Key Approaches and Resources for Successful Tobacco Cessation Counseling and Treatment

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No Disclosures
Objectives

• Describe the physiologic mechanism of nicotine dependence and clinical withdrawal

• Identify the value of counseling in treatment for nicotine dependence

• Identify evidence-based treatment options for nicotine dependence and clinical application

• Discuss institutional nicotine cessation resources
Sources of Nicotine Delivery and Dependence

- Chewing tobacco & pipes (loose leaf tobacco)
- Cigars
- Moist Snus
- Snuff
- Electronic Nicotine Delivery Systems (ENDS) aka e-cigarettes or “vapes”
- Cigarettes
1 out of 5 Americans Smoke

70% Want to Quit
52% Try to Quit Each Year
3% Succeed in Quitting on Their Own

42 Million Current Smokers in U.S.

http://www.cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/cig_smoking/
Prevalence of Smoking

- 31% smoking prevalence in American and Native Alaskan Indians, closely followed by other ethnically diverse groups (Multi-race, African Americans, Hispanic)
- 45% in those with GED vs. 6% in highly educated
- 34% prevalence with annual income of $6,000 to $12,000
- 24% in young adults (≤18 years old) and <18% in adults (18 years old)
- 25% prevalence with chronic pain
- As high as 80% prevalence in those afflicted with psychiatric disease

http://www.cdc.gov/vitalsigns/adultsmoking/index.html
http://aspe.hhs.gov/health/prevention; Orhurhu, V., Pittelkow, T., Hooten, W.
Tobacco Related Diseases are Costly

- $7.00/ pack of cigarettes smoked are spent on health care for tobacco related diseases = $150 Billion
- $150 Billion loss in productivity
- 1 in 5 smokers will die of a tobacco related disease, 10 years before their never smoking peers

Jha, P et al. NEJM 2013, 368: 341
MMWR Morb Mortal Wkly Rep 2001; 51 (14): 300-303
Neurobiology of Nicotine Dependence
Nicotine’s Affinity for α4β2 Receptors in the Brain

Arch Gen Psychiatry. 2006;63(8):907-914. doi:10.1001/archpsyc.63.8.907
Pharmacokinetics of Nicotine

- Nicotine reaches high concentrations in the arterial blood and lungs
- Distributes to the brain, storage in adipose and muscle tissue from the arterial blood
- Nicotine ½ life of 2 hours or more
- Metabolized in the liver to cotinine via CYP2A6
- 16 hour half life of cotinine
- Peak blood concentrations of nicotine are similar for cigar smokers, users of snuff, snus, and cigarettes

United States Preventive Services Task Force 2003

Summary of Recommendations

<table>
<thead>
<tr>
<th>Population</th>
<th>Recommendation</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Adults</td>
<td>The USPSTF recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products.</td>
<td>A</td>
</tr>
<tr>
<td>Pregnant Women</td>
<td>The USPSTF recommends that clinicians ask all pregnant women about tobacco use and provide augmented, pregnancy-tailored counseling for those who smoke.</td>
<td>A</td>
</tr>
</tbody>
</table>

http://www.uspreventiveservicestaskforce.org
United States Preventive Services Task Force 2015

Tobacco Smoking Cessation in Adults, Including Pregnant Women: Behavioral and Pharmacotherapy Interventions

Release Date: September 2015

**Recommendation Summary**

<table>
<thead>
<tr>
<th>Population</th>
<th>Recommendation</th>
<th>Grade (What's This?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults who are not pregnant</td>
<td>The USPSTF recommends that clinicians ask all adults about tobacco use, advise them to stop using tobacco, and provide behavioral interventions and U.S. Food and Drug Administration (FDA)–approved pharmacotherapy for cessation to adults who use tobacco.</td>
<td>A</td>
</tr>
</tbody>
</table>

**Supporting Documents**
- Final Research Plan
- Final Evidence Review
- Evidence Summary

Read the Full Recommendation Statement

http://www.uspreventiveservicestaskforce.org
Nicotine Dependence is a Chronic Disease

