50%: 2

Decreased by 95%: 4
Decreased by 50%: 2

Started Prog. | Completed Prog. | Quit Smoking | Decreased by 95% | Decreased by 50%
---|---|---|---|---
16 | 14 | 2 | 4 | 2
Contact Information

Chad Morris, PhD
University of Colorado
Behavioral Health & Wellness Program
1784 Racine Street
Mail Stop F478
Aurora, CO 80045
303.724.3709
Chad.Morris@ucdenver.edu

Bettie Thompson Blackmon, FNPC
Primary Care Providers for a
Healthy Feliciana, Inc.
P.O. Box 395
Clinton, LA 70722
Phone 225.683.5292
bblackmon@rkmcare.org