- Non-communicable
- Long lasting condition that can be controlled but not cured
- Leading cause of premature disablement and death
- Should be addressed in every patient encounter
- Critical to deliver ongoing counseling, and pharmaco-therapeutic treatment in order to impact long-term quit success
Smoking as a Modifiable Risk Factor: Data on Quitting and Treatment

**Interest in Quitting**
- 70% want to quit
- 52% make a quit attempt every year
- 3-5% successfully quit on their own

**Benefit of Multi-Modal Therapy**
- 3% quit on advice alone
- 10% with counseling
- 70-100% with combination of counseling & medication treatment

Treating Nicotine Dependence

• Treatment methods are well established and evidence based
• Combination counseling and treatment delivers the greatest chances of long-term quit success
• Counseling and treatment should be offered to all who are eligible
• Ideally, all clinicians are versed in counseling for nicotine dependence and treatment made available
• Tobacco treatment should be delivered as compassionately and aggressively as cancer care

Engaging Patients in Meaningful and Effective Counseling and Treatment
Readiness to Quit & Stages to Change: Counseling Creates Movement

- Readiness to quit is a dynamic process
- Counseling can move people in readiness to quit

DiClemente and Prochaska, 1998
Motivational Interviewing for Behavior Change

- Counseling approach
- Facilitates and engages intrinsic motivation for behavior change
- Goal oriented
- Patient centered
- Helps patients explore, examine, and resolve ambivalence about behavior
The Spirit of Motivational Interviewing

**Process of Guidance**

- **Partnership** – non-confrontational
- **Acceptance** – non-judgmental
- **Compassion** – understanding their suffering
- **Evocation** – capture information and their motivation to quit

**Motivational Interviewing Elicits**

- Values
- Assumptions
- Fears
- Expressions
- Hopes
Conducting the Motivational Interview

- Identify level of motivation to quit
- Elicit motivation(s) to quit
- Assess their confidence in quitting
- Identify reasons to continue to smoke
- Lead them to recognize their own ambivalence
- Provoke conversation about this ambivalence and lead them to their own conclusion about quitting
Taking a Tobacco and Quit History is Key: A Framework for Developing a Personalized Treatment Plan

- Create a partnership and engage the patient in the process of making a treatment plan
- Discuss evidence-based treatment options
- Revisit what’s been used in the past and concerns they may have about interventions
- Consider why previous attempts were unsuccessful
- Demystify and debunk myths about treatments
- Stage of Readiness to Quit
- Inventory historic and current use of all substances
- Current nicotine intake (how many cpd)
- Review any previous quit success
- Which treatments have been attempted?
- What worked and what didn’t work?
- Identify triggers to smoke
- Inquire who smokes around them
Evidence Based Treatment Options

• Combination Nicotine Replacement Therapy
  – Long acting transdermal patch
  – Short acting methods
• Varenicline
• Bupropion
Combination Nicotine Replacement Therapy (C-NRT)

• **Combination** NRT therapy outperformed single formulations of NRT

• Little or no information on Serious Adverse Events (SAEs) was provided in the trial reports

Dosing the Patch

• 1 Cigarette = 1 mg of Nicotine

• **Goal** = to match as much of the total dose of nicotine from cigarettes with an equivalent patch

• **Example**: If 1 pack per day (20 cigarettes) then use a 21 mg patch
Dosing Combination NRT

• Long-acting transdermal (Basal Dose)
  – 21, 14, & 7 mg patches

• Short-acting (Rescue Med)
  – Gum & lozenges, 2 & 4mg doses
    • Rely on absorption through oral mucosa
    • Gum is NOT an option for dentures
  – Nicotrol inhaler (80 puffs/cartridge)
    • 20-40 puffs every hour as needed (20 puffs=1 cigarette)
    • Don’t inhale just puff like sucking on a cigar or a straw
    • NOT an option with dentures in
  – Nicotine nasal spray (0.5mg/spray)
    • 1-2 sprays every hour as needed (2 spray= 1 cigarette)
    • Spray towards septum
    • Commonly burns
Pharmacokinetics of Varenicline

- **Mechanism:** partial α4β2 nicotinic receptor agonist. Prevents nicotine stimulation of mesolimbic dopamine system associated with nicotine addiction. Stimulates dopamine release. Partial antagonist of α4β2 receptor to ↓ reward of smoking
- **Pregnancy:** category C
- **Half Life:** 24 hours
- **Time to peak:** 3-4 hours
- **Metabolism:** minimal, < 10% metabolized (no drug-drug interactions)
- **Excretion:** Urine (92% as unchanged drug)
- **Dietary consideration:** take with food and full glass of water to decrease GI upset

Varenicline

- Meta-analysis of 14 varenicline trials found no difference between the varenicline and placebo arms
- Event rates for SAE were 2.1% in the varenicline arms and 2.0% in the placebo arms
- Subgroup analyses had no significant excess of neuropsychiatric events or cardiac events
- **Dose:** gradual titration with initial starter pack with quit date set in the second week of the starter. Then 1mg BID for a total of 12 to 24 weeks

Reduce to Quit with Varenicline

- Varenicline use while smoking demonstrated a significant long-term abstinence (27%) over placebo (9.9%)

Pharmacokinetics of Bupropion

- **Mechanism:** Atypical antidepressant. Inhibitor of the neuronal uptake of norepinephrine and dopamine. Increased dopamine to the mesolimbic reward system. May also block α4β2 receptors.
- **Pregnancy:** Category C
- **Half Life:** Extended release 21 +/- 7 hours
- **Time to Peak:** Extended release ~ 5 hours
- **Metabolism:** renal and hepatic
- **Contraindications:** renal and hepatic impairment, eating disorders, seizure history, head injury with LOC in past 5 years, psychiatric disorders, MAO inhibitors

Common Side Effects and Observations of Bupropion

**Side Effects**

- Nausea
  - Most prominent in higher doses and immediate release formulations
- Agitation
- Activation
- Appetite suppression

**Recommendations**

- Plan to take with food
- Avoid in those who have a significant anxiety disorder
- Ideal to prescribe the extended release formulations and start low with slow titration of dosing
- 2nd dose before 6PM
- Avoid in anorexia
EAGLES (Evaluating Adverse Events in a Global Smoking Cessation Study) Trial

- Randomized, double-blind, triple-dummy, placebo and active controlled (nicotine patch; 21mgj per day with taper) trial of varenicline (1mg twice daily) and bupropion (150mg twice daily) for 12 weeks with 12 week non-treatment follow-up
- 4116 in psychiatric cohort and 4028 in the non-psychiatric cohort
- The overall incidence of the neuropsychiatric adverse events were similar across the 4 treatment groups
- Varenicline 4%, bupropion 4.5%, nicotine patch 3.9% and placebo 3.7%

Setting up for Success: Identifying those in need of Higher Intensity Therapy

• Too often tobacco use is approached with only lower intensity therapy or interventions
• Considerations for higher intensity therapy:
  – Severity of addiction
  – Substance use disorders
  – Biopsychosocial circumstances

Quitting Smoking is a Journey

- It usually takes a number of attempts to quit, before succeeding
- Maintain regular contact and open communication
- Promote those who are contemplating
- Guide those who are going through a quit attempt
- Support those who have had a lapse or relapse in their quit attempt
- Reinforce a successful quit to prevent relapse
- Don’t give up on smokers
Launching the Treatment Plan

- Partner with the patient
- Focus on education and empowerment
- Avoid fear tactics, shaming and blaming
- Discuss the options for treatment and the risks, benefits, and side effects to each of the medications
- Provide written instructions and prescriptions with follow-up plan in place
- Ongoing counseling improves long-term quit success
- Consider telephonic follow-up sooner
- Quitting takes practice; don’t give up on your patient
Goal is to Quit: Setting a Quit Date

• Setting a target quit date is central to success
• Allows smokers to plan for quitting and obtain supplies and support
• Advise to smoke last cigarette on the night before the quit date
• Emphasize that quitting smoking means avoiding smoking completely
Promoting the Skills to Quit in Your Patients

- Develop pro-active approaches to avoid common triggers to smoke
- Anticipate and manage high risk situations
- Restructure life as a non-smoker
- Replace old smoking rituals with a new rituals
- Share that prevention of withdrawal is the key to success
Defining Lapse and Relapse and Common Causes

- **Lapse**: when a single or a few cigarettes are smoked
- **Relapse**: when regular smoking is resumed and lasts longer than 7 days
  - Severe and prolonged periods of withdrawal
  - Insufficient treatment plan or poor adherence to treatment plan
  - Negative emotions and interpersonal conflict
  - Coping mechanisms are compromised and trigger situations present themselves
  - Exposure to someone smoking
  - Use of other substances, ETOH
Reinforcing a Successful Quit

- Preventing and Coping with Lapse and Relapse
  - Focus on successes and what works
  - Talk through what happened/why it occurred
  - Reassess treatment regimen and use
  - Engage in ongoing motivational interviewing
  - Close follow-up
Smoking Cessation Success in Our Program

55% Smoking on Entrance into Lung Screening Program

96% Agree to Counseling  71% Agree to Treatment  53% Are Quit on Follow-up CT Scan

66% have Progressed in their Readiness to Quit Stages
Utilization of the Electronic Medical Record in Addressing Smoking Cessation
Smoking Cessation Smart Set

Chief Complaint
- Nicotine Visit - Chief Complaint
  - NICOTINE DEPENDENCE

Diagnosis Codes
- Nicotine Visit Diagnosis Codes
  - Nicotine addiction (F17.200)
  - Personal history of tobacco use, presenting hazards to health (Z87.85)

Nicotine Replacement - Choose both basal and PRN
- Basal Nicotine Patch
- Basal Medications
- PRN Nicotine Lozenge
- PRN Nicotine Replacement Therapy

Progress Notes
- Nicotine Visit Progress Note

Office Visit Level of Service
- Office Visit LOS codes
- Office Visit - Tobacco Specific Preventive Counseling and Treatment Visit
  - PREVENT COUNSEL/INDIV, 15 MIN [99401]
  - PREVENT COUNSEL/INDIV, 30 MIN [99402]
  - PREVENT COUNSEL/INDIV, 45 MIN [99403]
  - PREVENT COUNSEL/INDIV, 60 MIN [99404]
- Office Visit - Smoking Cessation, Face-to-Face Counseling Only Visit
  - TOBACCO USE CESSATION INTERMEDIATE 3-10 MINUTES [99405]
  - TOBACCO USE CESSATION INTENSIVE >10 MINUTES [99407]

TeleHealth Level of Service
- TeleHealth LOS Codes
- TeleHealth - Tobacco Specific Preventive Counseling and Treatment Visit
- TeleHealth - Smoking Cessation, Face-to-Face Counseling Only Visit

Ad-hoc Orders
Click the Add Order button to add an order in this section
Epic Progress Notes in Smart Set

- Nicotine Visit Progress Note
  - Nicotine Initial Visit
  - Nicotine Follow-Up Visit
  - Nicotine Integrated Counseling Visit
Epic Progress Notes

• Facilitate motivational interviewing for behavior change
• Facilitates counseling and treatment
• Document appropriately
• Capture reimbursement for time spent
• Track performance and outcomes metrics
### Treatment Medications/Order Set

#### Nicotine Replacement - choose both Basal and PRN

<table>
<thead>
<tr>
<th>Basal Nicotine Patch</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Standard dose Nicotine (AKA NICODERM CQ) 21 mg/24 hr TD Patch 24HR (for patients with smoking rate &gt;10 cigarettes/day)</td>
</tr>
<tr>
<td>- Low Dose Nicotine (AKA NICODERM CQ) 14 mg/24 hr TD Patch 24HR (for patients &lt;45 kg or smoking rate of &lt;10 cigarettes/day)</td>
</tr>
<tr>
<td>- Other Nicotine (AKA NICODERM CQ) 7 mg/24 hr TD Patch 24HR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basal Medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>- BuPROPion SR (aka Wellbutrin SR) 150 mg Oral SR Tab</td>
</tr>
<tr>
<td>- Follow Up - Varenicline 1 mg Oral Tablet</td>
</tr>
<tr>
<td>- Starter Pack - Varenicline 0.5 mg (11)- 1 mg (42) Oral Tablets, Dose Pack</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRN Nicotine Lozenge</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Standard Dose Nicotine Polacrilex 4 mg Lozenge</td>
</tr>
<tr>
<td>- Low Dose Nicotine Polacrilex 2 mg Lozenge</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRN Nicotine Replacement: Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>- If first cigarette is &gt; 30 minutes after waking - Nicotine Polacrilex (NICORETTE) 2 mg Gum</td>
</tr>
<tr>
<td>- If first cigarette is &lt; 30 minutes after waking - Nicotine Polacrilex (NICORETTE) 4 mg Gum</td>
</tr>
<tr>
<td>- nicotine (NICOTROL) 10 mg Inhal Cartridge</td>
</tr>
<tr>
<td>- Nicotine 10 mg/mL Nasal Spray, Non-Aerosol (0.5 mg/spray)</td>
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</tbody>
</table>
# Nicotine Cessation Pharmacotherapy Guide – Hyperlink

<table>
<thead>
<tr>
<th>Medication / Available Strengths</th>
<th>Mechanism of Action / Considerations</th>
<th>Warnings / Cautions</th>
<th>Dosing / Instructions</th>
<th>Side Effects &amp; Patient Management</th>
</tr>
</thead>
</table>
| **Chantix (varenicline)**
0.5 mg, 1 mg tablets              | Blocks nicotine binding to α-4-β-2 nicotinic receptors, partially stimulates nicotinic receptor
Alcohol ↑ intoxication, aggression, amnesia | Psychiatric disorders
Cardiovascular disease
Operating machinery (banned for pilots, air traffic controllers, truck / bus drivers)
Severe renal impairment
Pregnancy
Avoid if history or risk of seizure | Day 1-3: 0.5 mg once daily
Day 4-7: 0.5 mg twice daily
Day 8-end: 1 mg twice daily
Ccr < 30 mL/min: 0.5 mg once daily, max 0.5 mg twice daily
Quit date 1 week after starting or quit between 8-35 days or quit by 12 weeks with cigarettes cut by 50% at 4 weeks, 75% at 8 weeks, stop at 12 weeks, then additional 12 weeks of therapy
Duration: 12 – 24 weeks | Nausea – take with food and full glass of water
Insomnia / vivid dreams – take second dose with evening meal instead of bedtime
Changes in mood, suicidal ideation – discontinue and contact provider
Limit alcohol intake
Caution with buproprion due to seizure risk |
| **Zyban / Wellbutrin (bupropion, sustained release)**
150 mg tablets                    | Blocks re-uptake of dopamine, norepinephrine
May use with nicotine replacement therapy
Consider if history of depression | Contraindicated if history of seizure, eating disorder, or MAOI use within prior 14 days
Caution if bipolar disorder
Pregnancy
Safe in cardiovascular disease | Day 1-3: 150 mg once daily
Day 4-end: 150 mg twice daily
Quit date 1-2 weeks after starting
Duration: 7 – 12 weeks | Insomnia – avoid bedtime administration, separate by 8 hours from morning dose |
### Level of Service and Tobacco Specific Codes

#### Office Visit LOS codes
- [ ] OUTPATIENT NEW 20 MINUTES [99202]  edit
- [ ] OUTPATIENT NEW 30 MINUTES [99203]  edit
- [ ] OUTPATIENT NEW 45 MINUTES [99204]  edit
- [ ] OUTPATIENT NEW 60 MINUTES [99205]  edit
- [ ] OUTPATIENT F/U 10 MINUTES [99212]  edit
- [ ] OUTPATIENT F/U 15 MINUTES [99213]  edit
- [ ] OUTPATIENT F/U 25 MINUTES [99214]  edit
- [ ] OUTPATIENT F/U 40 MINUTES [99215]  edit

#### Office Visit - Tobacco Specific Preventive Counseling and Treatment Visit
- [ ] PREVENT COUNSEL,INDIV,15 MIN [99401]  edit
- [ ] PREVENT COUNSEL,INDIV,30 MIN [99402]  edit
- [ ] PREVENT COUNSEL,INDIV,45 MIN [99403]  edit
- [ ] PREVENT COUNSEL,INDIV,60 MIN [99404]  edit

#### Office Visit - Smoking Cessation, Face-to-Face Counseling Only Visit
- [ ] TOBACCO USE CESSATION INTERMEDIATE 3-10 MINUTES [99406]  edit
- [ ] TOBACCO USE CESSATION INTENSIVE >10 MINUTES [99407]  edit
## Coding Update

### Smoking Cessation Counseling

Medicare covers counseling to prevent tobacco use for outpatient and hospitalized beneficiaries:
- Who use tobacco (regardless of whether they have signs or symptoms of tobacco-related disease);
- Who are competent and alert at the time that counseling is provided; and,
- Whose counseling is furnished by a qualified physician or other Medicare-recognized practitioner.

Medicare Part B covers tobacco cessation counseling for **symptomatic** and **asymptomatic** patients.

**Symptomatic** patients are those who use tobacco and:
- Have been diagnosed with a disease or an adverse health effect recognized to be tobacco-related
- Take a therapeutic agent for which the metabolism or dosing is affected by tobacco use

To report smoking cessation counseling to **Symptomatic patients** use the below CPT codes:

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>99406</td>
<td>Smoking and tobacco use cessation counseling visit; intermediate, greater than 3 minutes up to 10 minutes</td>
</tr>
<tr>
<td>99407</td>
<td>Smoking and tobacco use cessation counseling visit; intensive, greater than 10 minutes</td>
</tr>
</tbody>
</table>

**Asymptomatic** patients are those who use tobacco but do not have symptoms of tobacco-related disease.

To report smoking cessation counseling to **Asymptomatic patients** use the below HCPCS codes:

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>G0436</td>
<td>Smoking and tobacco cessation counseling visit for the asymptomatic patient; intermediate, greater than 3 minutes, up to 10 minutes</td>
</tr>
</tbody>
</table>
Identifying Nicotine Dependence Therapy and Treatment Options in your Community

- Individual counseling
- Behavioral therapy
- Group counseling
- Proactive telephonic counseling
- Employer based quit coaching, telephonic
- Pharmacologic treatments
- Outpatient or inpatient tobacco treatment
Affordable Care Act and Clinical Reality

- Screening for tobacco use
- Individual, group and phone counseling (at least 10 minutes per session)
- All FDA-approved tobacco cessation medications (prescription and over-the-counter) when prescribed by a healthcare provider
- At least two quit attempts per year
- 4 sessions of counseling and 90 days of medication per quit attempt
- No prior authorization is required for treatment
- No cost-sharing is required
Coding & Billing

• Medical based visits with concomitant medical and/or psychiatric problems
  – Use new and established visit codes
    • 99205, 99204, 99203, 99202
    • 99215, 99214, 99213, 99212

• Tobacco Specific Preventive Visits
  • 99401 – 15 minutes
  • 99402 – 30 minutes
  • 99403 – 45 minutes
  • 99404 – 60 minutes
  – Counseling face-to-face only
    • 99406 (symptomatic) or G0436 (asymptomatic) – Counseling ≤ 10 minutes
    • 99407 (symptomatic) or G0437 (asymptomatic) – Counseling > 10 minutes

• Telephonic Visits, > 7 days since last face-to-face visit and > 24 hours before next face-to-face visit
  • 99441 - 10 minutes
  • 99442 – 11-20 minutes
  • 99443 – 21-30 minutes

Capitalize on Teachable Moments

- Health related events spur behavior change and are teachable moments
- Teachable moments occur in a patient-clinician interaction
- Remember: Most patients want to quit but just don’t know how
- **You can make a difference!**
Capital on Teachable Moments

You can make a difference!
Questions?

THANK YOU!

Joelle.Fathi@swedish.org